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**THE EXPANSION OF THE INTERNAL MARKET SUGAR
CONSUMPTION AND INCREASE SUGAR EXPORTS AS A PRIORITY
TO IMPROVE THE EFFICIENCY OF RUSSIA SUGAR
BEET SUBCOMPLEX***

*The publication is prepared as part of the scientific supported by Russian foundation for humanities project number 15-32-01215

Розширення внутрішнього ринку споживання цукру і збільшення обсягів його експорту як при-пріоритетних напрямки підвищення ефективності бурякоцукрового підкомплексу апк рф. У статті розглянуто напрямки підвищення еф-ності функціонування бурякоцукрового підкомплексу апк росії. Виявлено, що в умовах забезпечення власних потреб в цукрі в більшості регіонів основним стратегічним завданням є ді-версифікація збуту цукру і цукровмісної продукції. В якості основного методу дослідження з причини відсутності кількістю-жавної оцінки факторів шляхом використання матриці результатів аналізу стратегічних чинників (sfas), що включає в себе зовнішні (efas) і внутрішні чинники (ifas).

Ключові слова: *бурякоцукровий підкомплекс апк, цукор, госу-дар-ного регулювання і фінансова підтримка, синергетичний ефект, стратегічний розвиток, ефективність.*

Sugar beet farming is an important place in the system of agricultural production of the country, so improving the economic welfare in the agricultural sector allowed us to solve some of the problems of the sugar subcomplex, which increases its efficiency. At the same time, in the industry remains disorganization between all links of the production chain, not allowing to achieve system synergy potential from the consolidation of resources for specific manufacturing processes. The result is the generation of new problems while eliminating the current problems: the expansion of cultivated areas – the lack of quality of planting material; intensification increase - the difficulty of access and high cost of credit resources; diversification of production – lack of

new released varieties of seeds; high harvest of sugar beet – lack of capacity of its processing; the increase in sugar production - limiting its sales in view of undeveloped infrastructure and trade logistics. And this pattern continues to persist in years of successful harvests and will affect the sugar beet subcomplex in the future, if do not solve the problem comprehensively, taking into account the possibility of creating a synergistic effect on the entire chain of links, and not solving only local problems alone.

Ignoring in most cases of opportunities of a synergistic approach to the development of sugar beet subcomplex reduces the effectiveness of the implemented measures aimed at improving its effectiveness. Therefore, the achievement of their objectives depends on the ability of managerial decision-making, allowing to solve strategic tasks of the sugar beet subcomplex development. At this stage the priority purpose is to provide the diversification of sugar and sugar-containing products sales, the level of production which we have in most of the regions fully meet our needs. Overproduction and the difficulty of sugar sales is able to nullify all successes achieved in the development of certain elements of the sugar beet sector, whether the development of seed production, expanding acreage, increasing yields and sugar content of sugar beet, modernization and increase in production capacity. All these directions will be limited by the possibilities of sugar consumption in industry and households in the regions and underdeveloped logistics infrastructure, are not able to increase trade flows between regions and for export.

To expand and develop the existing infrastructure of the sugar beet processing factory and the use of sugar in industrial uses in logical areas to allow more competitive management of production, to reduce logistics costs. At this stage, the basis for the sugar beet cultivation re situated in the regions of Central Federal District (50-55%), Volga Federal District (20-22%) and Southern Federal District (18-20%). However, only in the best households are able to keep the level of yield on a comparable in comparison with European producer level of 60 tons/ha [3]. On average in Russia the level of yield of beet sugar is much lower for 3 years in a row, it is only 40-41 tons per ha. It turns out that the collected harvest is enough to ensure the production of sugar by 90%, virtually eliminating the need for a supply of sugarcane for processing. The level of sugar production was achieved due to good value of one parameter: in 2011-2012 is a planted area with a relatively good yield of sugar beet, in 2013 – a high yield, and in 2014-2015 - raising the level of sugar output - over 15% (table 1).

1. The main parameters of development of beet sugar subcomplex of A.I.C. in the Russian Federation in 2005-2015 years

Indicators	Years						Departure from 2015year
	2005	2011	2012	2013	2014	2015	
Gross yield of sugar beet, th. tonnes	21420	47643	45057	39321	33513	39031	17611
Beet sugar crops, th. ha	805	1292	1143	903,8	918,7	1022,2	217,2
Yield level of beet sugar, dt/ha	282	392	409	442	370	388	106
Sugar recovery, %	13,96	13,00	12,51	12,95	15,09	15,17	1,21
Produced sugar overall, th.tonnes	5600	7087	5308	4940	5269	5743	143
- from beet sugar, th. tonnes	2503	4722	4838	4428	4604	5133	2630
- share, %	44,7	66,6	91,2	89,6	87,4	89,4	44,7
-from sugar cane, th. tonnes	3097	2365	470	512	665	610	-2487
- share, %	55,3	33,4	8,9	10,4	12,6	10,6	-44,7

Source: calculated by the authors according to the statistics of «All-Union Association of Sugar Industry»

This shows that to increase the gross harvest of sugar beet is possible in the short period as due to extensive factors (the extension of the cultivated areas), and intensive (intensification of production, the development of beet root seed breeding, by which it is possible to increase the yield and sugar content of sugar beet). High harvest may be the result of a confluence of favorable factors, as evidenced by the high variation of harvest and yield of sugar beet. And in this case, to minimize losses possible by prolonging the period of juice extraction in sugar factories until winter, and then longer. However, we still run into the capacity limit of the sugar market, which will lead once again to a sharp decrease in the cost of sugar. As a result, lose income not only directly by the sugar producers, but also agricultural organizations, as the price of sugar beet depends on the final cost of sugar (in the domestic terms of its share in the cost of sugar in the regions varies from 6% to 8%). As a result, the low level of investment attractiveness of the beet sugar subcomplex, because of the profitability volatility as producers of sugar beet and sugar, despite the fact that

this industry is the most profitable per 1 ha of crops (along with potatoes) in the structure of agriculture. Thus, the opportunities for diversification and expansion of domestic consumption of sugar and its industrial use is a factor, the improvement of which forms a synergistic effect on all stages of the reproductive chain of the sugar beet subcomplex.

The direction of expansion of domestic market of sugar consumption depend on the government strategy of food industry development and possibilities of realization of the competitive advantages and the negative impacts of external factors and problems of sugar beet subcomplex. This assessment is usually carried out based on the SWOT matrix, but we proposed to eliminate the drawback of this method in the absence of quantitative estimates of the factors by using a results matrix analysis of strategic factors SFAS (table 4), which includes external (EFAS – table 3) and internal factors (IFAS - table 2). This approach has been successfully used by us in the systematization of the factors and directions of development of breeding and seed production - the basic elements of the sugar-beet subcomplex [2]. With its help conducts the systematization of the factors that enable or a the defining difficulties of the development of domestic market consumption of sugar and its export.

2. Results of the analysis of internal factors (IFAS) for sugar beet subcomplex of the Russian Federation

Internal factors	weighting coefficient	Rating	The rating is based on the weighting coefficient	Comments
<i>Strengths (S)</i>				
The ability to quickly increase harvest of sugar beets	0,10	4	0,40	The availability of own raw materials for the production of beet sugar in order to ensure food security
Modernization and growth of new sugar beet processing capacity, including in the framework of state development programs	0,15	5	0,75	The increase the production of sugar and demand for sugar beet
The presence of large agricultural holdings specialized in the sugar beet growing sugar beet and manufacturing beet sugar	0,15	4	0,60	The establishment of synergy effect in the production chain

<i>Продовження табл. 2</i>				
1	2	3	4	5
Large, steady demand (consumption) of sugar by the population for personal needs	0,05	3	0,15	Support of demand for sugar in the domestic market
The growth of sugar exports and sugar-containing products	0,05	3	0,15	Elimination of excess sugar from the domestic market, diversification of production and increased income of sugar beet subcomplex
<i>Weaknesses (W)</i>				
The increase in the consumption of sugar substitutes and sweeteners	0,05	3	0,15	Will lead to slower development of the sugar beet subcomplex and the reduction of domestic consumption of sugar; this trend threatens the quality of nutrition
Higher cost of production of domestic sugar from sugar beet in comparison with major exporters of sugar cane	0,15	5	0,75	The decline in investment attractiveness of the industry in the structure of the economy; limiting economic expansion of sugar exports
Unstable price situation on the domestic sugar market	0,15	4	0,60	Lack of financial resources for expanded reproduction of all the elements of the reproduction chain of the sugar beet subcomplex
The high volatility of sugar beet harvest	0,10	4	0,40	The instability of the resource base and high dependence on natural conditions; in case of excessive harvest leads to large losses of sugar beet
Undeveloped trade and transport infrastructure	0,05	3	0,15	The increase in transaction costs reduces the efficiency and competitiveness of domestic sugar on the world market; appreciation and complexity of inter-regional redistribution of raw materials and product of subcomplex of the country
Total	1,00		4,10	

3. Results of analysis of external factors (EFAS) for sugar beet subcomplex of the Russian Federation

External factors	Weighting coefficient	Rating	The rating is based on the weighting coefficient	Comments
1	2	3	4	5
<i>Opportunities (O)</i>				
Expansion of government programs of financial support for the development of sugar beet subcomplex	0,10	5	0,50	The development of the sugar beet subcomplex (seed production and sugar beet), the conservation threshold values of sugar production
Simplification of export procedure in the countries of «Customs Union»	0,05	3	0,15	The development of export potential of the country and the elimination of domestic consumption of sugar
The establishment of special protection measures for participants in the sugar beet subcomplex	0,15	4	0,40	The creation of favorable conditions for participants of the sugar market and providing cover sugar beet farms
The government program of development of the food industry, including preferential loans from the «Fund the development of the industry»	0,15	4	0,60	Increase the capacity of sugar beet processing factory and the growth of domestic demand for sugar and by-products of its production
The development of production directions of by-products	0,05	4	0,20	Diversification of production; maintenance and support of demand for sugar beet

<i>Продовження табл. 3</i>				
1	2	3	4	5
<i>Threats (T)</i>				
The steady increase in domestic logistic costs and tariffs	0,15	5	0,75	Growth production costs and transaction costs determines the loss of competitiveness of exports and the decrease in the efficiency and investment attractiveness of the industry
The decrease in the level of customs tariff protection of import of sugar beet seed from EU, raw sugar and beet sugar from Belarus	0,10	3	0,30	Threat to the food security of the country; the growth of imports in the domestic market will reduce revenues and business activity of domestic business
Active promotion of the market and increased competition of sugar substitutes, sweeteners	0,05	3	0,15	A threat to the health of the population, the decline in consumption of sugar, which reduces the domestic market consumption of sugar
The tight monetary policy of the government, manifested in the high key interest rate on loans	0,15	4	0,60	The reduced availability of investment and credit resources identifies the lack of finance and lower profitability of the business units of the sugar beet subcomplex
The structural crisis of the economy caused a reduction of investment attractiveness and profitability of the food industry	0,05	4	0,20	The collapse of domestic demand and sugar prices will lead to a slowdown in the development of sugar beet subcomplex Russia
Total	1,0		3,85	

4. Results matrix analysis of strategic factors (SFAS)

Strategic factors	Weighting coefficient	Rating	The rating is based on the weighting coefficient	Duration			Recommendations and direction of strategic development
				S	M	L	
1	2	3	4	5	6	7	8
The presence of large agricultural holdings specialized in the sugar beet growing sugar beet and manufacturing beet sugar (S)	0,05	3	0,15		X		The generation of synergies from the development of cooperation between all the links of the reproduction chain of the sugar beet subcomplex
Modernization and growth of new sugar beet processing capacity, including in the framework of state development programs (S)	0,15	4	0,60			X	The commissioning of modern sugar factories and the modernisation of functioning
Higher cost of production of domestic sugar from sugar beet in comparison with major exporters of sugar cane (W)	0,15	5	0,75		X		The reduction in cost for 1 centner due to the use of the factors of intensification, is able to provide the greatest return on 1 rouble of cost
Unstable price situation on the domestic sugar market (W)	0,15	3	0,45	X			Stabilization of production volumes of sugar to provide indicative values of food security and the rehabilitation of surplus through exports

<i>Продовження табл. 4</i>							
1	2	3	4	5	6	7	8
The government program of development of the food industry, including preferential loans from the «Fund the development of the industry» (O)	0,15	5	0,75			X	The expansion of volumes and directions of allocation of preferential loans to the food industry
Expansion of government programs of financial support for the development of sugar beet subcomplex (O)	0,05	4	0,20			X	The growth of state support for breeding and seed-growing farms through the tools of subsidies and compensation of costs
The steady increase in domestic logistic costs and tariffs (T)	0,15	4	0,60	X			Growth restriction or «freezing» of tariffs for energy and transportation
The tight monetary policy of the government, manifested in the high key interest rate on loans (T)	0,15	4	0,60	X			The reduction in the key interest rate and increase the availability of loans for industrialists and agrarians
Total	1,00		4,10				

In the resultative matrix of SFAS included major internal and external factors that are the basis for the establishment of directions for the further development and expansion of the capacity of the domestic market of sugar consumption and increase its exports. The necessity to use the possibilities of sugar beet subcomplex with the aim of reducing the impact of threats and weaknesses of its functioning is determined by the strategic importance of sugar to ensure food security of the population.

The proposed strategic development of sugar beet subcomplex are the components of national economic policy. This is determined by the destruction of the existing organizational-economic mechanism of relations between industries, which was based on the high role of the state in regulating the processes. The «invisible hand of the market» is not (as the example of

developed agricultural countries in the world where a high regulatory role of the state) to ensure a rational division of labour among industries and economic areas that contribute to fair and sufficient for the development of areas of agricultural production allocation of resources. Therefore, the government needs to have correct imbalances in the functioning of the sugar beet industry and sugar market based on instruments direct financial support of its members (expressed by subsidies or compensation of production costs of seed producers and beet growers and other participants in the sugar market), government regulation (represented in the form of implementation of programs of modernization and development of the farming and food industries, and control measures of interindustry relationships in the markets and limiting the influence of natural monopolies) and general economic policy that determines the investment climate in the industry.

At this stage reserves to increase direct budget support to enterprises of the sugar beet subcomplex and other participants of the sugar market in the context of structural crisis in the economy and the budget deficit virtually no. Therefore, the perspectives of increasing demand for sugar depends on government regulation, the effectiveness of which should be possible to provide the conditions for major investments. This requires a review of current monetary policy, which determined the high cost and low availability of credit resources. The development of the food industry and the sugar beet subcomplex is possible to achieve only with the guarantee that businesses can obtain the low-interest loans for the periods corresponding to the duration of the research and production cycle in the investment sector. With such a high rate (exceeding the profitability of many sectors of the food industry), in our opinion, implementation of any industrial projects depends on the activities of government institutions, the priority of which is allocated to «Fund the development of the industry» [3]. The selection of priority projects should be implemented with the possible generation of synergy effect from cooperation between all links in the chain of reproduction of the sugar beet subcomplex, which is currently achievable only in large specialized sugar beet farm. The rest of the business units can be maintained by creating a stable pricing environment on the domestic sugar market and freezing rates that determine the steady rise in the prices of production costs. In major sugar producing regions existing export opportunities as a method of rehabilitation of the surplus product of the internal market can be maintained (not to the detriment of the domestic economy and food security of the population) using the tools of subsidizing (only for direct exporters and not to companies of traders) and providing preferential tariffs for the transportation of sugar.

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Svyatova O.V., Soloshienko R.V., Vydrina O.N. The expansion of the internal market sugar consumption and increase sugar exports as a priority to improve the efficiency of Russia sugar beet subcomplex*

*The publication is prepared as part of the scientific supported by Russian foundation for humanities project number 15-32-01215.

In the article considers the directions of increase of sugar beet subcomplex Russia efficiency functioning in the article. There has been revealed that in conditions of ensuring their own needs in sugar in most regions of primary strategic objective are to diversify sales market of sugar and sugar-containing products. It is proved by the authors that over-production and the difficulty of the sales of sugar under the current limited capacity of the domestic sugar market leads to a sharp decrease value on it, resulting in loss of income of sugar producers and beet growers, because the price of sugar beet depends on the final cost of sugar. The result is a loss of income of sugar producers and beet growers, because the price of sugar beet depends on the final cost of sugar. This eliminates the positive results that have been achieved at all stages of sugar beet production (seed production, extension of cultivated areas, higher yield and sugar content of sugar beet, modernization and increase in production capacity). Therefore, the diversification and expansion of domestic consumption of sugar and its industrial use by increasing the export potential of sugar-containing products creates a synergy effect on all stages of the reproductive chain of sugar beet subcomplex.

As the main research method in the absence of quantitative estimates of the factors are the results matrix analysis of strategic factors (SFAS), which includes external (EFAS) and internal factors (IFAS). In the productive matrix of SFAS included major internal and external factors that are the basis for the establishment of directions for the further development and expansion of the domestic market potential of sugar consumption and increase its exports. As a basis proposed a change in monetary policy, namely the reduction of interest

rates on long-term investments aimed at the modernization and development of the food industry and the sugar beet subcomplex. State investment it is advisable to invest in projects that can generate a synergistic effect on all stages of the reproductive chain of sugar beet subcomplex. Support of the sugar export is based on direct subsidies and provides preferential tariffs for the transportation of sugar.

Keywords: sugar beet subcomplex, sugar, government regulation and financial support, synergy effect, strategic development, efficiency.

О.В. Святова, Д.А. Зюкин, О.Н. Выдрин **Расширение внутреннего рынка потребления сахара и увеличение объемов его экспорта как приоритетные направления повышения эффективности свеклосахарного подкомплекса АПК РФ.** В статье рассмотрены направления повышения эффективности функционирования свеклосахарного подкомплекса АПК России. Выявлено, что в условиях обеспечения собственных потребностей в сахаре в большинстве регионов основной стратегической задачей является диверсификация сбыта сахара и сахаросодержащей продукции. Это доказываются авторами тем, что перепроизводство и трудность сбыта сахара при существующей ограниченной емкости внутреннего российского рынка сахара приводит к резкому снижению стоимости на него, в результате чего происходит потеря доходов как сахаропроизводителей, так и свекловодов, потому что цена на приемку сахарной свеклы напрямую зависит от конечной стоимости сахара. Это в общем итоге нивелирует положительные результаты, которые удалось достигнуть на всех стадиях свеклосахарного производства (развитие семеноводства, расширение посевных площадей, повышение урожайности и сахаристости сахарной свеклы фабричной, модернизация и увеличение производственных мощностей). Поэтому диверсификация и расширение внутреннего рынка потребления сахара и его промышленного использования при увеличении экспортного потенциала сахаросодержащей продукции формирует синергетический эффект на всех этапах воспроизводственной цепочки свеклосахарного подкомплекса АПК.

В качестве основного метода исследования в виду отсутствия количественной оценки факторов путем использования матрицы результатов анализа стратегических факторов (SFAS), включающую в себя внешние (EFAS) и внутренние факторы (IFAS). В результативной матрице SFAS включены важные внутренние и внешние факторы, которые являются также основой для формирования направлений для дальнейшего

развития и расширения потенциала внутреннего рынка потребления сахара и увеличения его экспорта. В качестве основы предлагается смягчение монетарной политики, а именно в снижении процентной ставки на длинные инвестиции, направленные на модернизацию и развитие отраслей пищевой промышленности и самого свеклосахарного подкомплекса АПК. Государственные инвестиции целесообразно направлять в проекты, которые способны генерировать синергетический эффект на всех стадиях воспроизводственной цепочки свеклосахарного подкомплекса АПК. Поддержка экспорта базируется на инструментах прямого субсидирования и обеспечения льготных тарифов на транспортировку сахара.

Ключевые слова: свеклосахарный подкомплекс АПК, сахар, государственное регулирование и финансовая поддержка, синергетический эффект, стратегическое развитие, эффективность.

Стаття надійшла до редакції: 18.04.2017 р.