

Organizational structure of the agriculture of the Chechen Republic as a factor of its institutional development and import replacing industrialization

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Abstract — In the article the authors provide the analysis of the existing institutional structure of the crop production and livestock breeding in the Chechen Republic. Its empirical assessment under the conditions of the modern import replacing industrialization of agriculture of Russia allows showing the trends and regional peculiarities of this process in the agriculture of Russia.

Keywords — *agriculture, crop production, animal husbandry, institutional structure of production, import substitution*

At a new more active and accelerated stage of growth of national agriculture which is pushed by the modernization market, the development of the agriculture of the North Caucasian Republics should be based on all available opportunities for their modernization, productivity growth taking into account the specificity of regional agricultural production, structure of output and institutional structure of agriculture.

I. INTRODUCTION

In 2019-2020 in the agriculture Russia has approached a new stage of its development which is connected with the transfer from the import replacement to import orientation and the search of new markets, expansion of the regions of the production distribution.

This means that the transfer from the previous model of development i.e. "food independence, import replacement" to a new modern one like the development of resource potential (land resources) and elimination of technological inferiority should take place" [1].

The agriculture of Russia is moving to a new stage of its more qualitative development when large and medium sized agricultural business should develop strategies of a more efficient growth, to use as a basis the innovative modernization of production and to integrate into global chains of creation of value added chains.

II. MATERIALS AND METHODS (MODEL)

The scientific paper used a set of theoretic, methodological and applied researches of foreign and national specialists in regional economics, papers on territorial and spatial development of agriculture, strategic programming and program and target development of agriculture in the context of their regional specificity, development of agricultural sphere of economy in depressive regions and also import replacement of agricultural development of Russia under the conditions of the food import ban.

III. RESULTS AND DISCUSSION

The modern development of crop production of the Chechen Republic is characterized by its active industrialization through the involvement of agricultural firms the share of which practically doubled during 8 years from 28,1% in 2010 to 54,1% in 2017 (Fig. 1).

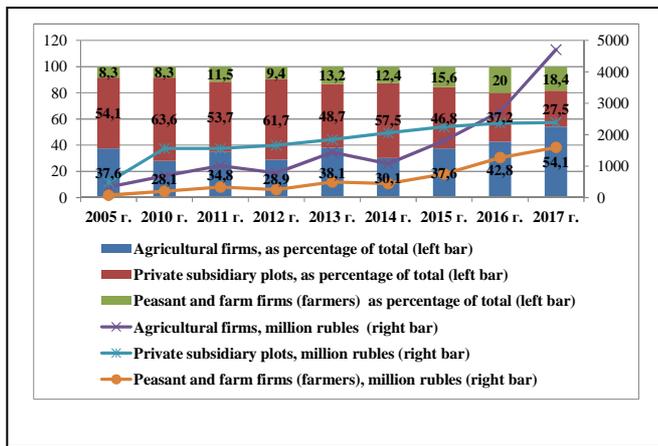


Fig.1 Production of crops in the Chechen Republic according to types of firms in 2005-2017 (in actual current prices) [2]

This allows concluding that an industrial model of the agriculture is formed in the crop production of the region and this model principally differs from the institutional structure of animal husbandry where the owners of private subsidiary plots dominate.

As we can see from Figure 1, in 2014-2017 the development of agricultural firms in crop production of republic is characterized by a significant growth of production, the dynamics of which exceeds the gross indices of production of the owners of private subsidiary plots and cooperative and farm firms (presented by a flat curve in the diagrams).

The dynamics of production of some agricultural crops in the republic is determined by the change of the role and the participation of some types of firms in this process.

Thus in crop production the reduction of the share of output of private subsidiary plots is observed (it was 94,4% in 2010 and 48,4% in 2017) at the accelerating development of agricultural firms the share of which grew from 1,1% in 2010 to 46,7% in 2017.

From the point of view of specific crops the modern development of crop production of the Chechen Republic is characterized by a more considerable growth of agricultural firms and a significant reduction of production of private subsidiary plots.

Thus, the most obvious is the growth of vegetable production in agricultural firms, the share of which in the firms of all categories grew from 6,5% in 2014 to 46,7% in 2017. Herewith the main production of vegetables and potatoes is still concentrated in private subsidiary plots. The owners of private subsidiary plots framed 83,7 % from the total volume of potato production (in 2016 it was 94,2 %) and they farmed 48,4 % of vegetables (in 2016 it was 78,6 %) [3].

The growth of share of agricultural firms in the production of sugar beet is observed at the reduction of the share of peasant and farm firms and sole proprietors (farmers) in the total volume of production.

In the whole in 2010-2017 the growth of gross vegetable production in the republic is connected with the increase of vegetable productivity (in 2013 it was 23,7 dt/ha, in 2014 it was 79,6 dt/ha, in 2015 it was 255,3 dt/ha, in 2016 it was 87,6 dt/ha, in 2017 it was 154,2 dt/ha) and also a considerable growth of vegetable production in agricultural firms.

The transfer of vegetable production to an industrial basis is typical of not only for vegetable production of the Chechen Republic and is determined by the rise in price of imports, reduction of the share of which left a part of domestic market free. The growth potential in the domestic market is determined by the concentration of the main part of production within private subsidiary plots which are easily eliminated from the market at a competitive fight.

The most dynamically this process ran in 2013-2017. The share of private subsidiary plots in crop production in the Chechen Republic reduced from 48,7% in 2013 to 27,5% in 2017. The share of agricultural firms grew from 38,1% in 2013 to 54,1% in 2017. The share of peasant and farm firms grew from 13,2% in 2013 to 18,4% in 2017.

The trend mentioned above in institutional structure of crop production of the republic reflects the total vector of insufficiently efficient reforms in the industry of the region. The critical assessment of the results of reforms is given by the scientists N. G. Gasanov.

From the point of view of the scientists “The hope of the reformers of the first wave and some scientists in the agricultural science of making the agriculture grow by means of replacement of large scale agricultural firms by peasant and farm firms (farmers) never fulfilled. Thus in average in 2010-2013 in the structure of agriculture the share of peasant and farm firms in the Russian Federation makes only 8,8%, the weight of agricultural organization is 47% and the weight of production of the owners of private subsidiary plots was 44,2%. In the Chechen Republic the share of peasant and farm firms is 5%, the share of large scale agricultural firms is 9,5% and the share of the owners of private subsidiary plots is 85,5%” [4].

The facts provided by the scientists in reality reflect the inefficiency of the policy of market reforms in agriculture during which the main direction was the development of small batch production which is less competitive than the large scale agricultural production. This fact denotes the growth of the share of hand work, minimal mechanization of processes and use of simple technologies.

In the current context the development of crop production is characterized by obvious and managed changes of its institutional structure in which the main role play the large scale agricultural firms and peasant and farm firms when the share of the owners of private subsidiary plots reduced twice.

These circumstances create the basis for a further technological modernization of crop production of the Chechen Republic and growth of labour productivity in this sector of the regional economy.

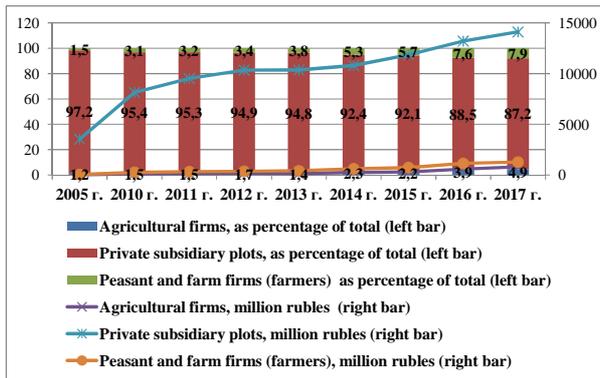


Fig. 2 Production of animal husbandry in the Chechen Republic according to types of firms in 2005-2017 (in actual current prices) [2]

Despite an active development of agricultural firms in the crop production of the Chechen Republic, one of the problems of the development of the agriculture of the region is the increase of volumes of production due to an extensive growth at the conservation of productivity at the level which is considerably lower than the potential one.

This fact is determined by the deficit of financial resources what leads to the reduction of expenditures on the growth of soil fatness, to an insufficient use of seeds of high quality.

The analysis of institutional structure of agriculture of the Chechen Republic proves that in contrast to the crop production, the animal husbandry is poorly developed in large scale agricultural firms.

The animal husbandry is dominated mainly by the owners of private subsidiary plots at a constant growth of peasant and farm firms which reached in 2017 7,9% although this ratio was 1,5% in 2005 (Figure 2).

In 2011 as M. Israilov mentions the peasant and farm firms produced 0,3 % of milk, 3,4 % of meat, 10,6 % of eggs. This situation creates the shortage of raw material for the processing enterprises [5]. By 2017 a significant growth of egg production or 7,9% from all the categories of firms was observed. The dairy and milk production grew by 39,6%. The weigh of production of meat and poultry remained practically unchanged (3,5%).

The production of the owners of private subsidiary plots dominates in the dairy and meat production and they farm the largest part of the products mentioned above. It is the inefficient institutional structure of animal husbandry of the republic that limits the opportunities for the development of integration processes in the industry, development of meat and milk producing clusters what presents a serious problem in a further acceleration of a qualified market transformation of the animal husbandry of the region.

The development of a milk producing cluster in dairy husbandry in the agriculture of the Chechen Republic is an indicator of the attempt of its system development, the goal of which is to reduce the share of the imported milk and to create an independent resource base for national dairy producers.

The implementation of an investment project in the construction of the second phase of the cluster (dairy farm for 1200 cows in the Gudermesskiy region of the Chechen Republic has a significant importance for the development of the agriculture of this region and the Northern Caucasus as a whole.

The implementation of such projects creates the foundation for the transfer to an industrial model of agricultural production what can become an additional growth point what is extremely important for the depressive regions which are subsidized from the federal budget.

In 2010-2017 the dynamics of the production of meat and poultry was positive (+15,6%) and significantly exceeded the production of milk in the region (+9,1%). The growth of egg production in the mentioned period made up 67,8%.

Judging from the results of the numerical analysis the crisis stabilization in the dairy production of agriculture of the republic was observed. Meanwhile the total volume of milk production considerably exceeded the ratio of 1990 (216,9 thousand tons). In 2010 the mentioned ratio made up 262,7 thousand tons, in 2017 it was 286,9 thousand tons [2].

The main factor of production growth deceleration in animal husbandry is a low level of its institutional structure development where the private subsidiary plots dominate. By January, 1st 2018 they accounted for 84% of meat and poultry production and for 87,5% of milk production.

This fact allows drawing the conclusion that the animal husbandry of the republic need a deeper and more accelerated market reforms, the strategy of which should be related with general tendencies of the transformation of dairy and meat market of the country and first of all with the opportunities which are available in these segments in the process of import replacement industrialization.

The relevance of the given task is reinforced by the accelerating growth of meat and milk consumption in comparison with their production observed in the republic. This fact significantly aggravates the situation and fuels the problem of the provision of food security in the republic itself which has relatively low indices of meat and meat product consumption as well as the macroregion as a whole. For the moment at the back of the existing relatively low productivity of livestock animals, the share of domestic meat production makes up 36-37 % and the share of domestic meat production is 80-85 %.

At the same time it is the concentration of the gross part of dairy herd held by the owners of private subsidiary plots that emphasizes the limited opportunities of a forced growth which exist in the dairy industry of the agriculture of the republic.

As the results of numerical analysis show, the agriculture of the Chechen Republic has a relatively low level of subsidizing form the state in comparison with the Republic of Daghestan, Karachay-Cherkessk Republic, Republic of Ingushetia which get more subsidies in comparison with the weight of their production in the gross agricultural product of the Russian Federation.

As for the agriculture of the Chechen Republic and other regions of the North Caucasian Federal District this means that for the agrarian sector of the economy the efficient projects and strategies of development should be developed taking into account its specialization. This action will provide the opportunity of their mixed financing at the domination of the off budget part of investments which will make up according to the plan 2/3 from the total volume of funding of agricultural development of the Chechen Republic in 2014-2020 [6].

In the vegetable and dairy production the directions attractive enough are created within which new development projects in the republic should be developed taking into account the reduction of imports and opportunities of the elimination from the market. A low level of domestic market saturation in the domestic dairy production where in 2018 the most intensive change of the economic environment was observed created the prerequisites for an active expansion of the dairy production here. Meanwhile the maintenance of a high level of state support of dairy production in a long term period will provide its investment attractiveness both in the sphere of raw materials production and in its processing.

The current macroeconomic and competitive shift and the evolutionary phase of "maturation" of the formation structure of the market create a certain handicap for the development which is used by numerous companies and should use the agricultural firms of the Chechen Republic. The inert conservation of a previous structure of the agriculture of the region should be completed with more progressive projects focused on an aggressive development in specific commodity and market niches of the agricultural business.

However when assessing the specificity of a further development of the agriculture of the republic it should be noticed that the current market cycle in the agrarian sector of the economy requires the redefinition of strategic goals included into the industrial programs of the agricultural development before the introduction of sanctions and the transfer to the policy of import replacement.

In the field of the strategic programming of the agricultural development of the Chechen Republic in the modern period at least two adjustments are needed.

First, the regional directions and strategies of the agricultural development of the republic written into the federal target programs should be adjusted taking into account the import replacement program and the specificity of its implementation in the North Caucasian Federal District at the regional level.

Second, the creation of new imperatives of the budget consolidation in 2018-2019 requires the adjustment of the investment model of the import replacement development in the agriculture of republic and creation of new mechanisms and instruments providing an optimal balance of government expenditures and off budget investments under the conditions of budgetary consolidation.

The identified level of industrial production in the agriculture of the Chechen Republic allows confirming that in the region the carcass foundation for the development of vertically integrated market structures is created. Herewith a high concentration of capital in dairy production will allow developing more actively in this industry, constructing the whole technological chain within the milk cluster of the republic.

The vegetable production of republic makes up the only direction for the crop production development in the agriculture of the Chechen Republic where a big share of private subsidiary plots is observed. The realization of projects in this direction can be focused on import replacement in this sector of small commodity production with prospects for the exit into the markets of other regions.

In the agriculture of the Chechen Republic new strategic imperatives for the diversification should be developed which will be founded on the maximal adaptation to current and considerably large scale shifts in the development of domestic agrarian market. The logic of the synthesis of these two imperatives is in fact invariable.

The leading directions for the development of the agriculture of the Chechen Republic should present the directions of the agricultural production where the output of production is insufficient or there exist the opportunities for the replacement of weaker participants first of all the owners of private subsidiary plots. At the same time the strategy of development in these directions will be varied according to the return on investment, weight of private subsidiary plots, import volume and so on. So it is necessary to take into account the reserves of the market growth of industrial sector, risks and return on investments.

The trend to a complete import substitution in the agriculture has its specificity in some commodity and market niches and these peculiarities should be taken into account at the development of the marketing strategies of the development of industrial sector of the republic.

The agricultural business of the Chechen Republic should be organically built into the general trend of the growth of domestic agricultural and food production when using as a foundation the main long term strategic drivers for this growth:

- competition with the owners of private subsidiary plots i.e. this is the opportunity of distribution of businesses according to size and development of its market presence;

- insufficient level of capital concentration in the agriculture what opens the opportunities for the growth of efficient firms and construction of vertically integrated systems of a closed types and also it will allow reducing risks and generating a higher level of added value.

IV. CONCLUSION

Under the conditions of profit reduction of the state budget the policy of the concentration of investment resources in the industrially developed regions of Russia and subsidizing of the regions of the North Caucasian Federal district which do not provide a sufficient encouragement of regional economic growth should be replaced by a quick investment accumulation in perspective directions of import replacement in the depressive regions. This should be done for the growth of the self sufficiency of these regions and reduction of the burden on the federal budget in the future. This all will require the identification of sectoral measures for an accelerated development of the Chechen Republic in particular.

The analysis of regional peculiarities of agricultural development of the Chechen Republic under the conditions of the modern policy of import replacement allows drawing the conclusion that the factor of provision of its accelerated and sustainable development is in particular the industrialization of dairy production and launch of the projects in the sphere of protected horticulture which have a high investment attractiveness under the conditions of import replacement and opportunities of the replacement of small commodity production which have dominating positions in the dairy production of the Chechen Republic.

The critical analysis of the peculiarities of the import replacement in the agriculture of Russia showed that its forced growth in 2015-2016 was founded on an active replacement of food imports, growth of government subsidies in investment and working credits of agricultural business, growth of capital concentration within the development of vertically integrated chains of a closed type. The study allows identifying the main drivers of market growth for agricultural production and its efficient consolidation taking into account the specificity of product supply. Their regional focus under the conditions of the renewal of import replacement creates a new trajectory of

a qualified transformation of the agriculture of the Chechen Republic and its sustainable growth in the nearest future.

In general the regional vector of the territorial and sectoral development of the agriculture of the Chechen Republic should be based on the opportunities of its natural inclusion into the processes of import replacement and institutional and market transformation of agriculture of Russia. This will provide a qualified transformation of the agrarian industry of the regional economy under the conditions of agrarian and industrial model of the development of republic, forming the prerequisites for its accelerated and sustainable growth and also for the overcoming of lagging from the average Russian level of development of the regions' economy.

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