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# COMMODITY POLICY OF COMPANIES OF SUGAR BEET SUBCOMPLEX IN UKRAINE

# POLITYKA TOWAROWA PRZETWÓRCÓW BURAKA CUKROWEGO W PODREGIONACH UKRAINY

Key words: commodity, policy, sugar-beet, sugar industries

Słowa kluczowe: polityka towarowa, buraki cukrowe, cukrownie

**Abstract.** In the article determination of the commodity policy concept is considered. The main task of the article is to present all necessary terms of commodity policy and its determinants. As well the basic problems about creating of the companies of sugarbeet subcomplex has been outlined. Expandable of assortment of sugar plants is considered, including production of bagasse, molasses and biofuel.

### Introduction

At the present stage of development of market relations and agricultural production in Ukraine, including the sugar industry, arises a concentration of available resources in order to increase the efficiency of business management, takes place the constant search for rational and effective methods and procedures of production process improvement, production distribution, establishing long-term contacts with raw material suppliers, intermediaries, existing and potential consumers. The most efficient and effective way to obtain high commercial results is the usage of marketing concept in the process of business management.

Current trends, concerning domestic sugar producer's development, could be characterized as negative: volumes of sugar beet harvesting declined from 50 mln tons to 12 mln, and sugar production – to 1.4-2.2 mln tons. In opposition, almost all Western sugarbeet-sowing countries of European Union in the 90s of the last century reformed and restructured their sugar industries: low-power plants were taken out of operation, instead were built the new ones, technologically advanced, with maximum usage of modern equipment and advanced technology of sugar production. Regular sugar factories lending and investments in these countries are a striking evidence of the priority and strategic importance of the industry. [Homichak 2013] In this regard, a pressing problem has blown up, which lies in the fact that the current profitability of both agricultural producers and sugar refineries are insufficient to ensure expanded reproduction. To ensure the high productivity of all subjects of productive technological process at sugar beet enterprise subcomplex, should be initiated a supreme effective usage of raw materials, productive-sale orientation on the market requirements, and the marketing tools in the formation of commercial policy.

Commodity policy plays an important role in realization of commercial and marketing activity of enterprise at the market. The marketing aspect of activity is directed on providing users with commodities and services, and the commercial aspect constrains achievement of economic efficiency of the enterprise activity in the course of realization of purchases and sale of products. Basic directions and principles of development of commodity policy straight depend on expressly certain general strategy of enterprise. For the correct effective forming of commodity policy it is necessary to provide the following terms [Danilishin 2014]: presence of a long-term general strategy, a clear vuie of whole productions and to the sale of products on a prospect, perfect knowledge of market competition and its necessities, an adequate estimation of the possibilities and resources.

On the modern stage of the development of economy it is possible to select following basic tasks of commodity policy of enterprises of sugar-beet industry: quality management, diversification of assortment, determination of optimum correlation between commodities which are on the different stages of life cycle, adjusting of correlation between the mastered and new markets, choice of time of output of new commodity and elimination of ramshackle commodities from the market.

Most problems of commodity policy of enterprises of sugar beet subcomplex are unstructured, indefinite and preliminary not forecasted. In addition, often enough they foresee a few variants of decision. Therefore important is a high-professional analysis of data operative development of alternative decisions of problems. A commodity policy is well careful thought out not only allows to optimize the process of forming and update of assortment but also serves as for guidance of enterprise by the general direction of actions. One of the most perspective and effective methods which help to increase the efficiency of activity of enterprises of sugar-beet subcomplex and promote them is expansion of commodity assortment, its comprehensive development and perfection. Expansion, improvement and development of commodity assortment of enterprises of sugar-beet subcomplex is possible at the terms of complete and rational use of raw material which acts for the production of sugar, and also at the terms of the complex processing of by-products of sugar-beet production, which are possible at the typical static sugar plant. Basic raw material for the production of basic goods and by-products of sugar-beet production in Ukraine is a sugar beet, consequently sugar beet also will be base raw material both for expansion of commodity assortment and for diversification of activity of enterprises in this industry.

The value of sugar beets in national economy is not limited to its meaning as the unique source of raw material for the production of sugar and sugar industry on the whole. In addition to sugar, in the process of industrial processing of sugar beet factories obtain bagasse and molasses, which are valuable raw material for maintenance of raw of industries of national economy. Bagasse is used in rural economy for feeding of zoons, and also for production of pectin glue which is used in textile production. Molasses is widely used for making of the mixed fodders, it is raw material for the production of alcohol, bioethanol, glycerin, food yeasts, for bakery, suckling and lemon acids.

# Material and research methodology

The analysis is based on data from sugar-beet enterprises of Kiev region of Ukraine. For the purpose of research ABC-analysis was used. ABC-analysis is an important method to be used at the plant to identify key points and priorities. In the terms of validation, ABC-analysis allows for purposeful and economic measures. It can be expressed either in physical or value terms. ABC-analysis may be used to select strategic directions of the company, in logistics, production and marketing. For the ABC-analysis, the Company implements financial performance of industrial, economic and trade activities. The main theoretical methods of this research are systematic approach, analysis and synthesis. Marketing commodity policy is a set of measures for the creation and management of enterprise products to meet consumer needs and achieve their goals. Traditionally, this policy is the main content of marketing activity, because if the company is not producing useful consumer goods or services, the meaning of his existence disappears.

According to ABC- analysis, products which most revenue to our enterprise belongs to a class A, and therefore they should receive the most attention. In our company the class A includes sugar and bioethanol. The class B came in only one type of commodity products – brick building. This type of product has a relatively significant volume of sales in the company, so it is important, but its share in the sales of products is small. The group C in the enterprise includes five products -bagasse, molasses, lime and slaked lime, waste products. However, it should be noted that the all volume of molasses sent for bioethanol production. But to judge that the goods in the group C could not implemented is not correct, because there is the prospect of using biogas for pulp and granulation, for which demand is growing. Lime has seasonal character of sale (used for commercial purposes, construction, agriculture) and also waste products (fertilizing agricultural land). Sugar plants which do not produce bioethanol, has only sugar in Group A of their product portfolio. Such narrow specialization reduces their market stability and maneuverability.

Based on the research of scientists [Bondar, Fursa 2014, Danilishin 2014, Dydar 2010, Homichak, Oliynichuk 2013, Sabluk et al. 2007] and based on the analysis, we can identify key directions of the development of sugar plants.

First of all successful functioning of the sugar plant depends on the quantity and quality of the received raw sugar beets, because only the high sugar content of roots will provide for high performance of sugar and sugar content of chips, sugar content in molasses and other indicators that allow for complex processing of raw materials, maximize the use of by-products processing for quality production of other products. Therefore, it is appropriate to define strategic directions of development of sugar-beet subcomplex with maximal use of marketing mechanism and adaptation to market conditions.

An analysis of the enterprises, statistics and maximum possible adjustment of enterprises of sugar-beet subcomplex to market mechanisms should propose strategic directions for sugar beet production. First of all, it is necessary to focus on the development and implementation of marketing strategy of growth and diversification into all business processes.

One of strategic directions of the development of sugar-beet subcomplex enterprises is upgrading the quality at all stages of raw material reaping and processing. As for the process of root crop harvesting, at all its stages it is necessary to concentrate on the maintainance of integrity of sugar beet roots, and this forces beet-planting farmsteads to buy and/or to lease the advaced beet-lifting combines (mainly beet-lifting combines of the "ROPA" trade mark) and other agricultural equipment for sugar beet processing. It is also necessary to adhere to the defined depth of sowing seed, adhere to the sequence and clearness during harvesting, since superfluous manoeuvres can lead to mechanical damage of sugar beets, making them less suitable for technological use. It should be noted that cultivation of sugar beets in Ukraine takes place in accordance with the state standard "DSTU 4327:2013 Sugar beet roots for industrial processing. Specifivations" (superseding the DSTU 4327:2004) which came into force from 01.01.2014. Support and upgrading of quality are also necessary during the technological process of sugar beet processing. Specifically, the attention should be concentrated on implementation and compliance of international systems and standards of quality of both production process and products. The produced granulated sugar complies with the requirements of "DSTU 4623:2006 White Sugar. Specifications", adopted on June 29, 2006.

However, within the development of markets, changing of consumer tastes and increased requirements for product quality, it is important to establish and maintain international standards and the product quality system. It is necessary to implement and use the system of quality and safety management for food products in the course of white crystalline sugar production, namely by means of compliance with the requirements of ISO 9001, ISO 22000 systems, and to comply with the requirements quality and safety of food products according to the international standard FSSC 22000, as well as other international standards. An important element of quality management system and food safety is constant introduction of proposals to improve all the elements of the production process, and this will have a direct impact on customer satisfaction and quality of products, provide competitive advantage, and make it possible to manage the enterprise on the basis of marketing principles and generally improve the business activity of sugar-beet subcomplex enterprises.

The quality management system is an important part of business management, focused on achievement of advanced positive results, opening the new opportunities in a competitive environment. An important component of this system is compliance with the international environmental standard ISO 14001. However, it is important not only to implement international quality management system and product safety; equally important is maintenance of the progress achieved. Indeed, implementation of international standards into business processes of sugar factory or other enterprise in sugar-beet sector is a compelling evidence of the quality and safety of its food products for partners, customers and other participants of the marketplace. In the case of implementation of quality management system and obtaining of compliance certificates, it will not only significantly enhance the enterprise's image in the sugar-beet industry, but also confirm the advanced level of quality and professionalism of the company management team and employees.

It is important for the future development of enterprises of sugar-beet subcomplex to apply formation and implementation of strategies based on marketing researches. Focusing on the basic strategy, it is advisable to expand the commercial range of goods, to establish reasonable and competitive prices, to organize sales of products by efficient marketing communications. Enterprises of sugar-beet subcomplex have a necessity of effective application of marketing activity, which includes, in particular, the search of innovative ways of expansion of commercial range of goods with the purpose of the complex processing of by-products of sugar-beet production, for example production of biological types of fuel from molasses, granulation of bagasse for animal feed, that could become the powerful component of export activities. On sugar-beet enterprises the elements of the marketing pricing are actively inculcated, affiliative marketing is used regarding regular customers, discounts and other elements of marketing are widely used to increase the competitiveness of products and maintenance of positive image of enterprises.

Very important direction of strategic development of sugar-beet enterprises is permanent support of production processes at the advanced technological level, development of commodity assortment by means of complex processing of by-products, balancing of economic, and ecological constituents of sugar-beet production efficiency, development of complex mechanization and automation of production processes, search of loan funds for development of material and technical base, using of investment-innovative potential, development and introduction of effective marketing strategy, which will help to increase the volume of production, reduce the cost of sugar production and increase an income which will provide effective market activity and high level of competitiveness for enterprises.

#### Research results

Taking into account the legislation regulating the sugar-beet production in Ukraine, and importance of marketing implementation on the enterprises of sugar-beet subcomplex, it is expedient to develop the list of basic strategic directions and positions, which would allow to promote economic efficiency of sugar production, to maximize incomes of enterprises, and successfully conduct the economic processes on sugar-beet enterprises in a long-term perspective.

In adddition to the offered strategy of quality upgrading, the focus should be placed on expansion of product range. Realization of this task slould be coordinated within three basic directions: 1) expansion of assortment of basic products, 2) expansion of assortment of additional products and its industrial processing, 3) increase of the quality level of the renewed assortment and its control.

Increase of economic and ecological efficiency of sugar-beet enterprises can be achieved by means of: enhancing the level of the sugar beets productivity, that will increase production volumes of sugar and by-products; use of intensive techniques and technologies both in growing of sugar beets and during the technological process of sugar production; use of alternative energy sources for sugar-beet enterprises (which will make it possible to reduce the costs on power resources, that straight influences on the reduction of the cost of sugar and by-products, and also reduction of harmful emissions and the level of environmental contamination). Activation of market activity involves the use of marketing methods and techniques on the market. This direction includes development of marketing strategy, and marketing-mix (like a set of measures) which will provide not only cost reduction, but also formation and increasing of demand for sugar and sugar-beet byproducts, development and implementation of effective pricing policy, development of an effective system of promotion and placement of products on the market. One of the most important issues of sugar beet production is the problem of energy supply for refineries, which has become quite acute for sugar producers in recent years. Due to constant dependence of Ukraine from imported gas, the question of gas cost for industrial customers and its timely receipt for in-process are quite acute. Using of gas for industrial consumers has several disadvantages, namely:

- political instability that periodically makes timely and trouble-free supply of the "blue fuel" impossible;
- technical problems, which may be caused by changes in pressure during fuel transportation leading to technical problems with sugar factory equipment;
- high level material and power consumption of sugar-beet production requires large volumes of fuel supply;
- economic problems connected firstly with the high cost of gas that is reflected on the prime price of sugar and by-products of sugar-beet production;
- secondly, the supply of gas into the country is carried out by companies-monopolists, that
  makes it impossible to amend the terms of contracts for delivery and transporting of gas by
  economic subjects, including sugar-beet subcomplex enterprises.

Due to identified problems of gas supply, sugar producers replace gas in the production process by alternative fuels. Mainly, sugar plants use pellets, briquettes, biogas and biodiesel for this purpose, and this will greatly reduce the cost of the final product.

Strategically important direction of functional improvement of sugar-beet subcomplex enterprises is the reuse of by-products of sugar-beet production. It is commonly known that the basic by-products of sugar-beet production are bagasse and molasses. These products can be either used for cattle feeding, either in fresh, dried (bagasse is dried out, granulated, therefore getting marketable condition for export), or canned form (canning of molasses is performed in containers and vats for its reservation). Molasses is a valuable raw material for the production of biofuel in Ukraine and one of major factors of providing of national energy safety, because it diminishes dependence of the country from imported gas.

Ukraine does not belong to the countries that are leaders of biofuel production, however it has a powerful source of raw materials and potential to have leading positions in European markets. Molasses is raw material for the production of bioethanol, or, more specifically, its amount straightly influences on the amount of produced bioethanol in the country. Distilleries in Ukraine begin to recover; their technological lines modernize with the aim of bioethanol production. In Ukraine, as well as in the countries of European Union, production of bioethanol is growing. The major factors of acceleration of global biofuel production are the following:

- high level of demand for energy, which grows from year to year;
- reduction of energy security of import-dependent countries;
- reduction of worldwide energy reserves (oil and gas);
- worsening of global environmental problems.

Intensive growth of consumption and favorable conditions of world bioethanol market allow to increase the capacity of its production in Ukraine. EU countries are interested in importation of bioethanol fuel from Ukraine. Bioethanol market in Europe is growing by 3% annually, which constrains significant potential for increasing exports. But it is necessary to apply new rules and mechanisms to overcome obstacles and to develop the market of biofuel that inhibited by petroleum monopoly and businesses uninterested in imbalance in already formed oil market. [Danilishin 2014, p. 16].

In current times, biofuel is considered the main alternative to traditional fuels. Biofuel market in Ukraine is at the stage of inception, and this is an obstacle for development of the agricultural sector in general and the sugar-beet sector in particular. Another major problem is that more than 50% of the raw material for production of biofuels is intended for export to Europe. This should be a wake-up call for the country's government, because biofuel production in Ukraine would not only enhance energetical independence, but also would give impetus to the development of the majority of economic sectors, including sugar beet production. [Dudar 2010, p. 181-184].

Ukraine, as a country with developed sugar-beet production, can use the experience of France, where production of sugar and ethanol from sugar beets is combined within the same plant. Management of sugar factory can decide upon the percentage of sugar beet roots used for processing of sugar or ethanol, depending on market conditions. In Ukraine, this ratio is characterized as either

insufficient level of production, or overproduction. Such experience could play a major role in stabilizing the domestic sugar market and balancing supply and demand [Danilishin 2014, p. 17].

If on the micro-level sugar stocks are large enough and sugar plant has sufficient level to ensure implementation, it is advisable to carry out production of bioethanol instead of sugar in some production periods, that will partly reduce material costs. However, full production of bio-ethanol on the sugar plant is possible only with presence of own or purchased sugar beets. However, if the sugar factory operates toll conditions (the majority of sugar plants in Ukraine are functioning in such terms), then this transition is almost impossible, because the plant can buy sugar beet pulp and molasses, but beet farms almost never refuse sugar, they will require the appropriate product.

Taking into account the available resources, it is planned to achieve the level of annual bioethanol production in Ukraine of 4.5-5 mln tons till 2020. Given the volatility of the market, as well as substantial devaluation at the end of 2014 and at the beginning of 2015, sugar producers are forced to develop a set of measures to stay on the market. Since the majority of companies try to save material and financial resources, their chief executors consider it inappropriate to fund marketing activities. However, in these conditions the use of marketing tools allows sugar producers to restrain on the market.

To preserve effective economic and trade activity of companies in sugar-beet sector, we suggest to use the following marketing activities in development programmes. First, expanding the product range. Producing new products, enterprises could retain existing customers and gain new ones. Foremost, it is possible to produce powdered sugar, sugar syrup, sugar with various fruit fillings and vitamins, that increase sales volume and expand the range of consumers. Second, search for new channels of sales. In this case, it would be better to use "niche marketing", i.e. to cover additional market niche. It is necessary to develop new markets; it is assumed that their purchases would not have significant amounts at first, but periodic purchase of sugar will allow to stay on the market and attract consumers who will become permanent and profitable during the period of stabilization. It is advisable to concentrate on sales of sugar to small and medium customers. Mainly, it is necessary to develop and establish contacts with confectionery, bakery, mechanized bakery, cafe, which indeed are the main consumers of sugar. It would be quite efficient to offer sugar with high purification degree to plants which produce food products for children (with minimal technology changes and minimal operating costs). It may be implemented by sugar plants both in start-up period and period of market growth, because the volume of consumption is relatively small and sugar plant can provide these deliveries without any special conditions and complications.

However, in such terms managers in any case should not refuse to regular customers, contracted volumes of sales, contract obligations, because the number of customers must be constantly increased. In terms of economic instability the issue of excess profits of sugar factories (not integrated companies) is not relevant. The main purpose of application of marketing in these conditions, both for sugar beet plants and for agriculture enterprises with other specializations, is to maintain the existing market share and customer base. However, our proposal for marketing activities allows sugar plants to generate additional revenues and competitive advantage within stabilization of market equilibrium, monetary and currency security. Marketing activities proposed by the authors allow to develop and refine the sugar beet industry, but the problem of raw material for sugar production is important too, because it is a source for sugar and sugar beet by-products. Therefore, it is necessary to propose a set of measures to stabilize the growing volumes of sugar beet.

### Conclusions

Marketing commodity policy is a set of measures for the creation and management of enterprise products to meet consumer needs and achieve their goals. Traditionally, this policy is the main content of marketing activity, because if the company is not producing useful consumer goods or services, the meaning of his existence disappears. The task and functions are also considered in the article, specific main problems of commodity policy forming are outlined.

According to ABC-analysis, products which most revenue for enterprise belongs to a class A, and therefore they should receive the most attention. In sugar-beet company the class A includes sugar and bioethanol. Biofuel production in sugar factories should be a priority in the energy sector of the country. There are several reasons for this priority, namely:

- powerful agro-industrial complex represents a competitive advantage both for enterprises and for the country in many developed states, in the production of ethanol fuel (fertile soil, favorable climatic conditions are favorable agricultural infrastructure and tradition of sugar beets cultivation);
- increase of biofuel production will ensure energy security by reducing dependence on imported energy;
- in prospect, biofuel will become competitive, compared with traditional energy sources;
- diversification of production will contribute to the development of agriculture, help create
  jobs, enhance the value of sugar beet production in the strategic aspect.

The same analysis can be a starting point for the effective commodity policy forming on an enterprise. To preserve effective economic and trade activity of companies in sugar-beet sector, we suggest to use the following marketing activities in development programmes: expanding the product range, search for new channels of sales, introduction of "Whitelable", creating of conditions delivery for sugar and by-products.

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## Streszczenie

Celem badań było przedstawienie najważniejszych czynników polityki towarowej i jej uwarunkowań. Omówiono koncepcję polityki towarowej i wskazano problemy związane z funkcjonowaniem przedsiębiorstw przetwórczych buraków cukrowych w podregionach Ukrainy. Wskazano także możliwość rozszerzenia asortymentu cukrowni o produkcję wytłoków z trzciny cukrowej, melasy oraz biopaliw.

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