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## УПРАВЛІННЯ РИНКОМ КОНСЕРВОВАНИХ ФРУКТІВ ТА ОВОЧІВ УКРАЇНИ

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## MARKET OF CANNED FRUITS AND VEGETABLES OF UKRAINE

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**Анотація.** У статті висвітлено ситуацію та основні тенденції розвитку українського ринку плодоовочевої консервації, серед яких виділено необхідність інвестування, розширення обсягів виробництва, зростання конкуренції та натуральних і маринадних консервів, джемів і пюре, сокової продукції, томатної продукції, а також консервів дієтичних і для дитячого харчування. В ході вивчення ринку розглянуто залежність від товарної категорії, споживання консервованих овочів і закусок, яка коливається з різною інтенсивністю. Виділено основні сегменти ринку, а саме основна частина українського виробництва в цій сфері зосереджена на переробці помідорів, більше половини з яких перетворюються на вітчизняних консервних заводах в томатну пасту і пюре. Серед інших популярних у виробників і споживачів видів консервації - горошок і кукурудза, яким наші господині знаходять найширше застосування. Визначено, що в останній період вітчизняний ринок овочевої продукції належить до значних за вартістю, витратами та ефективністю інститутів, що характеризується суперечливими трендами розвитку. Центральне місце у структурі ринку належить оптовій і роздрібній торгівлі, ринковій інфраструктурі; саме ці елементи визначають товарний оборот галузі, а також технологічні перспективи. Робота висвітлює основні проблеми, зокрема відсутність ефективної системи продажів, адекватно розвиненої логістики. Визначено обсяги, смності і темпи зростання ринку. Робота охоплює всі сегменти функціонування ринку: від розвитку сировинної бази та ціноутворення на овочі та фрукти до внутрішньої і зовнішньої торгівлі готової консервованої плодоовочевої продукцією, а також зростання якості продукції; розширення асортименту; розширення сегменту екологічно чистої продукції. Для розвитку ринку консервованих плодів та овочів пропонується зайнятися покращенням якості та безпеки продукції, оптимізувати цінову політику, зосередити зусилля на зростанні виробничих потужностей та обсягу продажу.

**Ключові слова:** овочепереробна промисловість України, консервація фруктів та овочів, виробництво, споживач, асортимент, ринок консервації фруктів та овочів.

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**Annotation.** The article highlights the situation and main trends in the Ukrainian market of canned fruits and vegetables, including the need to invest, expand production, increase competition and natural and marinated canned food, jams and purees, juices, tomato products, and canned dietary and for baby food. In the course of studying the market, the dependence on the product category, consumption of canned vegetables and snacks, which fluctuates with different intensity, is considered. The main market segments are highlighted, namely the main part of Ukrainian

*production in this area is focused on processing tomatoes, more than half of which are converted into domestic canned tomato paste and puree. Among other popular types of canning and corn - peas and corn, which our housewives find the widest application. It is determined that in the recent period the domestic market of vegetable products belongs to the significant in cost, cost and efficiency of institutions, characterized by contradictory development trends. The central place in the market structure belongs to wholesale and retail trade, market infrastructure; it is these elements that determine the trade turnover of the industry, as well as technological prospects. The work highlights the main problems, in particular the lack of an efficient sales system, adequately developed logistics. The volumes, capacities and growth rates of the market are determined. The work covers all segments of the market: from the development of raw materials and pricing of vegetables and fruits to domestic and foreign trade in finished canned fruits and vegetables, as well as increasing product quality; diversification; expansion of the segment of environmentally friendly products. In order to develop the market of canned fruits and vegetables, it is proposed to improve the quality and safety of products, optimize pricing policies, focus on increasing production capacity and sales.*

**Key words:** vegetable processing industry of Ukraine, fruit and vegetable preservation, production, consumer, assortment, market of fruit and vegetable preservation.

*Formulas: 0; fig.: 0, tabl.: 0, bibl.: 6*

**Introduction.** It is believed that the level of consumption of fruits and vegetables per capita is directly related to the level of income, and indicates the general welfare of the nation - the higher the consumption of fruits and vegetables, the richer the country. From this point of view, the world richest countries are the USA, Canada, countries of Western Europe and Japan.

Vegetables and fruits are an important component of human nutrition, the main source of mineral salts and vitamins on which health, longevity and normal performance depend.

However, the seasonality of picking vegetables and fruits, storage difficulties forced people to look for new forms of processing food products, which would significantly extend their shelf life for consumption and ensure safety (presentation, essential minerals, etc.) during the off-season.

**Literature review.** Various scientists studied the problems of studying the agro-industrial complex, which includes vegetables and fruits, namely: V.Ya. Ambrosova, V.G. Andriychuk, P.S. Berezovsky, D.P. Glushchenko, V.N. Zimovets, V.I. Zubets, I.G. Kirilenko et al. However, the issues of forming a market for vegetable preservation with the subsequent identification of risk factors allocated only for this market were not considered in scientific papers. Therefore, an important point is to conduct research and analysis of market development factors, its features with the allocation of relevant areas, which determines the relevance of this study.

**Aims.** The purpose of this work is to study the main characteristics of the market, sales channels and market development trends in the current market conditions.

**Results.** The market of vegetable preservation is influenced by factors of two groups - production and consumption. The first include the harvesting of vegetable crops, purchase prices for them, energy tariffs, the cost of packaging, storage and transportation of finished canned food. The second group includes permanent demand, preferences of customers by type of product, advertising campaigns, fashion trends for different food systems and lifestyle, HoReCa development.

Consumption of fruit and vegetable preservation is determined by several factors:

- the stability of the economic situation: as soon as the financial opportunities of consumers deteriorate, they begin to deny themselves canned vegetables and fruits;
- seasonality: the highest level of consumption of purchased fruit and vegetable canning is observed in winter;
- the influence of the market of fresh vegetables, which are well represented in supermarkets in winter, and affect the decrease in the share of canned foods.

However, at the moment, both product groups have been identified, and each has taken its own position.

The vegetable processing industry of Ukraine is a complex, multifunctional industrial and economic complex with a developed system of sector cooperation and international activities. In 2018-2019 the market volume of canned vegetables in Ukraine amounted to more than 60 thousand

tons in physical terms and more than 330 million US dollars in cash [2].

In these conditions, the assortment policy is of particular importance. For the goods, on the part of the consumer, increased demands are made on the assortment and quality, and its economic performance depends on the efficiency of the processing enterprise.

Despite the increase in production in recent years, the consumption of fruits and vegetables in Ukraine is far from the same indicator in the EU and the USA. So, if in Ukraine annually about 4 kg of fruit and vegetable canning is consumed per capita, in the EU this figure is 10-16 kg, in Canada - 13 kg, and in the USA - 50 kg [3].

This may be due not only to the slow growth of the welfare of the population, but also to the quality level of many canned products, because in Europe it is much higher than in our country, so the culture of consumption and attitude to canned products is different.

The main place in the diet of Ukrainians is occupied by the classic assortment positions of conservation - marinades, peas, corn, vegetable paste. The culture of consumption of these products has developed long ago.

For example, marinades are a traditional snack on an everyday and festive table. Peas and corn are used as an independent side dish or as an element of salads. Vegetable paste is a popular, fast, tasty and nutritious snack.

At the same time, the tradition of making home-made blanks makes a rather significant contribution to the total consumption of canned vegetables, thereby reducing the consumption of canning made at enterprises. The share of consumption of products prepared at home takes about 50-55% of the total consumption of canned fruits and vegetables.

However, it should be noted that this situation is typical for the periphery, while megalopolises (Kiev, Kharkov, Dnipro, etc.), on the contrary, demonstrate a reduction in the consumption of home-made products and an increase in the consumption of canned goods produced industrially up to 80%.

Today, customers prefer those types of canned food that are difficult to make in

simple home conditions. These types of products include canned corn, peas, legumes, mushrooms, vegetable caviar, etc. Demand for canned fruit is virtually nonexistent. Among the most popular brands producing fruit and vegetable products are “Veres”, “Chumak”, “Zlatodar”, “Torchin Product”, “Nezhin” and “Runa”.

In recent years, a healthy lifestyle has been popularized in Ukraine, which stimulates an increase in the consumption of vegetable and fruit products in general. The general increase in the consumption of canned vegetables is due to the following reasons:

1. The growth of consumer welfare allows you not to spend personal time on creating homemade blanks, but to purchase ready-made canned food made in an industrial way;

2. The accelerating rhythm of everyday life, which is especially felt in large cities, does not leave time for preparing homemade preparations;

3. The increase in employment of women, the main creators of home-made canned vegetables, leads to a situation where consumers are forced to resort to another alternative, buying canned fruits and vegetables in stores [1].

The financial and economic situation in the camp negatively affected the structure of the industrial market for fruit and vegetable preservation, which fell by an average of 20%.

Moreover, in the category of «not substituted goods», for example, such as peas, corn, the decline was small. But in the segments of substituted goods, for example, salads, natural canned vegetables, the drop in consumer demand was quite significant - with fluctuations up to 30%.

The research results showed that canned vegetables are included in the diet of 55.3% of Ukrainian families, the main place in which is occupied by green peas and corn - their share in sales is 54%. The second place belongs to canned mushrooms (15%), the group of salads and snacks takes the third place - 8% of the total.

Among various canned vegetables, the largest drop in consumption was observed in 2018-2019. in segments such as zucchini

(-39%), tomatoes (-17%), peppers (-4%), eggplant (-9%), eggplant paste (-7%) and cucumbers (-5%).

The consumption of green peas (5%), corn (2%) and mushrooms (2%) also decreased. At the same time, the consumption of olives, olives, vegetable mixtures and beans, squash caviar, on the contrary, increased (by 7%, 2%, 11%, 8% and 11%, respectively) [3].

The Ukrainian market of fruit and vegetable canning is dominated by domestic product, the combined share of products of foreign manufacturers is about 30%. The main group of imported fruit and vegetable preservation is legumes. Of the total supply of canned corn, 96% of production is supplied by Hungary, and another 4% comes from Thailand and Russia. Beans and peas also come to us from Hungary: 92.1% of beans and 97% of peas were imported from this country [3].

The total number of domestic producers of fruit and vegetable canning is approximately 300 enterprises - from small harvesting workshops to enterprises of national scale, which are combined into large production associations. The group of leaders in the domestic market for fruit and vegetable canning is formed by such companies as BONDUELLE, GC "Veres", TOV "Chumak", PE "Agrospetsproekt", TD "Nezhin" and others.

Among the listed domestic producers of canned vegetables, TOV Veres stands out as a small advantage - it accounts for 20% of the total retail volume.

Another popular product of the fruit and vegetable industry are juices. Among the best-selling are apple and orange. The main demand falls on Sandora brand products (14%) and Odessa cannery (12.7%).

Leading domestic brands produce canned fruits and vegetables not only at their own facilities, but also place orders at other processing enterprises with modern equipment. The constant increase in raw material prices contributes to a change in the market of fruit and vegetable preservation. Many low-power canneries and workshops are declining, and some have stopped production altogether due to a rise in the cost

of their raw materials and the inability to compete with the products of influential holdings. And the opportunity for their goods to be on the shelves of supermarkets is becoming almost unrealistic, given the high requirements for supply stability, price factors and a number of other reasons.

Most large processors create their own raw material bases, apply modern methods of intensifying the cultivation of vegetables, modernize their storage conditions, expand the range of packaging, and strengthen their marketing policies.

Domestic companies work not only for our market, but also for export. The leaders in this direction are the companies of Veres Group of Companies and CJSC Chumak, which cover up to 80% of the export flow of mushrooms, beans, cucumbers and tomatoes. A significant part of the preservation of fruits and vegetables is exported to Russia and the CIS countries. In Russia, Ukrainian-made canned cucumbers and tomatoes account for about 15% of the total consumer preservation market.

However, the increase in export volumes is not explained by a glut in the domestic market, but by higher conservation prices in importing countries, which makes it possible to increase production profitability. The devaluation of the national currency made domestic conservation relatively inexpensive in dollar terms, thereby increasing the competitive advantages of Ukrainian producers [4].

At the same time, the growth rate of consumption of fresh vegetables, fruits and berries exceeds the growth rate of consumption of fruits and vegetables. This trend is taking place not only in Ukraine, but also in other countries [5].

Stable peak consumption of canned vegetables and fruits falls on December-February. During this period, sales have grown several times, in particular, the level of sales on Christmas holidays can increase 10 times, compared with the autumn-summer months. Thus, in this case, a very strong influence of the seasonality factor is observed.

When considering the market of fruit and vegetable preservation, the age factor should

be taken into account. So, representatives of the youth group buy canned goods in order to save time spent on cooking, while they strive to try new tastes, while representatives of older age groups show a rather conservative position when buying well-known products.

Ukrainian producers today cannot fully satisfy the needs of the market - the share of domestic fruit and vegetable preservation in the CIS market is about 13% [6].

The Ukrainian market of fruits and vegetables significantly lacks domestic producers and farmers. The agricultural market of Ukraine has great prospects, which provide it with a tolerable climate and fertile land. It is attractive to Western investors, since in Ukraine the cost of agricultural products is 3 times lower than in the EU.

But the repulsive factor is instability in the state system and economy. In addition to high taxes and unpredictable lawmakers, the Ukrainian agricultural industry has a number of other problems. Insiders note that our commodity producers do not have enough storage facilities with high-quality modern equipment. In addition, the cultivation of agricultural crops, especially fruits and berries, is very costly.

In order to properly care for plants, to ensure productivity and environmental cleanliness of products, it is necessary to spend a large amount of financial resources, which are now especially lacking.

An alternative solution to logistical difficulties and high prices was selling via the Internet. Internet portals and sites where farmers themselves sell their products are becoming increasingly popular in the West. In Ukraine, online food trading is only beginning to develop. So far, in this way, they mainly sell organic products. But, as foreign practice shows, it is time for traditional retail to expand their activities by creating virtual retail outlets.

**Conclusions.** From all of the above, we can conclude that the market of canned fruits and vegetables in Ukraine has great potential for its growth, however, the development of the industry is negatively affected by the fact that a significant part of the country's population traditionally dispenses with home-

made products and does not experience an acute need for similar products manufactured industrially.

Against the background of non-decreasing volumes of home preservation, producers focus on the manufacture of products with the greatest demand, such as peas, corn and beans. Ukrainian raw materials for the production of canned fruits and vegetables will become more popular, since many retail chains and canneries that previously actively placed orders for production in China and India are likely to abandon this practice, since imported raw materials have risen in price due to the appreciation of the exchange rate.

Given the growth of the solvency of the population in Ukraine and neighboring CIS countries, the successful development of exports to non-CIS countries, the nature of this class of products should ensure the successful development of the fruit and vegetable canning industry in subsequent years.

You can forecast the development of the market of fruit and vegetable cans in Ukraine in the coming years. The pace may be modest (3-8%), but this is inevitable for several reasons: continued urbanization of the population of our country, reduced cooking time, lack of need to procure “summer stocks” of products that are available all year round, as well as universal acceleration pace of life, generating a high level of employment of the major part of the population.

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