

WayScience



1st International Scientific
and Practical Internet Conference

«Achievements of 21st Century
Scientific Community»

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PROSPECTS OF GROWING MARGINAL NICHE CULTURES IN THE WAR AND POST-WAR PERIOD

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Under modern conditions, the current state of the Ukrainian agricultural sector is complex and difficult to predict. Growing the main export agricultural crops such as wheat, corn, barley, among the oilseed crops - sunflower, rapeseed and soy is becoming a more difficult task. About 90% of all cultivated areas in the country are devoted to these six agricultural crops. Most farmers understand that in the 2023 season there may be many problems with the export of grain and oil crops, the remains of which will be stored in elevators and warehouses for a long time, which will not allow them to make a profit on time.

The created crisis situation provides new opportunities for domestic agricultural producers in the production of niche crops, which in terms of their volatility show an increased margin on the market, which allows farmers to obtain additional profit during their sale. The main niche crops grown in Ukraine are oats, millet, rye, buckwheat, triticale, mustard, flax, and legumes, which account for no more than 10% of all agricultural land in the country. Some of these crops may become an alternative in terms of yield this year and will prevail in terms of profitability from 1 ha for traditional ones.

To determine the prospects of a niche culture, it is necessary to take into account possible peculiarities in the process of cultivation and subsequent export of products. The main evaluation criteria should be considered: the area of production, the location of the farm under natural and climatic conditions, and the place in the crop rotation. Including new crops for growing on the farm, it is possible to master cultivation technologies quite quickly, but it is more difficult to find the necessary sales channels and study the sales market for the products. Therefore, when introducing new plants into the crop rotation, it is necessary to pay attention to the fact that the niche culture has a high margin, which will allow the risks to be covered and the agricultural enterprise to develop further.

In the war period of 2022-2023, it is difficult to export large volumes of food. There are many risks involved in transporting goods. Therefore, agricultural producers more often pay attention to niche crops, when there is a small number of competitors on the market, the selected crops have a high margin and significant export potential. Entering the market of niche cereals and products of their processing allows farmers and agricultural holdings to diversify business risks associated with the occurrence of unfavorable conditions in the sectors of traditional crops [1,2].

The formation of the final price on the market of niche cereals and their processing products in Ukraine depends on the initial cost of raw materials, wages to workers, depreciation of equipment and technical means, and also takes into account various logistical and administrative current costs and the exclusivity of this offer. According to the structure of general production costs, production in monetary terms has the form presented in Figure 1.

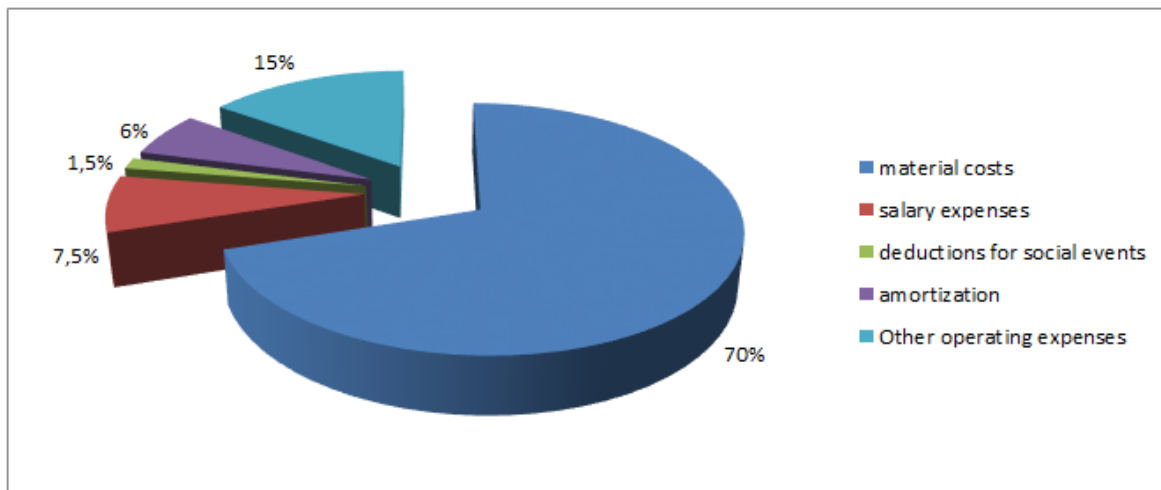


Fig. 1. The structure of general production costs of production in monetary terms, %

Among the external factors that have an influence on the formation of the final price of grain products in the market of niche crops, it is the tension of the competitive environment and price changes depending on the situations. The economic balance on the commodity and money markets and the general macroeconomic situation in the country will also be affected - the rate of inflation, exchange rates and state regulation of the economy as a whole.

Most of the niche cereal crops are presented in the form of cereals, and today their various types are not relevant and not popular among consumers. Modern proponents of a healthy lifestyle (ZSJ) give advice on how to follow a gluten-free and carbohydrate-free diet, but this is only suitable in an exceptional manner for a small number of consumers and with special recommendations of nutritionists. Whole grain cereals are a source of fiber that promotes proper digestion and a high content of nutrients, thanks to which cereals are considered among the most useful foods. With proper consumption of cereals such as buckwheat and millet, they enrich the body with the necessary nutrients, prevent vitamin deficiency, and avoid digestive problems, especially if they are grown in environmentally friendly conditions. [3,4,5]

In the agricultural sphere of Ukraine, niche crops, such as millet and buckwheat, have never had the main role in cultivation among other agricultural crops, but they remained in the structure of cultivated land every year. Also, they are among the main grain crops in Ukraine and their value is determined by their rich content of nutrients and waste-free use.

The analysis of the state of the market of niche cereal crops - millet and buckwheat for the ten-year period 2012 - 2022 in Ukraine showed that the volume of millet production has changed in recent years, the lowest values were in 2017-2018, which amounted to 81 and 84 thousand tons. Accordingly, the largest indicator was 256 thousand tons in 2020. According to the data for the month of December, in 2022, the volume of millet production was reduced by two times compared to the previous year. As for the production of buckwheat in Ukraine, starting from 2017 (180.0 thousand tons), there is a decreasing trend until 2019 (85.0 thousand tons). But in the following years, the dynamics of buckwheat production will increase and in 2022 will be 158.5 thousand tons.[6,7]

As a result of a detailed analysis of the dynamics of millet production in Ukraine, with an overview over the ten-year period 2012 - 2022, it can be seen that the productivity of niche crops - millet and buckwheat has a sufficiently high level to meet food needs not only in the domestic market, but also in the foreign market.

According to the established norms, 5.5 kg of millet and 6.8 kg of buckwheat are expected for food security per person in one year. What makes it possible to have a surplus of these crops in the country, thereby creating an opportunity to provide useful food products not only to its people, but also to have profitable economic ties with other countries of the world.

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