



**Development of cooperation in the framework of strengthening the material and technical base of small forms of Economy**

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**ABSTRACT**

The key problem of the agrarian sector in Russia is the low productivity of agricultural labor, which negatively affects the competitiveness and efficiency of the industry as a whole. Hence the high cost price of agricultural products and products of its processing, inadequate motivation for labor, investment unattractiveness [Klychova G.S., Nizamutdinov M.M., Mavlieva L.M., Safiullin L.N.2014].

But the basis for intensive development of agriculture and ensuring the food security of the Russian Federation is, first of all, the availability of sufficient technical security for agricultural producers. Practice, calculations of specialists show that the energy supply per 100 hectares of arable land should be 300-350 horsepower at the current 150 horsepower.

In addition, the agriculture of the country continues to decline in technology. Part of its shortcoming is compensated by the acquisition of energy-intensive, high-performance equipment and the introduction of resource-saving technologies using combined soil-cultivating and sowing units, minimizing tillage.

However, the equipment of agricultural commodity producers remains at a level that does not allow performing all technological operations in the normative agrotechnical terms and with the necessary quality does not allow to receive programmed yields, which leads to a shortage and loss of production during harvesting.

Therefore, in Tatarstan there is a republican program of technical equipping of agricultural enterprises under the 40:60 scheme with two billion rubles co-financing from the budget. It follows that the existing measures of state support for technical and



technological development, both at the federal and the level of subjects, are primarily aimed at modernizing large and medium-sized businesses [Klychova G.S., Mavlieva L.M., Klychova A.S., Kulikova L.I.2014].

At the same time, for many types of products, small forms of management (peasant (farm) households, including individual entrepreneurs, and households) provide about half of the total output of products in the industry. However, this category of agricultural producers does not have the financial resources to purchase expensive imported equipment, and they do not fit into the existing schemes, and the measures of state stimulation of this direction at the regional level, in the absence of support from the federal budget, are not sufficient to actually strengthen their material and technical base.

The combination of small forms of management in cooperative structures in order to strengthen energy supply will serve as a further impetus for ensuring substantial growth of their production, food security of the country in non-standard conditions, and modernity.

**Keywords:** cooperation, material and technical base, modernization, import substitution, food security.



## **1. INTRODUCTION**

As of January 1, 2017 year, in the country's agro-industrial complex, the state technical inspection authorities registered 400.9 thousand tractors, which is 9 thousand units less than as of January 1, 2016 year, 129.6 thousand combine harvesters, 1.2 thousand units more, and 15.1 thousand forage harvesters, which is 0.7 thousand units less than the level of 2016 year (15.8 thousand). This is in view of the fact that in addition to agricultural organizations, the presence of machinery is also taken into account in peasant (farm) farms and in food and processing industry enterprises [Klychova G.S., Mavlieva L.M., Klychova A.S., Kulikova L.I.2014].

As a measure of state support for technical and technological modernization of agriculture and renovation of the machinery park, subsidies are provided to producers of agricultural machinery for reimbursement of costs for the production of equipment sold to agricultural producers at a discount in the amount and according to the list approved by the Government of the Russian Federation. December 27, 2012 year № 1432 "On approval of the rules for granting subsidies to producers agricultural machinery" (after - the Decree № 1432).

The bulk of agricultural machinery is supplied to the Republics of Bashkortostan and Tatarstan, Orenburg, Samara, Voronezh, Kursk, Saratov, Omsk, Tambov, Rostov, Volgograd, Novosibirsk, Tomsk and Amur regions, Krasnodar, Stavropol, Krasnoyarsk and Altai. In four constituent entities of the Russian Federation, the implementation of technology with government support was not carried out in 2016 year [Klychova G.S., Nizamutdinov M.M., Mavlieva L.M., Titov N.L. 2016].

To improve technical support of agricultural producers of the Republic of Tatarstan, federal and republican programs are actively used.

From the budget of the republic, from 2014 year, about 2 billion rubles are allocated for reimbursement of 40% of the cost of purchased equipment, which allows to provide an annual update of 6-7 billion rubles and maintain energy supply at 155 horsepower per 100 hectares of crops. The task was set to 2020 year to bring it up to 200 horsepower, based on multifunctional, energetically saturated machines and increase labor productivity by 2-3 times.

Also in 2017 year, a new program is being implemented to renew the park of energetically saturated tractors, with compensation from the budget of fifty percent of



their cost, the villagers purchased almost 100 such tractors [Subaeva A.K., Malinina N.V.2014., Subaeva A.K., Zamaidinov A.A. 2015].

Within the framework of the subprogram "Support to Small Forms of Management and Agricultural Cooperation", the state program for the development of agriculture and regulation of markets for agricultural products, raw materials and food for 2013-2020 years, approved by the Resolution of the Government of the Russian Federation of July 14, 2012 year, № 717, in the Russian Federation in 2016 year on the event "Grant support of agricultural consumer cooperatives for development of material and technical base ", in comparison with 2015 year, the volume of budgetary allocations increased by 500 million rubles or 2,3 times.

Since 2015 year, the Republic of Tatarstan has launched a program of grant support for cooperatives. With their help, 20 co-operatives have been established and are developing, which have received over 260 million rubles in budget support. [Klychova G.S., Nizamutdinov M.M., Mavlieva L.M.2014.].

## **2. METHODS**

The main shortcoming of the current State Program "Agricultural Development and Regulation of Agricultural Products, Raw Materials and Food Markets in the Republic of Tatarstan for 2013-2020 years" approved by Resolution of the Cabinet of Ministers of the Republic of Tatarstan dated April 8, 2013 year № 235 "On Approval of the State Program" and regulation of markets for agricultural products, raw materials and foodstuffs in the Republic of Tatarstan for 2013-2020 years" and the procedure for granting subsidies from the budget of the Republic of Tatarstan in 2017 year for reimbursement of part of the costs of technical and technological modernization of agricultural production (approved by Resolution No. 8 of the Cabinet of Ministers of the Republic of Tajikistan of February 10, 2017 year N8) is the absence of measures to stimulate the intensive development of small forms of management [Nizamutdinov M.M., 2010].

Subsidies to agricultural producers, agricultural organizations are provided within the limits provided for by the relevant municipal districts in accordance with the annex to this Procedure.

The distribution of limits for granting subsidies to municipal districts of the Republic of Tatarstan is based on the following percentages:



50 percent - in proportion to the area of arable land (Table - 1);

50 percent - in proportion to the volume of revenues of agricultural producers from the sale of goods, products, works, services for 2016 year (hereinafter referred to as revenue).

**Table - 1** Distribution of financing limits for reimbursement of part of the costs of technical and technological modernization of agricultural production in 2017 year.

(thousandrubles)

| N   | Name of municipal districts, organizations of the agro-industrial complex | Financing limit                                      |                         | Total   |
|-----|---|--|-------------------------|---------|
|     |   | distributed in proportion to the area of arable land | proportionateto revenue |         |
| 1   | 2   | 3  | 4                       | 5       |
| 1.  | Agryz   | 9408,6   | 6586,0                  | 15994,6 |
| 2.  | Aznakaevsky   | 16465,0  | 10819,8                 | 27284,8 |
| 3.  | Aksubaevsky   | 11760,7  | 7526,8                  | 19287,5 |
| 4.  | Aktanyshsky   | 13172,0  | 15053,7                 | 28225,7 |
| 5.  | Alekseevsky   | 15053,7  | 13172,0                 | 28225,7 |
| 6.  | Alkeyevsky  | 14112,8  | 25873,5                 | 39986,3 |
| 7.  | Almetyevsky   | 12701,5  | 7526,8                  | 20228,3 |
| 8.  | Apastovsky  | 10349,4  | 10349,4                 | 20698,8 |
| 9.  | Arsky   | 17405,8  | 13172,0                 | 30577,8 |
| 10. | Atninsky  | 6586,0   | 9879,0                  | 16465,0 |
| 11. | Bavlinsky   | 7526,8   | 5645,1                  | 13171,9 |
| 12. | Baltasinsky   | 10349,4  | 13642,4                 | 23991,8 |
| 13. | Bugulminsky   | 9879,0   | 4704,3                  | 14583,3 |
| 14. | Buinsky   | 14112,8  | 15053,7                 | 29166,5 |
| 15. | Verhneuslonskiy   | 7997,3   | 7526,8                  | 15524,1 |
| 16. | Vysokogorsky  | 10819,8  | 7997,3                  | 18817,1 |
| 17. | Drozhzhanovsky  | 9879,0   | 7526,8                  | 17405,8 |
| 18. | Yelabuga  | 8467,7   | 5645,1                  | 14112,8 |



|     |                                     |          |          |          |
|-----|-------------------------------------|----------|----------|----------|
| 19. | Zainsky                             | 12231,1  | 15524,1  | 27755,2  |
| 20. | Zelenodolsky                        | 7526,8   | 23991,8  | 31518,6  |
| 21. | Kaibitsky                           | 7997,3   | 7997,3   | 15994,6  |
| 22. | Kamsko-Ustinskiy                    | 7997,3   | 6115,6   | 14112,9  |
| 23. | Kukmorsky                           | 11290,3  | 13642,4  | 24932,7  |
| 24. | Laishevsky                          | 7997,3   | 13172,0  | 21169,3  |
| 25. | Leninogorskiy                       | 10819,8  | 8467,7   | 19287,5  |
| 26. | Mamadyshsky                         | 12701,5  | 9879,0   | 22580,5  |
| 27. | Mendeleyevsky                       | 4704,3   | 2352,1   | 7056,4   |
| 28. | Menzelinsky                         | 12231,1  | 7056,4   | 19287,5  |
| 29. | Muslyumovsky                        | 12231,1  | 6586,0   | 18817,1  |
| 30. | Nizhnekamsk                         | 9408,6   | 14112,8  | 23521,4  |
| 31. | Novosheshminsky                     | 12701,5  | 6586,0   | 19287,5  |
| 32. | Nurlatsky                           | 12701,5  | 11760,7  | 24462,2  |
| 33. | Pestrechinsky                       | 11290,3  | 9879,0   | 21169,3  |
| 34. | Rybno-Slobodsky                     | 12231,1  | 8467,7   | 20698,8  |
| 35. | Sabinsky                            | 8467,7   | 12701,5  | 21169,2  |
| 36. | Sarmanovsky                         | 13642,4  | 13642,4  | 27284,8  |
| 37. | Spassky                             | 13172,0  | 5645,1   | 18817,1  |
| 38. | Tetyushsky                          | 11760,7  | 8938,1   | 20698,8  |
| 39. | Tukaevsky                           | 12231,1  | 52217,5  | 64448,6  |
| 40. | Tyulyachinsky                       | 7056,4   | 5174,7   | 12231,1  |
| 41. | Cheremshanskiy                      | 10349,4  | 2822,6   | 13172,0  |
| 42. | Chistopol                           | 15994,5  | 12231,1  | 28225,6  |
| 43. | Yutazinsky                          | 5645,1   | 3763,4   | 9408,5   |
|     | Total limit for municipal districts | 470427,5 | 470427,5 | 940855,0 |

The limit of the size of the subsidy to the agricultural producer of the i-th municipal district is determined by the following formula:

$$W_i = S_p \times \frac{P_i}{P_o} + S_v \times \frac{V_i}{V_o} \quad (1)$$



where:

$W_i$  - the limit on the amount of the subsidy given to the agricultural producer of the i-th municipal district for technical and technological modernization of agricultural production;

$S_p$  - the size of the subsidy part distributed to agricultural producers in proportion to the area of arable land in accordance with this Procedure for technical and technological modernization of agricultural production;

$P_i$  - the area of arable farmer's agricultural land in the i-th municipal district, determined on the basis of the report of the Office of the Federal Service for State Registration, Cadastre and Cartography for the Republic of Tatarstan on the availability of land and their distribution by categories, lands and forms of ownership in the Republic of Tatarstan as of January 1, 2016 year - a report on the availability of land);

$P_o$  - the area of arable land in the Republic of Tatarstan, determined on the basis of the report on the availability of land;

$S_v$  - the size of the subsidy part distributed to agricultural producers in proportion to the amount of revenue in accordance with this Procedure for technical and technological modernization of agricultural production;

$V_i$  - the volume of proceeds of the agricultural commodity producer of the i-th municipal district, determined on the basis of the financial results report as of January 1, 2016 year in the form approved by the State Committee of the Russian Federation for Statistics (hereinafter - the financial results report);

$v_o$  - the total amount of revenues of agricultural producers in the Republic of Tatarstan, determined on the basis of the report on financial results.

The grouping of agricultural organizations and peasant (farmer) farms according to the sown area and revenues in the Republic of Tatarstan shows that 66% of the total number of agricultural producers cultivate arable land of less than 1,000 hectares, while they occupy less than 10% of the entire arable land of the republic [Mavlieva L.M., 2016]. (Table 2).



**Table - 2** Grouping of agricultural organizations and peasant (farmer) farms according to sown area and revenues in the Republic of Tatarstan in 2017 year.

| Grouping of enterprises      | Number of producers |              | Crop area        |              | Revenues        |              |
|------------------------------|---------------------|--------------|------------------|--------------|-----------------|--------------|
|                              | units               | share, %     | ha               | share, %     | thou. rub.      | share, %     |
| 0 ha                         | 386                 | 16,6         | 0                | 0            | 23 375,2        | 23,9         |
| 0 - 100 ha                   | 707                 | 30,5         | 32 574           | 1,1          | 2 055,6         | 2,1          |
| 100 - 200 ha                 | 349                 | 15,0         | 48 167           | 1,6          | 794,0           | 0,8          |
| 200 - 300 ha                 | 161                 | 6,9          | 39 056           | 1,3          | 3 561,0         | 3,6          |
| 300 - 500 ha                 | 168                 | 7,2          | 64 323           | 2,1          | 1 078,8         | 1,1          |
| 500 - 1000 ha                | 144                 | 6,2          | 99 979           | 3,3          | 1 536,1         | 1,6          |
| 1000 - 2000 ha               | 101                 | 4,4          | 144 839          | 4,8          | 2 136,6         | 2,2          |
| 2000 - 5000 ha               | 177                 | 7,6          | 564 458          | 18,6         | 17 114,6        | 17,5         |
| 5000 - 10000 ha              | 62                  | 2,7          | 412 814          | 13,6         | 12 846,4        | 13,1         |
| 10000 - higher               | 64                  | 2,8          | 1 628 957        | 53,7         | 33 387,7        | 34,1         |
| <b>Republic of Tatarstan</b> | <b>2319</b>         | <b>100,0</b> | <b>3 035 167</b> | <b>100,0</b> | <b>97 886,0</b> | <b>100,0</b> |

Agricultural enterprises with arable land of more than 10 thousand hectares cultivate 54% of the arable land of the republic and, according to the current program for technical re-equipment, have more opportunities to attract budget resources for the renovation of machinery.

### **3. RESULTS**

The Republic of Tatarstan was selected by the Ministry of Agriculture of the Russian Federation, along with another 9 subjects of the Russian Federation, in order to develop and approve state programs for the development of agricultural cooperation. With a view to its implementation, the Cabinet of Ministers of the Republic of Tatarstan adopted Resolution № 384 of June 13, 2017 year "On Approving the Program for the





Development of Agricultural Consumer Cooperatives in the Territory of the Republic of Tatarstan for 2017-2020 years".

Within the framework of the Program the following tasks are solved:

- stimulating the creation of agricultural commodity producers, including small forms of management, agricultural consumer processing and marketing cooperatives, and the development of consumer cooperation in the countryside;
- provision of conditions for the creation and modernization of the material and technical basis of the cooperative - the creation (acquisition, repair, modernization, conversion, erection) of industrial buildings, buildings, premises, workshops, equipping laboratories for industrial quality control and safety of manufactured (produced, processed, etc.) of products and conducting state veterinary and sanitary examination (purchase of equipment for laboratory analysis of the quality of agricultural products) and purchase of equipment intended for harvesting, storing, processing, sorting, slaughter, primary processing and cooling of meat and poultry, preparation for implementation loading, unloading, transportation of agricultural products, purchase of specialized transport, trailers, semi-trailers, wagons, modules, containers for agricultural products (including leasing) [Subaeva A.K., Zamaidinov A.A. 2015].

The immediate result of the implementation of measures for the development of agricultural cooperation in the Republic of Tatarstan is the growth in the number of processing and marketing cooperatives, the growth in the number of jobs in rural areas, the consolidation of cadres in the countryside and the stabilization of the rural population.

#### **4. SUMMARY**

Accordingly, in order to obtain budgetary support and increase the energy availability of small forms of management, it is necessary to unite them in cooperatives.

#### **5. CONCLUSION**

The immediate result of the implementation of measures for the development of agricultural cooperation in the Republic of Tatarstan is the growth in the number of processing and marketing cooperatives, the growth in the number of jobs in rural areas, the consolidation of cadres in the countryside and the stabilization of the rural population.



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## **7. BIBLIOGRAPHY**

- Klychova G.S., Nizamutdinov M.M., Mavlieva L.M., Safiullin L.N. Priorities of agricultural credit cooperation development // *Mediterranean Journal of Social Sciences*. - 2014. - T.5. - №18 SPEC. ISSUE. - C. 215-218.
- Klychova G.S., Mavlieva L.M., Klychova A.S., Kulikova L.I. Organization of accounting in fur farming according to IAS // *Mediterranean Journal of Social Sciences*. - 2014. T.5. - №24. -C. 84-90.
- Klychova G.S., Nizamutdinov M.M., Mavlieva L.M., Titov N.L. Analysis of the Strategy for the Development of the Agro-Industrial Complex of the Republic of Tatarstan // *Bulletin of the Kazan State Agrarian University*. - 2016. T.11 - №4. - P. 134-142.
- Subaeva A.K., Malinina N.V. Current condition of Russian agricultural engineering market / Subaeva A.K., Malinina N.V. // *Life Science Journal*. 2014. T. 11. № 9s. C. 360-362.
- Subaeva A.K., Zamaidinov A.A. Methods of agricultural machinery market regulation/ Subaeva A.K., Zamaidinov A.A.// *International Business Management*. 2015. T. 9. № 7. C. 1780-1784.
- Klychova G.S., Nizamutdinov M.M., Mavlieva L.M. Economic and organizational levers to ensure Russia's food security // *Innovative development of the economy*. - 2014. - № 6 (24). - P. 39-45.
- Mavlieva L.M., Equipping agriculture with fixed assets as a factor to ensure competitiveness of the agro-industrial complex of the Republic of Tatarstan / Mavlieva L.M., Nigmatullin R.R. // *Collected papers of Intern. scientific and practical conf. "INNOVATIVE TECHNOLOGIES OF SCIENTIFIC DEVELOPMENT"*. - Ufa: AERTHERNA. - 2016. - P. 148-150.
- Nizamutdinov M.M., Regional aspect of development of agricultural credit cooperation / Nizamutdinov M.M., Mavliyeva L.M.// *Actual problems of economics and law*. 2010. № 1. P. 84-88.
- Subaeva A.K., Zamaidinov A.A. Improvement of agricultural machinery economic efficiency / Subaeva A.K., Zamaidinov A.A // *International Business Management*. 2015. T. 9. № 7. C. 1770-1774.