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**MESSENGER**

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**EVALUATION OF THE EFFECTIVENESS OF STATE  
ASSISTANCE PROGRAMS IMPLEMENTED IN THE  
RA AGRICULTURAL SECTOR THROUGH A  
SURVEY AMONG FARMERS AND EXPERTS<sup>1</sup>**

*The agricultural sector has always been in the centre of attention of the state policy  
and the government initiates a number of measures to increase effectiveness and*

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<sup>1</sup> The article was prepared within the framework of grants of ASUE "Amberd" Research Center's study on "Evaluation of the effectiveness of state support programs in the sector of agriculture in 2010-2021".

*productivity of this sector of the economy. However, these measures are not always effective, and a question often arises about the results obtained against public resources spent in this sphere. The given research aimed revealing the effectiveness of the state assistance programs implemented in the RA agricultural sector, for the purpose of which a survey of the main beneficiaries of the sector was developed. In particular, separate surveys were conducted among farmers (both for households and commercial organizations) and experts in the field of agriculture. The results of the surveys made it possible to identify the main shortcomings and advantages of state support programs, as well as opportunities for their improvement.*

**Keywords:** *agriculture, farmers' survey, government support measures, agricultural support effectiveness*

JEL: Q14, Q18

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**Introduction.** Nowadays, there are a lot of agricultural lands in Armenia that are not being used or are used inefficiently. At the same time the level of poverty and unemployment is high in rural areas and the productivity is low, which can be mitigated if the agricultural sector becomes more efficient and productive. On the other hand, the export volumes of Armenian agriculture products are increasing with high rates showing that there is a high demand for these products in foreign markets. This indicates that there is need for government support for this sector in order to help farmers increase their production, use lands that are not cultivated yet, and create ground for increasing productivity in the sector, which will lead to an increase in exports. There are many types of existing state support programs for agricultural sector aimed at assisting farmers to expand production, acquire new equipment, as well as modernize the irrigation systems, introducing insurance systems, etc. However, these programs are not always effective or not sufficient to noticeably improve the situation in agricultural sector by increasing productivity and production volumes. Thus, this research analyzes the effectiveness of these programs in order to give understanding about how the programs affect the main economic indicators of farmers and find out their essential advantages and disadvantages.

As for the aforementioned analysis, some micro-level data were required, the authors conducted surveys both among individual farmers and organizations, aiming to obtain the corresponding data. As it is also important how the experts of agricultural sector assess the effectiveness of the state support programs, a separate survey has been conducted among experts as well. The questions included in the farmers' surveys were designed in a way to collect data about respondents (activity period, field, production size, location, etc.), the effects of the support measures on their economic variables, as well as their opinion about future improvements of the programs and agriculture development factors. The questions included in the experts' surveys were also designed to collect information about them (education, experience, etc.) as well as their view on the effectiveness of support measures.

The results of the survey indicate that beneficiaries perceive the support measures as overall effective, seeing some obstacles that need to be addressed to

increase the efficiency of the programs and to make them more targeted. Mainly, the crucial issues that the respondents point out among others are the government officials' low competence, the difficulties of programs procedures and also the low amount of support. Besides, respondents suggested providing them with new support measures regarding assistance at the product realization stage, with transportation issues and individual irrigation systems. The results of the experts' survey are mostly comparable to those of the farmers, however, there were some differences in the perception of the ease of the support measure procedures.

The policy measures taken by the government to support agricultural sector can potentially contribute to a better economic, environmental and social farm performance. The necessity for the state support in the agricultural sector is predetermined by a range of reasons, which essentially are not only natural (high dependence on weather, for example, influencing the volumes and the quality of crops) but also related to slow, as compared to other sectors of the economy, assets turnover, which usually lasts not less than a year. Thus, it is necessary to significantly support farmers by the state in order to level the profitability under force-majeure (Golubev, 2005)<sup>2</sup>. As the agricultural sector is mostly located in regions, far from urban areas, the state support of this sector is supposed to be balanced with the interests of all economic entities with the higher aim – to increase the welfare level and the quality of life of the population in a region on its way to sustainable development (Leck et al., 2014)<sup>3</sup>.

Definitions of state agriculture support can be found in OECD Trade and Agriculture Directorate published in March 2016<sup>4</sup>, where “support” is defined as gross transfers to agriculture from consumers and taxpayers, arising from governments' policies that support agriculture. In addition to budgetary expenditures, support includes other estimated transfers, which do not always require actual monetary disbursements (e.g. credit concessions).

Analysis of the Armenian state policy in agricultural sector has been implemented by FAO<sup>5</sup> in the framework of The European Union's Neighbourhood Programme, stating some limitations in terms of budget resources needed to achieve the main goals of the agriculture and rural development program as well as limitations in terms of institutional capacity. In the scope of the assessment FAO also implemented SWAT analysis of the agricultural sector of Armenia. As the main strengths of agricultural sector favourable climate conditions and diverse climatic zones, land resources available for further growth, good reputation of Armenian products in CIS markets were

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<sup>2</sup> Голубев А., Задачи государственного управления российским агрокомплексом // АПК: экономика, управление, №1, 2005, с. 33–40.

<sup>3</sup> Leck C., Evans N., Upton D., Agriculture – Who cares? An investigation of care farming. UK Journal of Rural Studies, 34, 2014, pp. 313–325.

<sup>4</sup> OECD Trade and Agriculture Directorate: OECD's Producer Support Estimate and Related Indicators of Agricultural Support, Concepts, Calculations, Interpretation and Use (The PSE Manual), published in March 2016.

<sup>5</sup> FAO (2012), Assessment of the Agriculture and Rural Development Sectors in the Eastern Partnership countries: The Republic of Armenia, Implemented by FAO, Funded by European Union, 2012.

mentioned. Among main weaknesses, FAO indicated outdated farming and production systems leading to low productivity, lack of modern machinery and infrastructure, inefficient use of land resources, etc.

To get a better view on the use of policy measures and their effects, some micro level data are needed, which can be effectively collected through a survey among the main stakeholders. However, surveying farmers is not an easy task, as not all farmers are ready and have willingness to answer the survey questions. Pennings, Irwin and Good (2002) revealed that in order to increase the probability of getting answers it is crucial to send the survey in the right time period and to decrease the perceived length of the questionnaire as well as to prepare the form and amount of compensation<sup>6</sup>.

Surveys among farmers is an internationally common practice, that have been used to assess the effects of various changes in the agricultural sector. To estimate how digital payments can make a fundamental difference to farmers the World Cocoa Foundation and Better Than Cash Alliance have developed a farmers' survey questionnaire that cocoa companies can use to better understand farmers' digital and financial lives and build familiarity with digital payments<sup>7</sup>. The survey included questions aiming to gather general information about farmers, their income and digital payments, as well as their experience of mobile money. Another survey was conducted by Waha et.al. (2016) to analyse the effectiveness of the specifications of the farming systems characteristics that could help inform about the importance of each system for a country's agricultural production and its ability to cope with short- and long-term climate changes or extreme weather events<sup>8</sup>. With the aim of facilitating the policy synthesis in agricultural sector a nation-wide survey was performed in India in 2003 to get statistical indicators on the socio-economic aspects of farming<sup>9</sup>. The data generated from the survey was used for the agricultural policy formulation.

More formalized and recurrent surveys called Agricultural Resource Management Survey (ARMS) are being performed by USDA. Those are the primary sources of information on the financial condition, production practices, resource use, and economic well-being of farm households in the USA. The data collected from these surveys can be used in policy analysis models, as well as in the process of development of environmental indicators<sup>10</sup>.

**Research methodology.** The examination of the methodological approaches to the evaluation of the effectiveness of the state support provided to the

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<sup>6</sup> Pennings J. M.E., Irwin S. H., Good D. L. (2002). Surveying Farmers: A Case Study, Review of Agricultural Economics, Vol. 24, No. 1 (Spring - Summer, 2002), pp. 266-277.

<sup>7</sup> Buruku B., Chaintreau M., Kahonde O. (2021), Digitizing Payments in Ghana's Cocoa Supply Chain. TOOL FOR COCOA COMPANIES: Farmers Survey Questionnaire, World Cocoa Foundation and Better Than Cash Alliance, Business series working paper.

<sup>8</sup> Waha K., Zipf B., Kurukulasuriya P., Hassan R. M. (2016). An agricultural survey for more than 9,500 African households, Sci Data 3, 160020 (2016), <https://doi.org/10.1038/sdata.2016.20>

<sup>9</sup> Mehta R. (2009). Situation Assessment Survey for farm sector policy formulation, Paper for FAO Expert Consultation on Statistics in Support of Policies to Empower Small Farmers (Bangkok, 8-11 September, 2009).

<sup>10</sup> Ebel R. and Vasavada U. (2010). The ARMS: A Survey Supporting Indicator Development and Economic Policy Analysis, OECD working paper.

agricultural sector allows us to conclude that although the existing methods are diverse, they all emphasize the improvement of the ratio of state's spending on support and the corresponding result. The latter includes increasing the volume of agricultural production and exports, as well as rising the productivity and competitiveness of the sector. The methods and methodological approaches used in the literature are not always applicable to all countries due to the lack of statistical data.

Implementation of the program budgeting system requires evaluating the effectiveness of budget programs especially from the point of view of the beneficiaries, because the expected and actual results of the programs are best experienced by the direct beneficiaries. Therefore, in order to evaluate the effectiveness of budget programs, among other forms of monitoring, it is advisable to conduct a survey among the beneficiaries at certain intervals and with a certain sample and to analyse their results. From this point of view, conducting surveys among the beneficiaries and evaluating their opinion is the most practical method for evaluating the effectiveness of state support programs. Previous studies<sup>11</sup> also show that the rather modest funds allocated to the agricultural sector seem to be directed to the implementation of the most necessary and important programs, while the results of these allocations are not doubtlessly appreciated by the direct beneficiaries.

Thus, to analyse the perception of beneficiaries about the state support programs and to obtain micro-level data needed to assess the effectiveness of state support programs in the field of agriculture a survey was developed and conducted by the research team. Particularly, two surveys were conducted in parallel: among farmers (households and commercial organizations) and experts in the field. The aim was to reveal, on the one hand, the general perception of farmers regarding the effectiveness of the measures and their impact on the farmers' main indicators, and on the other hand, the opinion of experts in agricultural field regarding the effectiveness of the policy.

The questionnaire prepared for farmers consists of four sections:

1. *Information about the farm*, where an attempt was made to find out the information about the size of the farm, the years of operation, the performance indicators, which could make it possible to get a better idea about the participants of the survey, as well as to check the suitability of the sample,
2. *Information on government programs* for entrepreneurs who have benefited from any program, which includes questions about the effectiveness of programs and the effects of these programs on actual performance,
3. *Information on government programs* for entrepreneurs who did not benefit from any programs, where attempts were made to identify the main reasons for not participating in state programs,

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<sup>11</sup> Hunanyan I. S. (2017), Effectiveness of budget programs of RA agriculture according to the evaluation of the beneficiaries, "Finances and Economy" Scientific journal, #7-8, 2017, pp. 203-204.

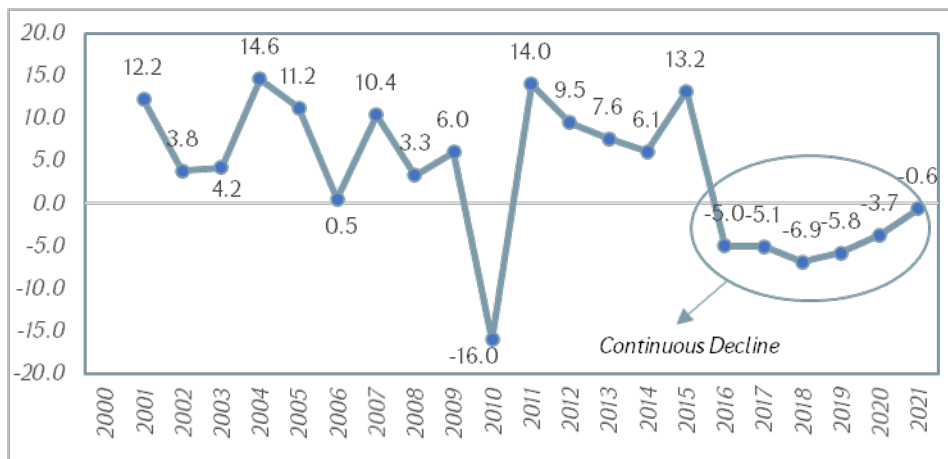
4. *Questions about the general development factors of the agricultural sector.* The purpose of these questions is to identify the obstacles to agricultural development that are not targeted or are insufficiently targeted by existing government support programs.

The questionnaire for experts consists of three sections:

1. *Questions about the expert* to find out the field of activity, experience and other data,
2. *Questions regarding the effectiveness of existing state support programs*, through which an attempt was made to find out the expert's opinion in that direction,
3. *Questions regarding the improvement of state policy and opportunities* for agricultural development.

86 farmers and 58 experts in the field of agriculture participated in the survey. The sample of the survey was carried out using the stratified sampling method<sup>12</sup>, for which we have used the information provided by the Statistical Committee of the Republic of Armenia. Based on the structure of the gross output of agriculture by regions (marzes), the share of farmers from each region was selected. Similarly, on the basis of statistical data, we determined how much the share of individual farmers and the share of organisations in the sample should be. The actual survey sample slightly differed from the weights reflected in the statistical data, but the deviation is not significant, so we can state that the stratified sampling methodology was preserved.

**Analysis of the results of the survey conducted among farmers.** During 2000-2009 and 2011-2015 the agricultural sector was growing at high growth rates. After this period, starting from 2016, the value added in agricultural sector kept declining. The same continues in 2022 as well, when in January-September the agricultural sector declined by 0.9 percent<sup>13</sup>.



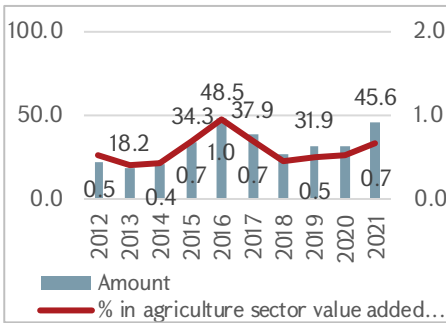
Source: RA Statistical Committee

**Figure 1. Real growth of agricultural sector from 2000 to 2021**

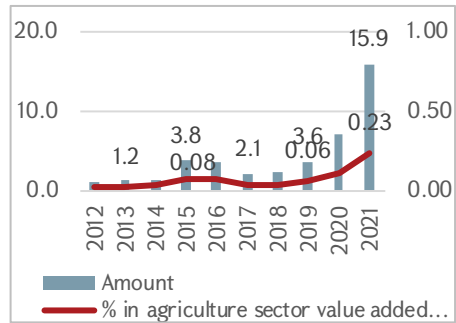
<sup>12</sup> Lauren Thomas (2021), Stratified Sampling | Definition, Guide & Examples, Scribbr publication, Revised on July 21, 2022, <http://surl.li/duvpa>

<sup>13</sup> Source: Authors' calculations based on the data from the RA Statistical Committee.

At the same time, the budget spending on agricultural sector has not increased significantly in contrast to the level of state support programs. In particular, the total spending on agriculture sector, including forestry and irrigation summed to 45.6 bln drams, while in 2016 it was 48.5 bln drams. In 2017-2020, the resources directed to agriculture from state budget were even lower (averaged to 32 bln drams), however slightly higher than the average of 2012-2015 (23.7 bln drams). On the other hand, the amount of state support programs increased in 2018-2021, after declining in 2017. In 2021 the total amount of targeted programs reached 15.9 bln drams compared to 3.6 bln in 2016. Of course, the lag of the effects of the state support programs on agricultural production may be long, thus the effects may be reflected in statistics in future years. At this point the statistics show, that on the macro level the state support programs are not effective, as the decline of agriculture is not mitigated. This issue can be on the one hand because of low effectiveness of the programs, on the other hand because of low amounts of support.



**Figure 2. State budget expenditures on agricultural sector (including forestry and irrigation), bln drams**



**Figure 3. Amount of state support programs in agricultural sector, bln dram**

The total amount of agricultural programs is really small, in 2016-2020 being only 0.06% of agricultural sector’s GDP. The total agricultural spending from budget is also small, in the same period being only 0.6% of agricultural sector’s GDP. The picture was a little improved in 2021, with targeted programs reaching 0.23% and total budget spending – 0.7%. However, that was not enough to bring the agricultural sector’s growth rate to the positive point.

With the macro data indicating ineffectiveness or inadequacy of agricultural support programs, more micro-level data are needed to better understand the effectiveness of those programs, and their main drawbacks. Thus, in order to collect the needed data a survey was conducted among the farmers and experts of the field.

Statistical information used to determine the survey sample is presented in Tables 1 and 2. According to the data of the Statistical Committee of the Republic of Armenia, the regions of Armavir, Ararat and Gegharkunik have a large weight in the structure of the gross agricultural product of the RA, with 22.8, 15.3 and 12.3% respectively in 2021. Then follow Aragatsotn, Lori, Kotayk and Shirak marzes each having around 8-9%, and the rest of the marzes are smaller.



**Table 1. The structure of gross agricultural output by regions, % of the total**

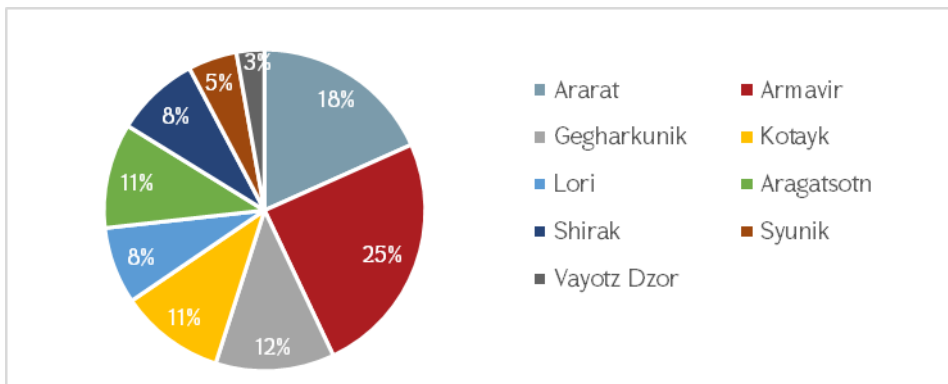
	2019	2020	2021
Aragatsotn	9.5	9.3	9.4
Ararat	15.2	15.4	15.3
Armavir	21.3	21.4	22.8
Gegharkunik	13.3	12.4	12.3
Lori	8.1	8.0	8.5
Kotayk	8.4	9.1	8.5
Shirak	10.3	10.5	9.4
Syunik	7.0	6.7	6.4
Vayotz Dzor	2.5	2.6	2.4
Tavush	4.4	4.5	4.9

**Table 2. The structure of the gross output of agriculture by type of producers, % of the total**

	2019	2020	2021
Commercial organizations	6.2	5.9	5.8
Individual Farmers	93.8	94.1	94.2

The weights are calculated by the authors on the basis of the data summarized in the bulletins about the socio-economic situation published by the RA VC. The weights were calculated only on the basis of the data of marzes, the data of the city of Yerevan were not taken into account:

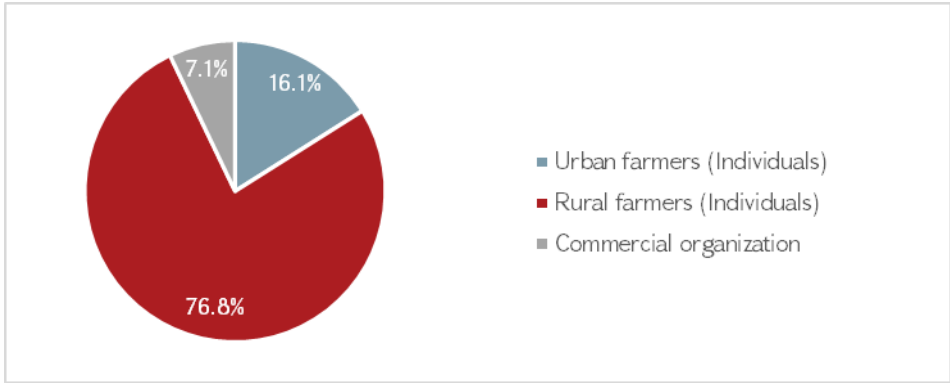
The actual survey sample generally corresponds to the statistical data. Among the 86 entrepreneurs surveyed, those operating in Armavir, Ararat, and Gegharkunik marzes have a large weight, with 25, 18, and 12%, respectively. The weights of farmers surveyed in other marzes in the total number of respondents also correspond to the above mentioned statistical data (see Figure 4).



Source: Results of the survey conducted by the authors

**Figure 4. Location of farms participating in the survey, according to the RA marzes**

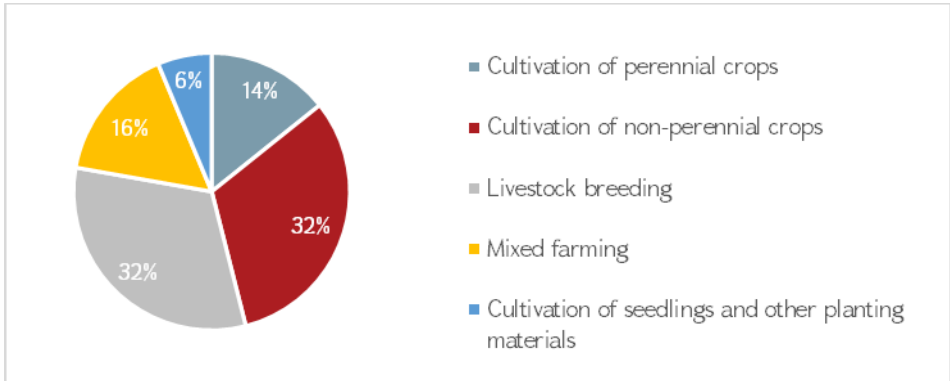
About 77% of the respondents are households, 7% are commercial organizations, and the remaining 16% are individual households of urban residents (see Figure 5). These indicators are also consistent with the statistical data presented in Table 2.



Source: Results of the survey conducted by the authors

**Figure 5. Types of farms participating in the survey**

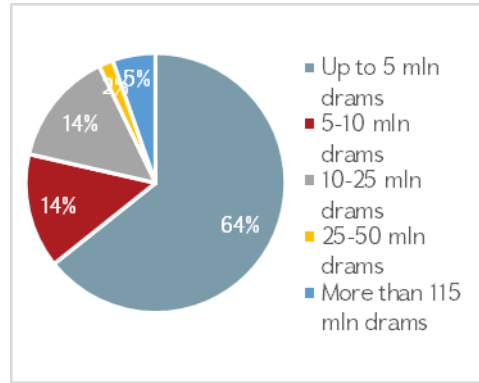
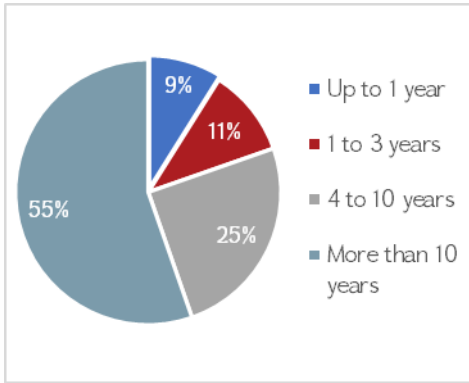
About 32% of the survey participants grow non-perennial crops, and another 32% are engaged in animal husbandry. Among the total respondents, the share of economic operators engaged in the field of mixed agriculture was 16%, and the share of those operating in the field of perennial crops was 14%. The remaining 6% were focused on growing seedlings and other planting materials. These data show that among the participants of the survey, farmers engaged in the main directions of agriculture have a significant weight, which is a positive factor from the point of view of the reliability of the survey results.



Source: Results of the survey conducted by the authors

**Figure 6. Sector of the surveyed economies**

The annual turnover of most survey participants is up to 5 million drams, which means that they are small farms (see Figure 8). Taking into account that the government support programs mainly target small and medium-sized economies, the presence of many small ones will increase the effectiveness of the survey.

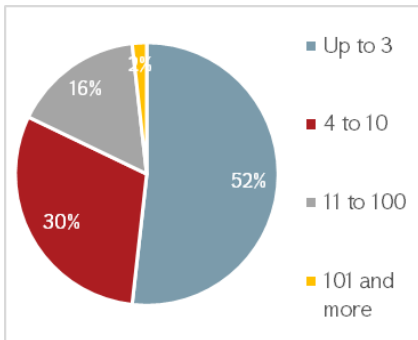


Source: Results of the survey conducted by the authors

**Figure 7. Period of activity of farms participating in the survey**

**Figure 8. Annual turnover of the farms participating in the survey**

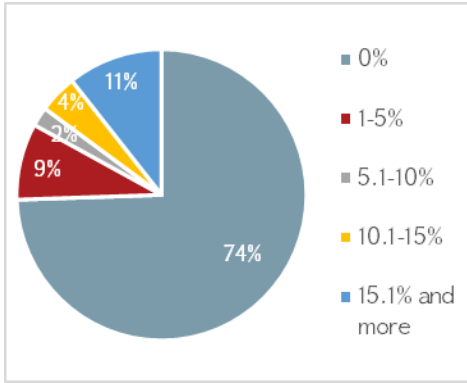
On the other hand, 55% of the respondents have been operating for more than 10 years, and 25% for 4-10 years, which will also have a positive impact on the results of the survey, because those who have been engaged in agriculture for many years have a better understanding of the main problems of the sector and of possible ways to overcome them (see Figure 7). In addition, the sample also includes representatives of newly established farms that started farming within the last year, which is also important, since new market participants generally show more innovative approaches, which will naturally have a positive effect on the results of the survey.



Source: Results of the survey conducted by the authors

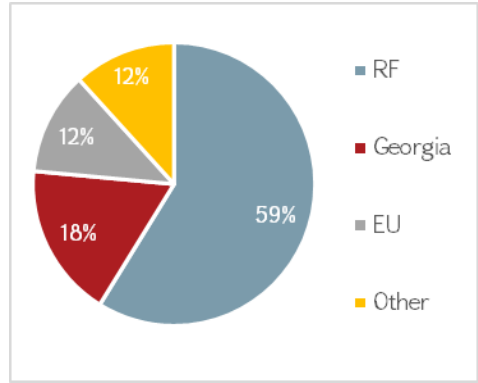
**Figure 9. The number of employees in the farms that participated in the survey**

About 52% of the organizations participating in the survey have an average annual number of employees up to 3, and 30% have 4 to 10 employees. About 16% of respondents have more than 10 employees, and only 2% have more than 100 employees (see Figure 9).



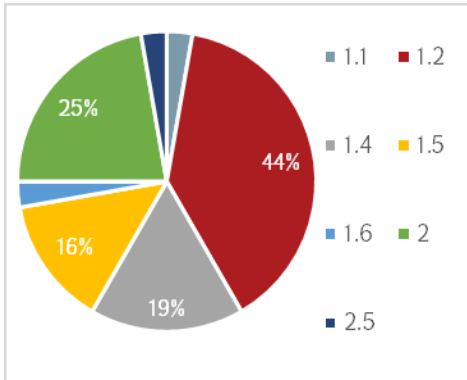
Source: Results of the survey conducted by the authors

**Figure 10. The weight of export as a share of total production**



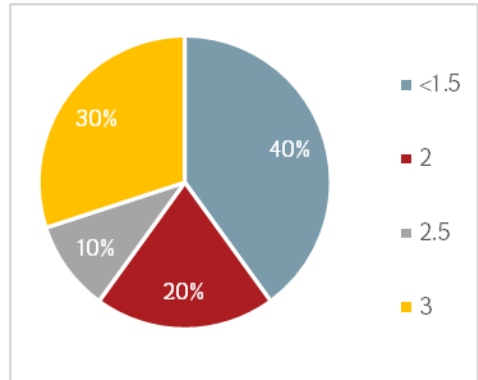
**Figure 11. Export destinations of the surveyed economies**

About 26% of respondents are engaged in exporting their products, while others sell their products either in the domestic market or to exporting organizations. The main market for about 59% of exporters is the Russian Federation, and for 18% - Georgia. It is noteworthy that around 12% of respondents export their products to EU member states.



Source: Results of the survey conducted by the authors

**Figure 12. Product price/cost ratio in the domestic market**



**Figure 13. Product price/cost ratio in the foreign market**

An interesting picture was revealed from the answers of farmers regarding price/cost ratio of their agricultural products (see Figure 12 and 13). In particular, in case of selling the product in the domestic market, the price/cost ratio was around 1.2 for 44% of respondents, meaning that the selling price exceeded the cost price by around 20%. For 19% of respondents this ratio was 1.4. In the case of foreign market, the picture is different. For around 60% of the respondents, the price/cost ratio was more than 1.5, that is, the businessmen sold the products in foreign markets at a price that was about 50% higher than the product's cost price. Moreover, from those 60%, about 30% had a price/cost ratio of about 3. These results show that exporting is much more profitable for entrepreneurs than selling in domestic markets.

We have surveyed both beneficiary and non-beneficiary farmers of state support programs, for one thing to get a better understanding of the reasons of not participating in those programs, for another thing to have opinions about farmers' views on the ways of improving the programs.

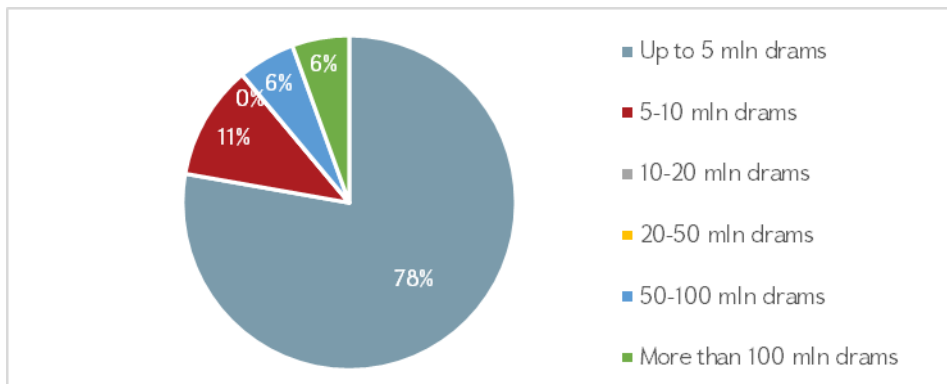
About 61% of the farmers who participated in the survey are beneficiaries of state support programs. As we have already mentioned, separate questions were included in the questionnaire for this group regarding the effectiveness of support programs and their impact on their economies.

**Table 3**

**Mostly benefited state support programs among the surveyed farmers**

Support program	The weight of the number of users of the programs as a share of total number of respondents
Subsidy of interest rates on loans to the sector	58%
Leasing for agricultural vehicles	19%
Leasing for agricultural equipment	3%
Modernization of irrigation systems	6%
Introduction of insurance system in agriculture sector	6%
Construction of small and medium greenhouses and their technological support	3%
Support for smart cattle ranches	3%

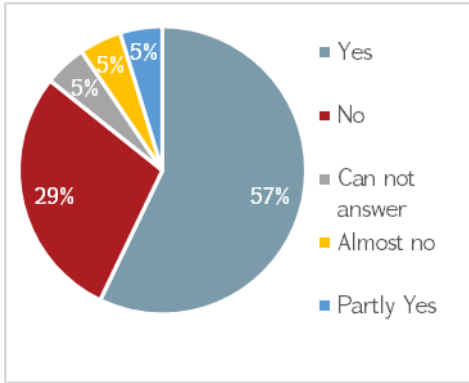
The information presented in Table 3 allows to form an idea about which types of support programs were mainly used by the entrepreneurs. The main majority are farmers who benefited from the interest rate subsidy programs for agricultural loans, whose weight is around 58%. The next program with high share is the leasing for agricultural vehicles and equipment.



Source: Results of the survey conducted by the authors

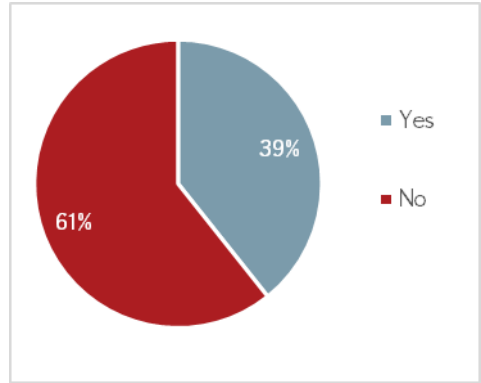
**Figure 14. Amount of state support received**

Since most respondents were small farm owners (up to 5 million drams turnover), the amounts received by them in the form of support are also small. About 78% of the respondents received support amounting to 5 million drams.



Source: Results of the survey conducted by the authors

**Figure 15. Has government support contributed to the expansion of production?**



**Figure 16. Has government support contributed to export expansion?**

According to farmers, this support has had a significant positive impact on their activity indicators. In particular, among the users of the programs, about 62% responded positively to the question about the state support programs helping to increase their production volumes, and 39% answered positively to the question about the state support programs helping to increase their export volumes (see Figures 15 and 16). However, about 29% of the respondents stated that the state support programs did not contribute to the expansion of their production volumes, and 61% to the expansion of exports. This is quite a high indicator, and this result calls for some corrections in the programs. Furthermore, about 71% of those who answered negatively to the previous questions were beneficiaries of “Subsidy of interest rates on loans to the sector” programs.

**Table 4**

**Which state support measures for the agricultural sector do you consider to be the most effective?**

Support program	Share of respondents that indicated the program as most effective	
	Programs beneficiaries	Non beneficiaries
Subsidy of interest rates on loans to the sector	45%	32%
Leasing for agricultural vehicles	15%	9%
Leasing for agricultural equipment	5%	9%
Modernization of irrigation systems	0%	27%
Introduction of insurance system in agriculture sector	24%	14%
Construction of small and medium greenhouses and their technological support	11%	9%

The questionnaire also included a question clarifying the respondents' opinion on the effectiveness of the measures (see Table 4). The answers to this

question differed significantly among the entrepreneurs who made use of the programs and those who did not. Around 45% of program users believe that the most effective measure is to subsidize the interest rates of loans provided to the sector, and then to introduce an insurance system in the agricultural sector. Meanwhile, for non-users of the programs, the second most effective measure is the upgrading of irrigation systems. It is noteworthy that the economic operators who benefited from the programs do not consider the modernization of irrigation systems to be effective at all, which may indicate that the implementation of programs aimed at the modernization of irrigation systems does not lead to the expected results.

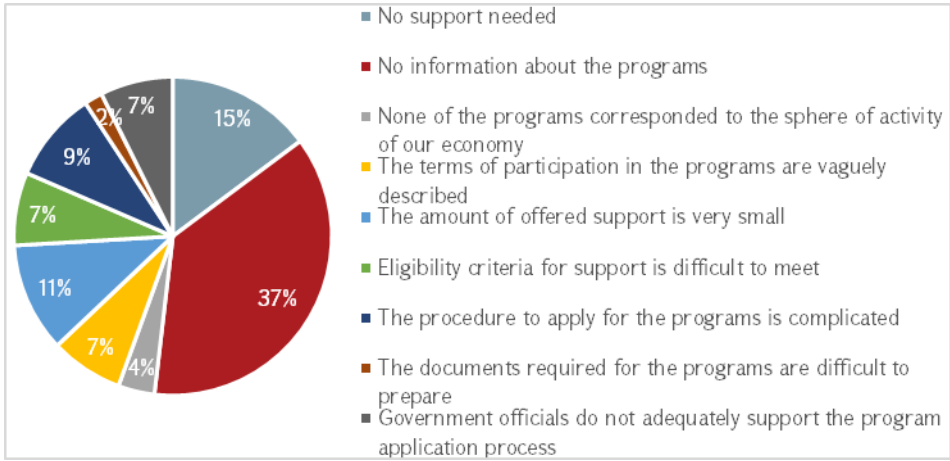
**Table 5**

**Respondents' opinion on some statements about government support programs (where 1 - strongly disagree, 5 - strongly agree)**

Statement	How much the survey participant agrees with the statement				
	1	2	3	4	5
<b>Government support programs meet the needs of farms</b>	13.8%	3.4%	17.2%	17.2%	48.3%
<b>Information about government support programs is easily accessible to farm representatives</b>	31.0%	10.3%	13.8%	17.2%	27.6%
<b>The procedure for applying for government assistance programs is simple and well designed</b>	44.8%	17.2%	17.2%	6.9%	13.8%
<b>The list of documents required to apply for government assistance programs is reasonable and can be prepared in a reasonable period of time</b>	37.9%	10.3%	13.8%	24.1%	13.8%
<b>The amount of support (amount of money) provided by government support programs corresponds to needs and market prices</b>	48.0%	4.0%	8.0%	28.0%	12.0%
<b>Government support programs are well targeted (those who really need it)</b>	44.4%	3.7%	11.1%	14.8%	25.9%
<b>Government officials are knowledgeable and efficient enough to support agricultural economies</b>	51.7%	3.4%	17.2%	10.3%	17.2%
<b>For industry organizations, overcoming state bureaucracy, regulations, including licensing requirements for types of economic activity is not unduly complicated</b>	59.3%	7.4%	11.1%	18.5%	3.7%

Through the question checking, the opinion of the respondents regarding some statements about state support programs, it was revealed that the majority of businessmen do not agree at all with the idea that overcoming the state bureaucracy, regulations, licensing requirements for organizations in the sector is not unnecessarily complicated. The next problematic provision, according to the majority of the respondents, is the level of knowledge of the employees of the government agencies involved in the support of the sector. The targeting of

support programs and the adequacy of the amount of support to real needs were also considered problematic.



Source: Results of a survey conducted by the authors

**Figure 17. Main reasons for not applying for the state support programs**

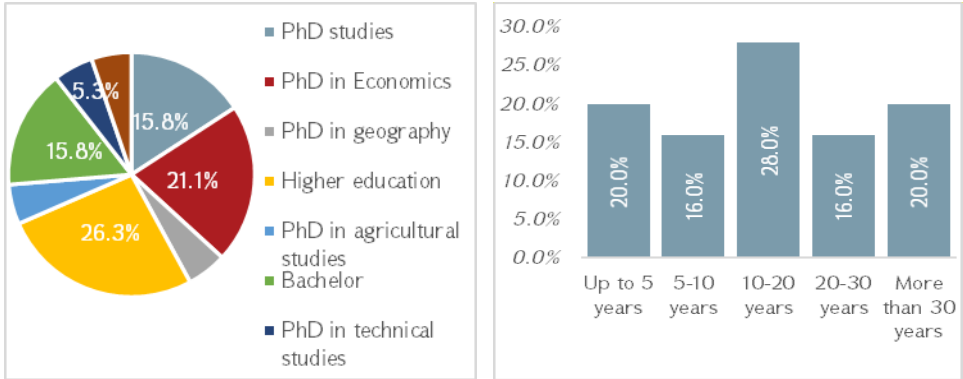
Most of the farmers who did not participate in any program (around 37%) mentioned the lack of information about the programs as the main reason (Figure 17). This shows that there is a need to increase the level of information among farmers. The weight of farmers who did not become beneficiary of the programs because of insufficient amount of support is also significant - around 7%. The other reasons of not participating in the programs relate to the small size of support offered, the process of applying for and receiving the support and correspondence of the support measures to real needs of farmers. These problems also need to be addressed.

When asked about new support measures, agriculturalists suggested the following:

- Product consumption support
- Measures aimed at support in the stage of the sale of agricultural products
- Simplification and clarification of the import procedure of all means supporting and contributing to agriculture (plants and new pesticides not registered in the RA region)
- Export support
- Support for procurement of packaging equipment
- Provision of fertilizers
- Creation of individual irrigation facility
- Insurance

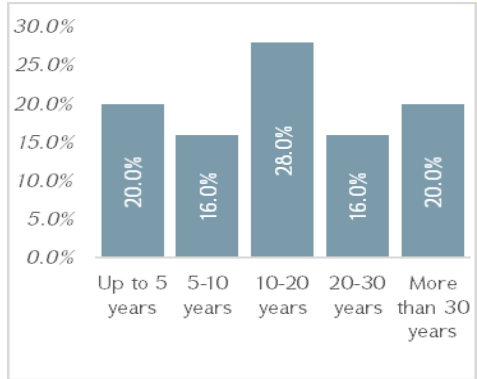


**Analysis of the results of the survey conducted among experts**



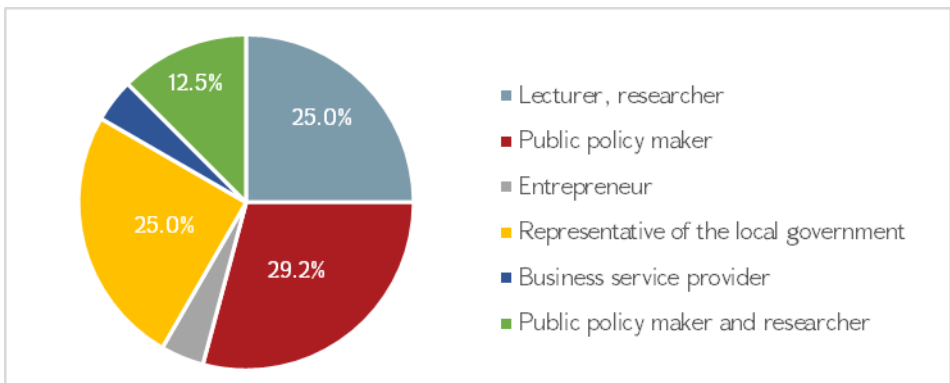
Source: Results of the survey conducted by the authors

**Figure 18. Educational background of the experts who participated in the survey**



**Figure 19. Professional experience of the experts who participated in the survey**

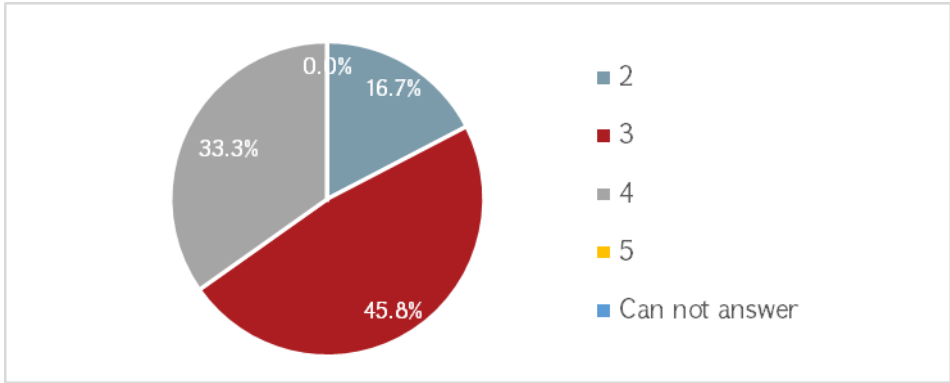
For the survey among experts, the sample of experts was made in such a way as to include experts with different professional levels who have significant experience in the field of agriculture. As a result, about 64% of respondents have more than 10 years of experience, and 36% of them have more than 20 years of experience (see Figure 19).



Source: Results of the survey conducted by the authors

**Figure 20. Field of activity of the experts who participated in the survey**

The fields of professional activity of experts are well diversified. Experts from public policymaking, local government representatives, teachers, and researchers as well as business service providers were included in the survey.



**Figure 21. Evaluation of the effectiveness of institutional conditions of agriculture by experts (1: extremely bad conditions, 5: extremely good conditions)**

The effectiveness of the institutional conditions of agriculture was assessed by experts at an average level. The majority, around 96%, evaluated the effectiveness of these institutional conditions with 2-5 points on a 5-point scale.

**Table 6**

**Experts' opinion on various statements about state support programs (1: completely false, 5: completely true)**

	The experts' agreement with the statement				
	1	2	3	4	5
Organizations with state participation play a major role in agriculture	17%	26%	13%	22%	22%
Support for the agricultural sector is a high priority at the state level	0%	8%	17%	25%	50%
Support for the agricultural sector is a high priority at the local government level	0%	21%	21%	25%	33%
Government support programs meet the needs of farms	0%	21%	25%	33%	21%
Information about government support programs is easily accessible to farm representatives	4%	21%	27%	30%	18%
The procedure for applying for government assistance programs is simple and well designed	8%	17%	29%	25%	21%
The list of documents required to apply for government assistance programs is reasonable and can be prepared in a reasonable period of time	0%	21%	30%	28%	21%
The amount of support (amount of money) provided by government support programs corresponds to market needs and prices	4%	9%	38%	32%	17%
Government support programs are targeted (support is received by those who really need it)	8%	25%	29%	38%	0%
Government officials are knowledgeable and efficient enough to support agricultural economies	4%	21%	38%	17%	21%
For industry organizations, overcoming state bureaucracy, regulations, including licensing requirements for types of economic activity is not unduly complicated.	4%	13%	29%	42%	13%

The results of the question testing the agreement of experts on some of the statements about the state support programs in the agricultural sector show that the experts generally agree on the high priority of the support of the agricultural sector. However, the opinion of experts differs significantly from the opinion of farmers regarding the question how targeted the programs are and the complexity of the bureaucratic system. We think these issues are quite important and the differences in the opinions of experts (especially state policymakers) and farmers can lead to a decrease in the effectiveness of support programs. Therefore, further analysis is needed to identify the causes.

**Conclusions and recommendations.** Summarizing the results of the survey, we can note that, in the perception of farmers, the state support programs are partially effective, and it is necessary to carry out certain reforms to improve them. In particular, it is necessary to increase the targeting of the programs, to increase the availability of information about them, as well as to simplify the procedures for applying and participating in the programs. In addition to that, it is also essential to include new programs, the most important of which, according to businessmen, are the programs aimed at supporting the sale of agricultural products. The effectiveness of the programs aimed at improving the irrigation systems is also problematic, because all the economic operators who used the programs did not consider the programs aimed at the irrigation system to be effective.

Based on the results of the surveys, some proposals aimed at increasing the effectiveness of state support programs can be derived. In particular:

- Increasing information accessibility about state support programs, as well as facilitating the procedure for participating in the programs. In this regard, the following measures are proposed:
  - Selection of the most effective and profitable crops (or types of livestock) by the municipalities in their area, separation of support programs for them. Of course, finding profitable crops needs separate research, however it is necessary for more targeted and better formulated programs.
  - Submission of an individual proposal to land owners based on the above mentioned information
  - In case of agreement and readiness, support in the procedure of using the program
- Simplify the procedure for applying for state support programs and designate separate workers to support business owners.
  - Development of new support programs for the agricultural sector, in particular.
    - Development and implementation of programs aimed at supporting the process of selling agricultural products,
    - Implementation of measures aimed at access to new markets for agricultural products,
    - Support for the establishment of individual irrigation systems.

- Gradual reduction of the loan subsidy programs (as majority of those who receive this kind of support stated that it didn't contribute to the increase in production or export levels), instead of implementing the programs to provide direct assistance (as described in the previous suggestions) to the farmers.

## References

1. Buruku B., Chaintreau M., Kahonde O. (2021), Digitizing Payments in Ghana's Cocoa Supply Chain. Tool for Cocoa Companies: Farmers Survey Questionnaire, World Cocoa Foundation and Better Than Cash Alliance, Business series working paper.
2. Ebel R. and Vasavada U. (2010), The ARMS: A Survey Supporting Indicator Development and Economic Policy Analysis, OECD working paper.
3. FAO (2012), Assessment of the Agriculture and Rural Development Sectors in the Eastern Partnership countries: The Republic of Armenia, Implemented by FAO, Funded by European Union, 2012.
4. Hunanyan I. S. (2017), Effectiveness of budget programs of RA agriculture according to the evaluation of the beneficiaries, "Finances and Economy" Scientific journal, №7-8, 2017.
5. Mehta R. (2009), Situation Assessment Survey for farm sector policy formulation, Paper for FAO Expert Consultation on Statistics in Support of Policies to Empower Small Farmers (Bangkok, 8-11 September, 2009).
6. OECD Trade and Agriculture Directorate: OECD's Producer Support Estimate and Related Indicators of Agricultural Support, Concepts, Calculations, Interpretation and Use (The PSE Manual), published in March 2016.
7. Lauren Thomas (2021), Stratified Sampling | Definition, Guide & Examples, Scribbr publication, Revised on July 21, <http://surl.li/duvpa>
8. Leck C., Evans N., Upton D. (2014), Agriculture – Who cares? An investigation of care farming. UK Journal of Rural Studies, 34.
9. Pennings J. M.E., Irwin S. H. and Good D. L. (2002), Surveying Farmers: A Case Study, Review of Agricultural Economics, Vol. 24, No. 1 (Spring - Summer, 2002).
10. Waha K., Zipf B., Kurukulasuriya P., Hassan R. M. (2016), An agricultural survey for more than 9,500 African households, Sci Data 3, 160020 (2016), <https://doi.org/10.1038/sdata.2016.20>
11. Голубев А., Задачи государственного управления российским агрокомплексом // АПК: экономика, управление, №1, 2005.

**ԳԱՅԱՆԵ ԱՎԱԳՅԱՆ**

Հայաստանի պետական տնտեսագիտական համալսարանի  
մակրոէկոնոմիկայի ամբիոնի դոցենտ, տնտեսագիտության թեկնածու

**ԳԱՐԻԿ ՊԵՏՐՈՍՅԱՆ**

Հայաստանի պետական տնտեսագիտական համալսարանի  
մակրոէկոնոմիկայի ամբիոնի դասախոս, տնտեսագիտության թեկնածու

**ԽՈՐԵՆ ՄԽԻԹԱՐՅԱՆ**

Հայաստանի պետական տնտեսագիտական համալսարանի  
կառավարման ամբիոնի դոցենտ, տնտեսագիտության թեկնածու

**ՔՆԱՐԻԿ ՎԱՐԴԱՆՅԱՆ**

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**ԱԻԴԱ ՄԻՐՈՒՄՅԱՆ**

Հայաստանի պետական տնտեսագիտական համալսարանի  
մակրոէկոնոմիկայի ամբիոնի ասպիրանտ

**«Հ գյուղատնտեսության ոլորտում իրականացվող պետական աջակցության ծրագրերի արդյունավետության գնահատումը ֆերմերների և փորձագետների շրջանում անցկացված հարցման միջոցով»** – Գյուղատնտեսության ոլորտը մշտապես գտնվել է պետական քաղաքականության ուշադրության կենտրոնում, և Կառավարությունը նախաձեռնում է մի շարք միջոցառումներ տվյալ ոլորտի զարգացումը խթանելու նպատակով: Սակայն այդ միջոցառումները ոչ միշտ են արդյունավետ, և հաճախ հարցեր են առաջանում պետական բյուջեի սուղ միջոցների ծախսման դիմաց արձանագրված արդյունքների վերաբերյալ: Սույն աշխատանքում նպատակադրվել է բացահայտել «Հ գյուղատնտեսության ոլորտում իրականացված պետական օժանդակության ծրագրերի արդյունավետությունը, ուստի ոլորտի հիմնական շահառուների շրջանում կատարվել է հարցում: Մասնավորապես՝ առանձին հարցումներ են անցկացվել գյուղատնտեսությամբ զբաղվող տնտեսավարողների (թե՛ տնային տնտեսությունների, թե՛ առևտրային կազմակերպությունների) և գյուղատնտեսության ոլորտի փորձագետների շրջանում: Հարցումների արդյունքները հնարավորություն են տվել բացահայտելու պետական օժանդակության ծրագրերի հիմնական թերությունները և առավելությունները, ինչպես նաև դրանց բարելավման հնարավորությունները:

**Հիմնաբառեր.** գյուղատնտեսություն, ֆերմերների հարցում, կառավարության աջակցության միջոցառումներ, գյուղատնտեսության աջակցության արդյունավետություն

JEL: Q14, Q18

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***Оценка эффективности программ государственной поддержки, реализуемых в сфере сельского хозяйства РА, посредством опроса, проведенного среди фермеров и экспертов.***

Сельскохозяйственный сектор всегда находился в центре внимания государственной политики, и правительство инициирует ряд мер по развитию сельскохозяйственного сектора. Однако эти меры не всегда эффективны, и часто возникает вопрос о результатах, зафиксированных при расходовании средств государственного бюджета. Целью данного исследования являлось выявление эффективности программ государственной поддержки, реализуемых в сельскохозяйственном секторе РА, для чего был проведен опрос среди основных бенефициаров сектора. В частности, были проведены отдельные опросы среди фермеров (как домашних хозяйств, так и коммерческих организаций) и экспертов в области сельского хозяйства. Результаты опросов позволили выявить основные недостатки и преимущества программ государственной поддержки, а также возможности их улучшения.

**Ключевые слова:** *сельское хозяйство, опрос фермеров, меры государственной поддержки, эффективность поддержки сферы сельского хозяйства*

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