Measures to improve the effectiveness of state support for agriculture at the regional level

M V Kuznetsova, E G Zinovyeva and A V Skripchenko
Nosov Magnitogorsk State Technical University, 38, Lenina ave., Magnitogorsk, 455000, Russia
E-mail: ekaterina_7707@mail.ru

Abstract. Acceleration of the pace of development of science and technology in recent decades requires a change in approaches to the formation and implementation of state innovation policy. In developed countries, more than 80% of economic growth is achieved through the innovative development of economic sectors. The progressive development of agricultural production is also conditioned by the implementation of scientific and technological achievements through their approbation and development in production. The article analyzes the main measures to improve the efficiency of state support for agriculture at the regional level on the example of the Chelyabinsk region.

1. Introduction
The well-being of citizens, the standard of living, and the health of the population, the volume and structure of consumption of goods and services, and social living conditions largely depend on the efficiency of the functioning of such a branch of the agro-industrial complex as agriculture. Agriculture in modern conditions of functioning is vulnerable to various environmental factors (unfavorable climatic and natural factors). In this regard, the provision of state support to the agro-industrial complex is a prerequisite for ensuring the successful development of this sector.

State support for agriculture is one of the most important methods of state regulation of this industry and is a combination of various methods, forms and instruments of influencing the agricultural economy to achieve certain results.

State support for the development of agricultural production should be understood as a system of measures aimed at import substitution, increasing the efficiency of the agricultural sector of the economy, ensuring sustainable development of agriculture, and achieving food security in the country [1].

State support for agriculture makes it possible to solve problems caused, on the one hand, by imperfect market mechanisms, and, on the other hand, by insufficient efficiency of the system of state regulation of the processes of formation, distribution, redistribution and consumption of the final product of the agro-industrial complex, taking into account the interests of agricultural producers and the level of its efficiency significantly affects on the performance of an industry such as agriculture.

2. Materials and methods
The research of many domestic and foreign scientists is devoted to the issues of state support, among which the works deserve special attention: L.I. Abalkin, A. Gerasimov [2], M.S. Petukhova [3; 4],
M.V. Kuznetsova [5], T.A. Akhmedzhanova [6], J.K. Galbraith, J.M. Keynes, A. Sagaydak [7], O.V. Shumakova [8], M.T. Lukyanova [9] and others. The contribution of these scientists is the fundamental basis for further research in the field of ensuring innovative reproduction in agriculture based on government support.

In the study, the following methods were used: abstract-logical, system analysis, structural-logical.

The information and empirical base of the study was the legislative and regulatory legal acts of the state executive authorities of the Russian Federation [10], the Ministry of Agriculture of the Russian Federation, federal and regional authorities of the agro-industrial complex.

3. Results and discussion
State support uses instruments - tax policy, the banking system, the leasing system, however, the budgetary funds paid in the agricultural support program are the main instrument of support.

The main goal of the state is to ensure the food security of the Chelyabinsk region and increase its competitiveness based on the innovative development of the agro-industrial complex, creating a favorable environment for entrepreneurship and improving the level and quality of life of the population living in rural areas.

Expected results of the state implementation of the program in general, the implementation of the measures of the State program to achieve a positive impact on the social results of the development of the Chelyabinsk region.

The main priorities of state protection:

- In the production sector - increasing the production of high-quality, environmentally friendly agricultural products and food in order to ensure food security and increase the competitiveness of the Chelyabinsk region;
- In the economic sphere - increasing the income of economic entities of the agro-industrial complex;
- In the social sphere - sustainable development of rural areas as an indispensable condition for preserving labor resources;
- In the sphere of development of production potential - the involvement of unused agricultural land in the turnover, import substitution of the production of seed products, vegetables in greenhouses;
- In the scientific and personnel spheres - ensuring the formation of an innovative agro-industrial complex.

In general, the result of the implementation of the state program is aimed at achieving a positive impact on the social and economic parameters of the development of the Chelyabinsk region, taking into account the priorities, goals, objectives and targets defined by Strategy 2035.

To increase the efficiency of the provision of state financial support for agriculture at the regional level, it is proposed to introduce measures aimed at the following goals:

- Advanced training of agricultural workers and training of new personnel for this area;
- Attraction and development of activities of small enterprises;
- Raising awareness of agricultural producers about new support programs;
- Development of fish farming;
- Stimulation of scientific activity in this area.

The main parameters of the subprogram for improving the qualifications of agricultural employees and training new personnel for this area called "Provision of agricultural personnel" are presented in table 1 [11].
Table 1. The main parameters of the program "Provision of agricultural personnel".

| Criterion                                      | Value                                                                                                                                 |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Subroutine name                                | Staffing agriculture                                                                                                                  |
| Objectives of the subroutine                   | Labor productivity growth in agriculture                                                                                               |
| Targets                                        | Growth in the number of people employed in agriculture                                                                                   |
|                                                | Share of graduates employed in their specialty                                                                                           |
|                                                | The number of employees in this field who have undergone advanced training and retraining                                              |
|                                                | Number of high-performing jobs                                                                                                          |
|                                                | Employee productivity index                                                                                                            |
| Sources of financing                           | Federal budget, regional budget                                                                                                        |
| Implementation methods                         | Subsidies for partial reimbursement of the costs of training programs for agricultural workers                                          |
|                                                | Subsidies for the provision of additional educational courses for students studying in the areas of "Veterinary and Sanitary Expertise", "Aquatic Bioresources" at the Federal State Budgetary Educational Institution of Higher Education "South Ural State Agrarian University" and "Chelyabinsk State University" |

The main parameters of the subprogram aimed at attracting and developing the activities of small enterprises in agriculture, called "Development of peasant farming" are presented in table 2 [11].

Table 2. The main parameters of the program "Development of a peasant farm".

| Criterion                                      | Value                                                                                                                                 |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| Subroutine name                                | Development of a peasant farm                                                                                                        |
| Objectives of the subroutine                   | Labor productivity growth                                                                                                              |
| Targets                                        | Growth in the number of small businesses that operate within the framework of a peasant farm                                             |
|                                                | Reducing unemployment in rural areas                                                                                                   |
|                                                | The volume of agricultural production by small enterprises                                                                          |
|                                                | Number of small businesses                                                                                                            |
|                                                | The number of people employed in the peasant farm                                                                                      |
|                                                | Labor productivity index                                                                                                              |
| Sources of financing                           | Federal and regional budget                                                                                                            |
| Implementation methods                         | Providing grants to support budding farmers                                                                                             |
|                                                | Reimbursement of part of the costs of small agricultural enterprises for the payment of interest under credit agreements, and loans received from agricultural consumer cooperatives |
|                                                | Reimbursement of part of the costs associated with registering a company as an individual entrepreneur (registrar services, purchase of an online cash register) |

The main parameters of the sub-program aimed at raising the awareness of agricultural producers about the new support programs called “Raising the awareness of agricultural workers” are presented in table 3 [11].

Financial support for fish farming in the Chelyabinsk region is an underdeveloped area. Currently, there are more than 3000 lakes in the Chelyabinsk region, of which 53 are large, with an area of more than 10 km². In the lakes of the Chelyabinsk region, there are over twenty different species of fish, such as crucian carp, rudd, bream, perch, pike perch, pike, burbot, etc. There is also significant potential for industrial and commercial breeding of such fish species as sturgeon and trout.
The main parameters of the program aimed at the development of fish farming under the name "Development of fish farming" are presented in table 4 [11].

**Table 3.** The main parameters of the subprogram "Raising awareness of agricultural workers".

| Criterion | Value |
|-----------|-------|
| Subroutine name | Raising awareness among agricultural workers |
| Objectives of the subroutine | Ensuring the prompt receipt and processing of applications for financial assistance from the population |
| | Enabling the growth of beneficiaries of counseling assistance |
| | Ensuring the growth of applications for subsidies through the Internet and consulting centers opened through the multifunctional center |
| Targets | Number of recipients of consulting assistance |
| | The number of visitors to a specialized Internet service created within the framework of this program, with which it is possible to complete and send an application for financial support. |
| | Number of completed applications for various forms of financial support |
| Sources of financing | Regional budget |
| Implementation methods | Financing the costs of creating and maintaining a specialized Internet service to provide information support to small and medium-sized agricultural enterprises, with which you can apply for financial and other support. Also on this resource will be located information about available vacancies in the field of agriculture |
| | Creation and placement of information leaflets with information on the available areas of support for small and medium-sized agricultural businesses |
| | Creation of specialized centers for providing consulting assistance to agriculture on the basis of a multifunctional center |

**Table 4.** The main parameters of the subprogram "Development of fish farming in the Chelyabinsk region".

| Criterion | Value |
|-----------|-------|
| Subroutine name | Development of fish farming in the Chelyabinsk region |
| Objectives of the subroutine | Enabling the growth of fish farming and fishing businesses |
| | Ensuring an increase in the number of stocked reservoirs |
| | Ensuring the growth of the catch and the sale of various types of fish |
| Targets | Fish catch and sales |
| | Number of fish farms |
| | Number of involved reservoirs |
| | The number of visitors to a specialized Internet service |
| Sources of financing | Regional budget |
| Implementation methods | Partial compensation for the costs associated with the implementation of this activity |
| | Preferential rent of reservoirs for fish farming |
| | Financing the creation and operation of a specialized Internet service to provide information support to entrepreneurs in this field |

In addition, an additional positive effect is an increase in the tourist attractiveness of the Chelyabinsk region for tourists, which will ensure the flow of additional funds to the budget of the Chelyabinsk region and the Russian Federation.
The main parameters of the subprogram aimed at stimulating scientific activity in this area called "Development of research in the field of agriculture in the Chelyabinsk region" are presented in table 5 [11].

**Table 5.** The main parameters of the program "Development of research in the field of agriculture of the Chelyabinsk region"

| Criterion | Value |
|-----------|-------|
| Subroutine name | Development of research in the field of agriculture of the Chelyabinsk region |
| Objectives of the subroutine | Ensuring an increase in the number of scientific developments by scientists of the Chelyabinsk region in the framework of urgent problems of agriculture in the region |
| | The growth of the scientific potential of the Chelyabinsk region |
| Targets | Number of recipients of grants and subsidies under the program |
| | The number of scientific developments implemented in practice |
| Sources of financing | Federal and regional budget |
| Implementation methods | Subsidies for reimbursement of part of the cost of research and development work in the agro-industrial complex |
| | Conducting a grant competition for innovative development in the field of agriculture |

The total amount of funding for the proposed and existing activities is presented in table 6 [11].

**Table 6.** The proposed distribution of budgetary funds intended for the subprograms of the program "Development of agriculture of the Chelyabinsk region", thousand rubles.

| Subroutine name | Financing volume, thousand rubles |
|-----------------|----------------------------------|
| Development of branches of the agro-industrial complex | 600000 | 500000 |
| Technical and technological modernization, innovative development | | 50000 |
| Stimulating investment activities in the agro-industrial complex | 300000 | 230000 |
| Sustainable development of rural areas | 345000 | 330000 |
| Management of the implementation of the state program of the Chelyabinsk region "Development of agriculture in the Chelyabinsk region" | | 600000 |
| Prevention of the emergence and spread of African swine fever in the Chelyabinsk region | | 10000 |
| Creation of a support system for farmers and the development of rural cooperation in the Chelyabinsk region | 15000 | 5000 |
| Export of products of the agro-industrial complex of the Chelyabinsk region | | 50000 |
| Provision of personnel for agriculture | | 1500 |
| Development of a peasant farm | 100050 | 60700 |
| Raising awareness of agricultural workers | | 120 |
| Development of fish farming in the Chelyabinsk region | 50 | 250 |
| Development of research in the field of agriculture of the Chelyabinsk region | 22000 | 9000 |
| Total by budgets | 1382100 | 1846570 |
| Total | 3228670 |
The program is funded primarily from the federal budget, which accounts for 63%, the regional budget accounts for 37%.

The expected effect of the implementation of these measures is presented in table 7.

**Table 7.** The expected effect of the implementation of the new subprograms of the agricultural support program of the Chelyabinsk region.

| Indicator name                                                                 | Indicator value before implementation of measures | Value of indicators after implementation of measures | Relative deviations |
|--------------------------------------------------------------------------------|--------------------------------------------------|----------------------------------------------------|---------------------|
| Number of high-performing jobs                                                 | 1.657                                            | 1.9                                                | 14.7                |
| Employee productivity index                                                    | 101.1                                            | 102.3                                              | 1.2                 |
| Agricultural output                                                            | 124.38                                           | 125.4                                              | 0.8                 |
| Number of small businesses                                                     | 1499                                             | 1520                                               | 1.4                 |
| Number of recipients of consulting assistance                                  | 100                                              | 150                                                | 50.0                |
| The number of visitors to a specialized Internet service                        | 0                                                | 150                                                | -                   |
| Fish catch and sales                                                           | 886.8                                            | 905                                                | 2.1                 |
| Number of fish farms                                                           | 111                                              | 119                                                | 7.2                 |
| The number of visitors to a specialized Internet service                        | 0                                                | 150                                                | 100.0               |
| Number of recipients of grants in the framework of the competition for innovative development in the field of agriculture | 0                                                | 2                                                  | 100.0               |

4. Conclusion
Thus, these events will allow attracting new personnel to this industry, increasing public awareness of the methods of financial support provided to agricultural enterprises, increasing the volume of production and increasing the tourist attractiveness of the region.

References
[1] Petukhova M S, Konova N N, Belaits D S, Chemova S G, Vyshegurov M S and Golikov A I 2018 Perfection of the technical and technological reequipment mechanism for agricultural production in Russia. *Espacios* **39**(18) 379-88
[2] Gerasimov A, Gromov E, Grigoryeva O, Skripnichenko Y and Kapustina E 2020 Trends and Regularities of the Development of Regional Markets of Agricultural Products in the Russian Federation. *Quality-access success* **21**(178) 143-7
[3] Petukhova M S, Stadnik A T, Sharavina E V, Samokhvalova A A, Grigoriev N V and Chemova S G 2016 Formation and development of the rotational system of farming in the Novosibirsk Region. *International Journal of Economic Research* **13**(6) 2509-23
[4] Petukhova M S, Stadnik A T, Shelkovnikov S A, Rudoy Y V and Matveev D M 2015 Improving the methodology of disposition of state support funds for agriculture under the WTO rules. *Asian Social Science* **11**(14) 133-40
[5] Kuznetsova M V 2015 Influence of the exit strategy of venture capital investors on the efficiency of financing innovative projects. *Corporate Economy* **2**(2) 20-5
[6] Akhmedzhanova T A, Vikulina V V, Votchel L M, Ivashina N S and Kuznetsova M V 2015 Assessment of efficiency of innovation projects financing through the exit strategies of venture capital investors. *Journal of Advanced Research in Law and Economics* **6**(3) 463-71
[7] Sagaydak A 2016 New trends in development of Land Administration in Russia. Land and
Poverty Conference (USA: Washington DC) 488

[8] Shumakova O V and Epanchintsev V Y 2020 Agro-Consulting as a tool for obtaining state support in the agro-industrial sector. *18th International Scientific and Practical Conference on Modern Trends in Agricultural Production in the World Economy* 120-30

[9] Lukyanova M T, Kovshov V A, Galin Z A, Zalilova Z A and Stovba E V 2020 Scenario Method of Strategic Planning and Forecasting the Development of the Rural Economy in Agricultural Complex. *Scientifica* 11(55) 9124641

[10] Federal Law "On the Development of Agriculture" Retrieved from: http://docs.cntd.ru/document/902021785

[11] Resolution of the Government of the Chelyabinsk region "Development of agriculture in the Chelyabinsk region for 2017 - 2020" Retrieved from: https://base.garant.ru/19875624/