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Building the potential of an agricultural enterprise

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Abstract. The article is devoted to the problem of forming the production potential of an agricultural enterprise. It is shown that for an agricultural enterprise this is due not only to the possibility of producing agricultural products, but also to the socio-economic development of localities located in rural areas. Tough competition in the agricultural market requires enterprises to search for and make new decisions required for the functioning of the stable operation of the enterprise. This makes it necessary to develop new innovative technologies, as well as expand the range of products and reduce the cost of production. This is facilitated by an increase in labor productivity and the accompanying increase in the production potential of the enterprise, as well as provides an opportunity to gain competitive advantages in the market. The growth of the production potential of an agricultural enterprise depends not only on the efficiency of its use of intangible and material resources, but also on the labor activity of its employees.

1. Introduction

The complexity and dynamism of the external environment of modern enterprises leads to the fact that in the conditions of market struggle, only the strong who have the greatest competitiveness survive.

According to [1] the competitiveness of enterprises depends directly on break-even operations. The main ways to increase the company's profit are:

- Increase in sales volumes, increase in sales prices, sales of products with higher added value.
- Increase labor productivity and return on funds.

The activity of any commercial organization is aimed at maximizing the profit received. However, the criterion of "profit maximization" according to a number of researchers [2] it is somewhat conditional and depends on the type of activity of the enterprise, its size, financial condition, and a number of other indicators. In other words, profit maximization is conditional and may differ for each specific enterprise at different times.

According to [3] for an agricultural enterprise, it is not profit maximization that should be considered, but profit maximization in which it maintains self-sufficiency and self-financing. In other words, an enterprise that produces agricultural products should strive to make a profit that will allow it to carry out expanded reproduction and maintain an acceptable level of competitiveness.

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According to [4], the strategy for ensuring an agricultural enterprise is a production activity that allows maintaining a state of equilibrium through effective functioning in the future. In other words, it is a set of tasks and goals of the enterprise for the future, which contribute to its progressive development, as well as are designed to ensure sustainability and increase economic efficiency.

According to du [5] the company's strategy for improving and maintaining the competitiveness of an agricultural enterprise depends on the efficiency of the three basic subsystems of the enterprise: sales of finished products, production and finances of the enterprise. At the same time, the minimum acceptable volume of production corresponds to reaching the break-even point.

According to [6] the level of resource efficiency of an agricultural enterprise largely depends on its technical equipment. To achieve break-even, it is necessary to ensure optimal utilization of its production capacity. A necessary condition for reaching the break-even point is to increase the volume of production and sales of products, expand the product range, and increase prices for products sold.

We do not fully agree with the above statements, for a number of reasons, for example:

- the production cycle of agricultural enterprises, as well as the period of time required for the sale of manufactured products can last several months, this complicates the determination of the break-even point.
- the availability of a good harvest does not guarantee profit, moreover, the company may receive losses due to an oversupply of products on the market.
- the production of crops such as sunflower or rapeseed can bring great profits, but these crops greatly Deplete the fertility of the soil.

Therefore, the question of the competitiveness of an agricultural enterprise, in our opinion, requires further study.

Potential is a set of specific opportunities to achieve certain goals.

According to [7] success in market relations is achieved primarily by those enterprises that prove their competitiveness, promptly analyze consumer preferences, the state of supply and demand, study the dynamics of external factors, and effectively adapt to it. Enterprise potential - represents the unity of components that ensure the ability and readiness of the enterprise to implement the tasks assigned to it

According to [8] an enterprise is a type of socio-economic system, its potential is the totality of its resources.

According to [9] a socio-economic system is a set of resources that are combined to achieve certain economic goals and organized and managed in a certain way.

According to [10], the main feature of the enterprise's production capacity, is that it is a multi-component dynamic system. The relationship between its individual components has an indirect effect on all other elements.

According to [11], the company's potential consists of production, economic, human resources, intellectual, scientific and technical and other potentials.

According to [12] the production potential of a firm is a system that includes fixed assets, financial, labor and material resources at its disposal.

According to [13] the production potential of a firm is the relationship that takes place in the enterprise to achieve the result determined by the goals of its activities.

According to [14] the production potential of a firm is the product capabilities it has when using the resources it has at its disposal.

According to [15], production capacity is an integral indicator of an enterprise's production activity that contains qualitative and quantitative characteristics. The main purpose of the production capacity is to create new additional costs, and its components must correspond to the products produced.

According to [16] increasing the efficiency of the use of production potential makes it possible to increase labor productivity, attract financial resources and increase sales. Production capacity is important for maintaining the competitiveness of an enterprise, since without evaluation and effective

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management based on it, it is difficult to achieve effective use of available resources. According to [17] effective use of production potential determines the ability to achieve a certain production result within a certain time period.

2. Methods

In this study, an analytical research method was used, with the help of which the studied problems were studied in their development and unity. Taking into account the goals and objectives of this work, we used the functional and structural method in conducting scientific research. This ultimately made it possible to study a number of issues related to the study of the potential of an agricultural enterprise.

3. Results

Increasing the efficiency of agricultural enterprises depends on many factors. Among them, [18] highlights the financial and economic state of the enterprise itself, the state of the agricultural market, the development of trade and processing products.

To improve the efficiency of agricultural production, according to [18], the most effective forms of economic activity should be implemented in practice, which can increase agricultural production and simultaneously solve problems related to the socio-economic development of settlements located in rural areas, while taking into account the features associated with the different forms of production

According To [19] an agricultural enterprise consists of two subsystems, the managing and the managed, which differ from each other in their functional content. When considering the potential of an enterprise, in our opinion, it is necessary to highlight the production potential that characterizes the ability to produce products and management potential that optimizes the use of production potential to achieve the goals of the enterprise.

According to [18] the production potential of an enterprise depends on the flexibility of the enterprise's production activities, the cost of production and its innovation activities.

Authors du [5] identify the potential for sales of finished products and the potential for quality of manufactured products as part of the production potential.

In our opinion, the study of problems related to the functioning of the agricultural sector, given the complexity of the object of research, requires the use of a systematic approach. The process of evaluating the performance of an agricultural enterprise and developing measures to improve it should be carried out in two stages.

At the first stage, we propose to conduct research in which direction it is possible to improve the efficiency of a particular agricultural enterprise, taking into account its production specifics.

And at the second stage, develop specific measures designed for the rational use of material, technical, financial and labor resources of the enterprise, the introduction of innovative technologies.

In our opinion, at the first stage, special attention should be paid to the analysis of the management potential of the enterprise, since it is its most important resource. According to [10] determines the personal composition and degree of qualification of the company's management, indicators of organizational, methodological and technical support for enterprise management. Management potential is closely correlated with the intellectual potential of an agricultural enterprise and depends on the ability and skills of its employees and the ability to use them to solve practical problems.

To increase the management potential of an agricultural enterprise, in our opinion, it is necessary to apply:

- Selection of qualified personnel.
- To improve the skills of employees of the enterprise and encourage their self-education.
- Implement modern innovative technologies for managing technological processes at the enterprise.

In our opinion, the production potential of an agricultural enterprise, in our opinion, consists of the potential of crop production and the potential of animal husbandry. These two potentials are

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interconnected, some crop production is used as feed in animal husbandry, and certain animal products are used as organic fertilizers. The potential of crop production consists of the potential of grain production, vegetable production, fruit production, software and feed crop production, the potential of animal husbandry consists of the potential of milk production, meat production, and other livestock products.

In addition to the potential of livestock and crop production, the availability of land and financial resources, agricultural machinery and technologies that use this technique is important.

In our opinion, the total economic efficiency of an agricultural enterprise consists of crop, livestock, management, and financial potential, provision of land resources and agricultural machinery, infrastructure development, and profitability of the enterprise. The presence of the above-listed potentials allows us to assess how successfully an agricultural enterprise can function and develop in the short and medium term.

To ensure the successful functioning of an agricultural enterprise, it is necessary to ensure effective and scientifically based interaction of all components of agricultural production, implement measures to increase the level of soil fertility, and the state of the livestock population should correspond to the state of the feed base.

In our opinion, it is advisable to unify the indicators for evaluating livestock and crop production, this will allow for more efficient use of the resources available to the enterprise, as well as compare the efficiency of production of individual types of products.

An important condition for the successful functioning of agricultural production, in our opinion, is the ability of the enterprise to adapt its activities to changes in its environment. Proper use of land resources available to the enterprise is an important element that ensures the successful functioning of agricultural production. Therefore, in our opinion, it is important to study their structure, as well as the possibilities of using them in agricultural production.

The presence of a developed transport infrastructure allows the agricultural enterprise to improve the sale of finished products and increase the radius of delivery to consumers.

To develop a program for the development of an agricultural enterprise in the future, in our opinion, it is necessary to study the dynamics of meeting the needs of consumers in agricultural products, predict their development in the future, and then correlate these data with its production potential.

4. Discussion

An important role in the stable functioning of an agricultural enterprise is played by its production potential.

In our opinion, it can be considered as the sum of crop, livestock, management and financial potentials, the availability of land resources and agricultural machinery, and the degree of development of transport infrastructure.

Its individual components can mutually replace or enhance the effect of each other.

An important component of the production potential is the management potential, its insufficient level is difficult to compensate for other resources of the enterprise.

The production potential of an agricultural enterprise is the material basis for its successful functioning, it is its real ability to produce competitive products using the available production factors in the conditions of dynamic changes in the internal and external economic environment.

Correct assessment of the production potential of the enterprise is the basis for the formation of an effective strategic line of the enterprise.

5. Conclusions

Currently, the existing methods, forms and technological processes of management of agricultural enterprises need to be improved.

It is difficult to achieve high production volumes without developing social and industrial infrastructure.

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A tough competitive environment requires the search and decision-making necessary to ensure the stable operation of the enterprise. This involves the development of new innovative technologies and expanding the range of products, reducing production costs. This is facilitated by an increase in labor productivity and the accompanying increase in the production potential of the enterprise, as well as provides an opportunity to gain competitive advantages in the market. Increasing the level of production potential of an agricultural enterprise depends not only on the efficiency of its use of material and non-material resources, but also on the labor activity of its employees.

References

- [1] Kochetkov O and Afanasova, Julia 2020 Formation the mechanism of resource management of potential of agricultural enterprises *The economic discourse* 117-25 10.36742/2410-0919-2020-2-12
- [2] Volkova N, Neberja K and Leshheva A 2019 Features of formation of potential of agricultural enterprises *Pryazovskyi Economic Herald* 10.32840/2522-4263/2019-5-6.
- [3] Balko S and Aliev S 2016 Improving the management of agricultural enterprises potential *Interactive science* 111-4 10.21661/r-91230
- [4] Bryla P 2018 Agricultural Enterprises in Poland 10.1007/978-3-319-59891-8_1
- [5] Kuzmenko L V 2015 Production potential formation at an agricultural enterprise 164 205-11
- [6] du Cros, Hilary and McKercher B 2020 Assessing product potential 10.4324/9780429277498-15
- [7] Kovács K 2018 Agricultural Enterprises in Hungary 10.1007/978-3-319-59891-8_9
- [8] Strzelecka A, Zawadzka D and Kurdyś-Kujawska A 2018 Potencjał produkcyjny a zadłużenie przedsiębiorstw rolniczych ujęcie modelowe production potential vs The debt of agricultural enterprises-a model approach *Prace Naukowe Uniwersytetu Ekonomicznego we Wrocławiu* 206-218 10.15611/pn.2018.533.20
- [9] Kramarenko I 2019 Investment potential of agricultural enterprises: impact factors *Efektyvna ekonomika* 10.32702/2307-2105-2019.12.54
- [10] Ermakov O, Velichko O, Bohach L and Nagorny V 2018 To question of estimation of production potential of agricultural enterprises *Financial and credit activity: problems of theory and practice* **3** 162-8 10.18371/fcaptp.v3i26.144373
- [11] Kolos Z 2019 Formation of effective management of productive potential of agricultural enterprises *Scientific papers of tavria state agrotechnological university (economic sciences)* **39** 253-9 10.31388/2519-884X-2019-39-253-259
- [12] Burlankov S and Kuzmin S 2018 Assessing Innovation Potential of the Agricultural Enterprise Vestnik of the Plekhanov Russian University of Economics 77-88 10.21686/2413-2829-2018-6-77-88
- [13] Chibuzor O 2020 Complex evaluation of competitiveness of agricultural enterprises *Economics* finance and management review 37-43 10.36690/2674-5208-2020-1-37-43
- [14] Urbancova H 2018 Agricultural Enterprises in the Czech Republic 10.1007/978-3-319-59891-8 5
- [15] Gillespie J and Schupp A R 1998 Ratite production as an agricultural enterprise The Veterinary clinics of North America *Food animal practice* **14** 373-86
- [16] Mikhalkina E and Korshunova L 2013 Use of labor potential of agricultural enterprises Management of the personnel and intellectual resources in Russia 2 10.12737/263
- [17] Kadyrus I, Donskykh A and Tereshchenko V 2020 Formation of a development strategy for agricultural enterprise *Efektyvna ekonomika* 10.32702/2307-2105-2020.7.64
- [18] Petrovych Y and Prokopyshyn-Rashkevych L 2020 Modern management aspects of industrial enterprises' production potential *Journal of Lviv Polytechnic National University Series of Economics and Management Issue* **4** 188-94 10.23939/semi2020.01.188
- [19] Vasylenko S 2019 Formation of product cost at agricultural enterprises *Scientific Horizons* **76** 57-63 10.33249/2663-2144-2019-76-3-57-63