State Backing of Modernization of Main Funds of Agricultural Purpose within a Matter of Increasing Food Security of Russia

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Abstract. Logistical support is one of the main factors for the modernization of agricultural production and the agro-industrial complex and for providing its stable innovative development (Russia can get out of the crisis of food dependence and increase national food security only this way), the level of production intensification, branch labor productivity, its competitiveness depends on it. The purpose of the research is the foundation of ways to improve the efficiency of the use of basic productive assets for agricultural purposes. Downswing of number of equipment took place from 1995 to 2000. The almost complete liquidation of large agricultural enterprises, the transfer of equipment to private farms, the crisis situation of the remaining enterprises led to the loss of machine and tractor fleet. By 2016, the fleet of basic equipment had cut totally in 14 times, including tractors - in 12 times, combines; grain harvesting - in 11 times, flax harvesting - 103 times, forage harvesters -9 times, milking parlor - in 9 times. Results: analysis of measures of direct state regulation, which involve the development, approval and financing of investment projects carried out independently and together with foreign investors; giving of guarantees on a competitive basis; placement of budgetary funds in financing of investment projects on a competitive basis; issue of bonded and guaranteed targeted loans and other forms.

1. Introduction
All activities, aimed at the effective use of basic production assets of agriculture, are divided into national and intrafarm. The national measures include work for improving technical and economic indicators, reducing the cost of labor through bettering of tractors designs, agricultural machineries, building projects and other types of fixed assets. Among the intrafarm activities there are those that are primarily dependent on agricultural workers and are aimed at improving the use of the machine-tractor park, industrial buildings, productive livestock, and multi-year plantings [3].

2. Methods
Nowadays the regional investment policy does not make it possible to overcome imbalances between the sectors of the agro-industrial complex, technical re-equipment, the introduction of waste-free
progressive technologies. Leftover investment principle of storage and processing negates the efforts of investing funds in agriculture, and also does not speed up the scientific and technological progress in the agro-industrial complex [7]. Research methods: the method of formal logic, which includes observation, measurement, comparison, analysis, idealization, problematization, explanation; the system analysis method represents a sequence of actions to establish structural links between elements or variables of researching system.

3. Main part
Nowadays, the production of some types of agricultural products has moved to private farmers as low-quality organizations (the level of marketability of peasant farm enterprises is less than 20% - grain, livestock products less than 30%, potatoes and vegetables less than 6%). Processing enterprises are not profitable to cooperate with them, and the system of cooperation between them has not been established, despite of the fact that in the pre-perestroika period, the cooperation system effectively existed and supported private farms by organizing purchases of surplus products, being the only intermediary between farmers and processors.

This circumstance causes a great need in the formation of an effective system of agricultural land management, ensuring their rational and effective use [1].

As already noted, the inefficient use of regional land resources, as well as all work of agricultural enterprises, is the lack of their fixed assets, especially their active part [6].

Table 1. Efficiency of land use in agriculture.

| Indicators                                      | 2005 | 2018 |
|------------------------------------------------|------|------|
| Intensity of land use in agricultural production |      |      |
| Degree of economic use of land, %             | 8,3  | 6,7  |
| Degree of land plowing the land, %            | 6,9  | 7,7  |
| Proportion of crops in arable land, %         | 9,7  | 4,45 |
| Grain area in the total area of crops %       | 7,6  | 8,49 |
| Land use efficiency                           |      |      |
| Grain yield, c/ha,                            | 2    | 1    |
| Milk production on 100 ha of agricultural land, c | 4,9  | 3,9  |
| Produced livestock and slaughter poultry on 100 ha of arable land, c | 5    | 4    |
| Eggs produced on 100 ha of grain crops, mln. eggs | 0,14 | 0,4  |
|                                              | 0,0  | 0,0  |
In this regard, the problem of low provision of regional agricultural enterprises with main production assets, a high degree of their wear and increase of the efficiency of their use comes to the first place.

The territorial location of each particular enterprise has a significant impact on the structure of fixed assets. For example, in the zone of insufficient moisture, the main part in the structure of fixed assets is occupied by buildings, including meliorative ones. In areas with severe climate, the proportion of capital production buildings is higher [5]. The structure of fixed assets is influenced by the size of enterprises and the level of concentration of production, as larger enterprises have the larger proportion of machinery and equipment. The concentration method provides savings of capital investments in the construction of industrial buildings.

The modern production has the stable trend of decreasing (in the dynamics there is a clear reduction) of the total value of fixed assets. It is due to the lack of financial resources at all levels (enterprises, municipalities, regions, and the state) of financing. The lack of financial resources is caused by the following reasons: especially energy inflation; the disparity of barter agreement prices between individual branches of agriculture and other sectors of national economy, especially in the production of agricultural machinery; inefficient privatization of agricultural and processing enterprises causing the lack of interconnections. On the one hand, there is the loss of sales market and production decline, and on the other hand - the loss of raw materials market and getting to low-cost imported and various substitutes. One more reason is the absence of a controlled economic mechanism for the functioning of agricultural producers in the harsh conditions of market formation; limited effective public demand; the lack of the effective state agricultural policy.

The most important factors influencing on basic production assets can also be distinguished: the nature and range of products, the volume of output, the level of mechanization of agricultural production, the level of specialization and cooperation.

The impact of the first factor especially influences on the cost of industrial buildings and vehicles, the more the volume of agricultural production is the higher is the proportion of agricultural machinery and equipment. This is especially noticeable in the industry structure.

To found the main directions of state regulation of the renewal of basic production assets by agricultural organizations, it is necessary to form a systematic integrated approach, which takes into account external and internal factors that influence on the reproduction in the branches of material production. These directions should be aimed at increasing capital investments, creating favorable conditions for long-term economic growth of agricultural production by taking into account factors affecting expanded reproduction.

State regulation of ensuring expanded reproduction through investment in the renewal of basic production assets will create the material basis for increasing the efficiency of use of agricultural production factors, such as land, fixed capital and labor resources (Fig. 1).

The most important direction of state regulation of increasing the efficiency of agriculture is ensuring the profitability of agricultural producers, which the state can organize by allocating funds to increase the level of subsidies and compensation for agricultural products from 5% to 35% of material costs, as the US and EU countries governments do. In this case, the agricultural organizations, having moved to the category of profitable ones, become attractive to investors, and most importantly, they are capable to realize the reproduction due to their own sources of financing.

Agricultural enterprises of industrial type (livestock farms, poultry farms, greenhouse complexes, enterprises using innovative technologies) deserve special attention. At the state level the following measures can be offered to improve the investment climate.

1. To establish privileges in the form of tax exemption of a share of profit which is invested in the reproduction of the organization’s fixed assets. In accordance with the regional authorities’ powers they may establish graded tax for legal entities involved in investment activity or individual industries which need innovative renewing of the basic production assets (technologically progressive).

2. Agricultural organizations and other legal entities, invested in their own production assets, can be given a differentiated easy property tax in the share that is included in the regional budget by
regional authorities. This benefit can be established for newly created and modernized fixed assets (for example, in the first three years since their creation).

3. Agricultural enterprises invested in their own production assets can be given a scheme for easy profit tax in the share that is included in the regional budget by regional authorities.

Figure 1. The proposed scheme of main directions of state regulation of investment activities in renewing of the basic production assets [3].

Table 2. Giving easy profit tax.

| Ratio of book cost of created or modernized basic production assets according to total value of them | Easy profit tax |
|---|---|
| 1,0 | 10 % |
| 1,0 – 0,5 | 12 % |
| 0,5 – 0,25 | 14 % |
| less 0,25 | 16 % |

Table 3. Subsidisation of credit cost for the purchase of basic production assets.

| Index of innovativeness of agricultural production (the ratio of value of commercial products obtained by innovative technologies to the total value of commercial products) | Amount of interest repayment grant (% of the refinancing rate) |
|---|---|
| 1,0 | 65 % |
| 0,7 -1,0 | 50 % |
| 0,5 – 0,7 | 35 % |
| 0,3-0,5 | 15 % |
| less 0,25 % | 0 % |
4. Discussion
The territorial location of each particular enterprise has a significant impact on the structure of fixed assets. In the zone of insufficient moisture, the main part in the structure of fixed assets is occupied by buildings, including meliorative ones. In areas with severe climate, the proportion of capital production buildings is higher. The structure of fixed assets is influenced by the size of enterprises and the level of concentration of production, as larger enterprises have the larger proportion of machinery and equipment. The concentration method provides savings of capital investments in the construction of industrial buildings [4].

The modern production has the stable trend of decreasing, (a clear reduction is seen in dynamics) of the total value of fixed assets. It is due to the lack of financial resources at all levels (enterprises, municipalities, regions, and the state) of financing [10]. The lack of financial resources is caused by the following reasons: especially energy inflation; the disparity of barter agreement prices between individual branches of agriculture and other sectors of national economy, especially in the production of agricultural machinery; inefficient privatization of agricultural and processing enterprises causing the lack of interconnections. On the one hand, there is the loss of sales market and production decline, and on the other hand - the loss of raw materials market and getting to low-cost imported and various substitutes [9]. One more reason is the absence of a controlled economic mechanism for the functioning of agricultural producers in the harsh conditions of market formation; limited effective public demand; the lack of the effective state agricultural policy.

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