

Section 6. Economics, organization and management of enterprises, branches, complexes

<https://doi.org/10.29013/EJEMS-22-1-62-68>

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DEVELOPMENT OPPORTUNITIES OF MATERIAL AND TECHNICAL RESOURCE POTENTIAL IN THE AGRICULTURAL SECTOR

Abstract. The market of material and technical resources is one of the most fundamental concepts of meeting the needs of the agricultural sector with machinery. From this point of view, the development of the market of material and technical resources at the expense of enterprises producing local agricultural machinery is one of the priorities of agrarian policy. Therefore, currently one of the primary issues is to improve the legal framework for the interaction of production and supply entities in agriculture, to ensure the creation of the necessary organizational structure for the development of the market mechanism of the economy.

Keywords: material-technical resources, resource potential, requirement, demand and supply, market.

The market economy system reflects the development of large-scale reproduction on the basis of demand and supply of commodity-money relations in all sectors of the economy. The market economy system ensures the sustainable development of the economy if the necessary market modification, including market infrastructure, is formed from both sectoral and territorial complexes. The diversity of one or another type of market is analogous to the functions of market infrastructure in terms of the de-

velopment of a specific sector of the economy. In this regard, the development of the market of material and technical resources has an important role in the sustainable development of the agrarian economy.

The market of material and technical resources reflects the economic relations based on free competition between the institutions producing or offering material and technical resources and their producers [5] (Дороговицева А. А., 2013). The market of material and technical resources is not only an entity that

carries out the process of purchase and sale. The market of material and technical resources is aimed at the development of large-scale reproduction in the economy as a whole, serving to meet the demand for technical means of this and other economic entities, regardless of ownership.

Demand and supply are the most important components of the market of material and technical resources. Demand in the market of material and technical resources is the volume of agricultural machinery in terms of natural and value that will be used by agricultural producers in a given period and is characterized mainly as a manifestation of demand.

Research has shown that attempts to determine demand without the effect of price are unfounded and vary depending on the price. In this regard, the law of demand exists in microeconomics. The essence of the law is that when other conditions do not affect the change in demand for goods, there is a contrary relation between it and the price. This arises mainly due to two reasons. First, when prices are low, the buyer tries to get more goods, and second, when the price of a good falls, the ratio of other goods becomes cheaper and the buyer has the opportunity to make a relatively profitable technique for himself.

The supply characterizes the economic relations between producers and sellers of resources with agricultural producers. The main part of the supply is the supply of goods and reflects the products that are on the market or can be put on the market in response to the solvent demand of agricultural producers in the market. Although the supply is closely related to the production of material and technical resources, these categories differ from each other both in their economic content and in their volume. If production is a category that directly reflects the process of resource development, supply is mainly characterized by exchange and market relations. The supply of goods is less than the volume of production. Thus, the goods produced are intended for sale in the domestic market, as well as for off-market consumers, stock replenishment and export. The resource supply

has a dialectical character and is constantly in motion. It is realized on the one hand, and completed on the other. The supply of goods is determined by quantitative and value indicators, acting in kind and value. The natural form of supply characterizes its consumption value by expressing its ability to meet the demand for material and technical resources. The value form of supply reflects the exchangeable capacity of a commodity and its exchange value. The process of supply formation is mainly characterized by two aspects. Firstly, the adaptation of resources to the ever-increasing demand in terms of quantity and quality, and secondly, its active influence on the rationalization of demand, supply and demand is the main principle of the development of the market of material and technical resources [4] (*Воронкина Д. В., 2012*).

Unlike demand, there is no direct relationship between price and resource supply, in other words, there is a direct relationship. In this regard, the essence of the law of supply in macroeconomics is characterized as follows: While other factors affecting the supply of goods remain unchanged, its volume varies depending on the price. In other words, when prices rise, the seller's incentive to offer more products to the market increases, otherwise a fall in prices leads to a decrease in the volume of products sold. The change in supply in line with the price is primarily explained by the fact that in the event of rising prices, the firm entering the market of material and technical resources uses a high level of production capacity by applying new technology, which ultimately leads to increased supply. Secondly, in the context of a consistent and stable rise in prices, other producers are involved in the industry, which leads to a further increase in production and, accordingly, supply.

Research has shown that it is impossible to achieve labor productivity in agriculture without creating the necessary material and technical base, to reduce labor costs per unit of output, to increase the economic efficiency of production. Most

economists have come to the conclusion that high economic performance in this area is impossible without providing agriculture with machinery and equipment. However, complex mechanization in the agricultural sector can be effective only if the machines and mechanisms required in the process of production of each specific product are applied in a complex way. In other words, the technical resources in the machine-tractor park should lead to complex mechanization, ensure increase in labor productivity on the basis of creating a favorable ratio between individual technical resources [3] (Алфєрєв В., 2012).

As mentioned above, the material and technical base of agriculture also includes land and water resources paired with material and technical resources. In agriculture, material resources consist of fixed assets and material resources and paired with land and water resources, are a significant part of the productive forces as a means of agricultural production. From this point of view, if we look at the park of the main types of agricultural machinery in the example of the Republic of Azerbaijan, we can see that the technical supply indicator for 2016–2020 increased from 21,236 units to 51,470 units, which in general results in increase by 2.4 times. The number of tractors in 2020 compared to 2016 increased by 2.1 times, the number of ploughs by 4.5 times, the number of cultivators by 16.2 times, the number of seeders by 1.1 times, the number of mowers by 10.25 times, the number of mineral fertilizer spreaders by 6.2 times, the number of sprayers and dusters increased 9.9 times and the total number of combines increased 2.4 times. Improving the technical base in agriculture prevents excessive and inefficient use of this equipment by increasing the supply of tractors and machines per 100 hectares. Thus, compared to 2016, in 2020 the number of tractors per 1,000 hectares increased by 2.02 times, and accordingly the amount of sown area per 1 tractor decreased by 51% to 47 hectares. In addition, there was an increase in the number

of cultivators, ploughs, seeders and mowers per 100 tractors. A similar situation is observed in the number of combines per thousand hectares. Thus, this indicator has increased 2.71 times for grain harvesters, 2 times for corn harvesters, 9 times for potato harvesters, 68 times for beet harvesters and 2.82 times for cotton harvesters [11].

However, the modernization of the agricultural sector is one of the priorities of agrarian policy. Excessive use of agricultural machinery leads to a decrease in productivity, adversely affecting the time and quality of implementation of agro-technical measures [1] (Алыев İ. H., Soltanlı İ. Q., 2017). In this regard, important attention should be paid to the constant improvement of material technical supply of this area.

In recent years, special attention has been paid to the sale of agricultural machinery on preferential terms to agriculture. The study shows that sales of agricultural machinery in 2016–2020 have a downward trend. Thus, compared to 2016, sales of tractors in 2020 decreased by 77.9% and accounted for 266 units. During this period, 80% of plough sales, 61.4% of cultivators, 73.9% of sowing units, 87.2% of cotton harvesters, 96.8% of fertilizer spreading machines, 82.4% of hay rakes, the number of tractor trailers decreased by 60.6%. The meanwhile, the total cost of machinery and equipment sold in 2020 decreased by 62.3% compared to 2016 and amounted to 52.3 million manats. In addition, it should be noted that per 2016–2020, the highest sales of most agricultural machinery and equipment were observed in 2017. Starting in 2017, preferential sales have tended to decline. Here, in addition to the general downward trend, it should be noted that in 2017, preferential sales of tractors increased by 36.6%, ploughs by 25.1%, cultivators by 5.4 times, sowing units by 70.1%, cotton harvesters by 90.4%, spraying and spraying machines 70.6% and sales of other agricultural machinery and equipment increased by 4.9 times. The cost of machines and equipment sold, increased by 94.2%

in 2017 and accounted for 269.4 million manats [11]. It should be noted that the growth of sales is due to the introduction of preferential terms by the state for the purchase of agricultural machinery and favorable prices.

Strengthening of material and technical resources consolidates scientific and technical, economic and organizational, and other system of measures. These measures should be aimed at the efficient and effective use of these resources and, ultimately at reducing their consumption per unit of output. All these are important condition for solving social and economic problems of society development.

Research has shown that import plays a significant role in meeting the needs for material and technical resources. Thus, in 2016–2020, the import of mineral fertilizers had a positive dynamics, increasing from 166.9 thousand tons to 350.5 thousand tons. Thus, the import of nitrogen fertilizers increased 2.2 times during the reporting period, the import of other types of fertilizers increased 2.1 times, on the other hand, the import of potassium fertilizers decreased by 3.8%. In the first 9 months of 2021, 111.3 thousand tons of fertilizers were imported. This is 2.5 times less than in the first 9 months of 2020 (274.9 thousand tons).

Research indicates that the cost of material and technical resources has a significant share in the structure of expenditures on agricultural products. The physical depreciation of resources leads to crop losses and, ultimately, to the loss of economic activity.

It can be concluded from the research that the market of material and technical resources is the main direction of meeting the needs of the agricultural sector in machinery. It should be noted that the formation of the market of material and technical resources in the agricultural sector at the expense of enterprises producing local agricultural machinery covers a long period. Therefore, the organization of work in the sphere of circulation of means of production in accordance with the

requirements of market relations, it is possible to carry out this process in stages with the necessary state support. The meanwhile, the legal framework for the interaction of production and supply entities operating in market conditions should be improved, and the necessary organizational structure should be achieved to implement the market mechanism of the economy. Obviously, according to the laws of market relations, the funds required for the material technical supply and maintenance of these private farms must be made at the expense of their own funds [8] (*Мамэ Э., Тускье Д., 1993*). Therefore, the import of technical resources from abroad through private institutions is becoming an objective necessity. For this purpose, the legal framework for entrepreneurs to import technical resources from abroad should be improved, and the issue of providing them with soft loans by the state should be considered. First of all, soft loans should be provided at a low interest rate, or the practice of continuous lending should be tested. All these can play an important role in the development of the market of material and technical resources in the agricultural sector.

Establishment of new agricultural machine-building enterprises by attracting foreign investments in order to develop the market of material and technical resources in the agrarian sector, transformation of some existing industrial machine-building enterprises into agricultural machine-building enterprises and the production of various types of machines and mechanisms, equipment, devices and aggregates used in agriculture should be given priority [6] (*Кормаков Л., 2014*). It should be noted that meeting the demand for material and technical resources of local producers at the expense of domestic resource supply leads to the expansion of import channels. This ultimately leads to both shortages and the inability of local producers to meet their needs due to the high cost of equipment.

Assistance in the development of the market of material and technical resources in the agricultural

sector can be carried out in two directions. The first is the establishment of enterprises producing agricultural machinery in the country, and the second is the state subsidizing the level of prices for imported machinery.

Enterprises producing the means of production for agriculture of the Republic can meet a certain part of the existing demand. This is possible only if the enterprises of the machine-building complex of the Republic are supplied with special equipment and advanced technologies to ensure the production of high quality products. Demand for the released products directly depends on its high quality and long service life [9] (*Литвишиков Е., 2010*).

Provision of machine-building enterprises of the Republic with advanced technologies is the main prerequisite for the formation of supply in the market of material and technical resources at the expense of local production. For this, the produced agricultural machinery should satisfy international standards and be able to compete in the world market. One of the important issues is to improve the design and research work in machine-building enterprises in order to increase the competitiveness of agricultural machinery to be produced. For this purpose, first of all, it is important to increase the professional skills of engineering and technical personnel.

In order to assist agricultural producers in meeting their technical needs, it is necessary to implement the following measures:

- creation of the necessary material and technical base for the production of technical means for agriculture, the technical level and indicators of which meet international standards;
- establish the necessary material and technical base for the production of material and technical resources in the agricultural sector, first of all, to adapt the capacity of existing plants and enterprises to the needs of the agricultural engineering industry [7] (*Крохмаль С. С., 2013*);

- establishment of separate auxiliary production areas in order to neutralize the dependence of agricultural machinery manufacturers on other areas;
- establishment of scientific-research, design-technological enterprises and their experimental bases in the field of agricultural engineering, training of skilled workers along with engineers and technicians;
- building of mutually beneficial relations with the relevant industrial enterprises of the republic and other foreign countries;
- development and implementation of complex measures for the access of manufactured agricultural machinery and other means of production to the world market;
- organization of joint production with machine-building enterprises of foreign countries.

That should be taken into account that the financial capacity of various agricultural enterprises is not enough not only to invest in the acquisition of material and technical resources, but also to carry out ordinary production. Therefore, in most cases, the funds raised are widely used. The state target programs are being developed in order to meet the needs of the agricultural sector in material and technical resources in the world practice, as well as prioritizes budget funds.

Intensification of production in the agricultural sector plays an important role in improving the system of supply of agricultural material and technical resources. The effective development of the market of material and technical resources in the agricultural sector depends on the mutual integration of sectors [2] (*Quliyev E. A. 2015*). As it is known, the material and technical resources used in the agricultural sector are mainly imported. In general, as a result of increasing investment in the industrial sector of the national economy, destructive tendencies are emerging in the development of agriculture. Thus, the development of industries is accompanied by an increase in the flow of

labor from agriculture to other sectors, and the emergence of structural contradictions in agriculture on the other hand. The intensification of the agrarian sector depends on the industrialization of agricultural production. Historically, this function has been performed by processing industries. It is obvious that agricultural products are delivered to the trading enterprises via passing through the industrial stage in processing enterprises, and then to consumers. The meanwhile, if the products come to consumers directly from agriculture itself – crop production and animal husbandry, now most of these products go through the stage of industrial processing and are consumed as finished products.

According to conducted researches, accurate economic mechanisms are not used in pricing, and those who sell resources determine prices as they wish. When analyzing the activities of farms, it becomes clear that their resource needs are often not fully met. This in turn, has a negative impact on production and quality.

For the efficient functioning of the market of material and technical resources, it is necessary to ensure a parity ratio of prices for agricultural and

industrial products. One of the most important directions in the development of the market of material and technical resources in the agricultural sector is the creation of favorable conditions for the availability of machinery and mechanisms necessary for the implementation of agro-technical measures, meeting the demand for agrochemicals and plant protection products [10] (Степанов В. И., 2009). Sustainable development of the agrarian sector, ensuring equipment growing for affordable agricultural products is to ensure the optimal implementation of agro-technical measures in the regions of the country with different soil and climatic conditions, mechanization of manual labor and the creation of a complex system of machines and mechanisms.

State regulation of the market of material and technical resources in agriculture is one of the main directions of the effectiveness of this market. From this point of view, in the conditions of increasing the material and technical base of consumers, economic improvement of farm entities, the main task is to gradually achieve the efficiency of free supply and sales market.

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