



NATIONAL FOOD SECURITY: STATUS, PROBLEMS AND PERSPECTIVES

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ABSTRACT

The production of food products in agriculture and the food industry in Bulgaria is important for the formation of the country's food resources, on which the national food security largely depends. The situation and challenges in providing the population with food are related to the stability of national sources for the availability of basic food products. In this regard, the report uses approaches to assess the situation, identifies problems and provides guidelines for the development of food production in the context of Bulgaria's membership in the European Union. Critical moments have been outlined and problems have been identified in providing the population with basic foodstuffs, where the reliability of domestic sources has a pronounced negative effect on the degree of food independence of the country, which as part of food security is part of national security.

Key words: food production, sources, food security.

INTRODUCTION

National food security is important for every country, including Bulgaria. The report examines it in terms of the status, problems and prospects for the production of basic food products and providing the population with basic food products.

The production of basic food products from agriculture and the food industry in Bulgaria is the main core of the country's food resources. Other sources for the formation of these resources are imports and output from households.

It is studied the status and trends in the production of 33 main food products from the two industries (17 from crop production, 3 - from animal husbandry and 13 - from the food industry) for three years - 2007, 2013 and 2016.

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In 2013, at the end of the first programming period, compared to its beginning (2007), the following was observed: a) in crop production for 10 products (58.8% of their total number) production increased. These are mainly cereals - more than twice times and sunflower - more than 3 times; (b) the production of livestock products decreased: in milk by 1.6%, in meat by 13.7% and in eggs - most strongly - by 22.4% and (c) in 6 products (46.2%), produced in the food industry, production is increasing (meat, fish and fish products, rice, milk, oil and sugar and chocolate products. The production of canned food (vegetables and fruits), bread and bakery products, some dairy products (cheese, cheese) decreased for the same period.

The comparison of the quantitative dimensions of the production of the observed products in 2016 with those at the beginning of Bulgaria's membership in the EU (2007) shows the following: a) in 11 out of 17 products in crop production (64.7%) the production increases - again mostly in cereals and sunflowers. b)

production decreases for the other 6 agricultural products - wine grapes - 58.4%, dessert grapes - 74.3%, strawberries - 85.0% and pepper 88.1% of those obtained during the base year and c) for 7 products (53.8%) of the food products industry production is increasing. These are meat, fish and fish products, rice, fresh milk, yogurt, cheese and oil. In 6 (46.2%) of the products the production decreased: bread and bakery products, meat products, yellow cheese, canned vegetables, canned fruits and sugar and chocolate products. The decrease was the largest in yellow cheese (by 26.1%) and the smallest - in canned vegetables (by 7.4%).

The main problems in the production of food products, in the context of national food security, are the following: the manifestation of the long-lasting, permanently formed tendencies of reduction of the production of important food products from agriculture and the food industry continues; there is a strong development in intensive cereals and sunflower. This is at the expense of the development of vegetable and fruit growing, as well as the production of raw materials and livestock products; food shortages arise; However, the "entry" of imported products on the Bulgarian food market is associated with problems in terms of quality control, undermining the production of small and medium-sized agricultural producers in our country and others.

The perspectives for production should be sought in: creating appropriate conditions (economic, technical, technological, infrastructural, etc.) to overcome the long-standing, permanent trend of reducing quantities and to further increase them. In Bulgaria there are favorable natural and climatic conditions for the cultivation of a wide range of agricultural crops, and the results achieved in the past speak of underutilization of the potential of Bulgarian agriculture; to link the production of food products with the necessary resources for its implementation and with the food needs of the society. The agrarian policy pursued in Bulgaria must be aimed at ensuring national food security. It is necessary for the prospects for development of the production of food products to be outlined in the National Food Policy of Bulgaria, in which the issues of providing resources, production parameters and

opportunities for satisfying the consumption of basic food products should be interconnected.

The degree of reliability of the national sources of food products, in processed or unprocessed form, is of key importance for ensuring full food consumption and increasing the level of food security of the country. The current crisis caused by coronavirus-19, with the drastic measures for quarantine imposed at the beginning and the sharp increase in demand for certain food groups (some fruits and vegetables, purchase of products with a long shelf life for future use, etc.), forced the governments of the EU member states to act individually, practically applying protectionist measures. The pandemic has focused the attention of the public on rethinking the importance of national production to ensure sustainable and permanent access of the population to food - in sufficient quantities, with the necessary quality characteristics and species diversity.

The current situation shows that the results in the production of basic food resources do not contribute to solving the problems related to the food security of the country and in particular to achieve relative food independence in the consumption of basic foods. Ensuring sustainable links between the national production of food raw materials and products, which are the basis for satisfying the country's population needs of food, requires a closer connection of the results in the main areas of their production - agriculture and food industry, with the necessary ones to provide healthy and adequate amounts of food.

The need for food is not limitless. It is within the limits of the physiological needs of humans, which makes it possible to determine - both quantitatively and species-wise, both individually and at a general and national level. Based on the nutrients needed to meet specific needs for the maintenance of life processes in the human body and which are the main sources, the products are situated in seven groups, in which they are represented both by those of plant and animal origin. These are products with traditions both in the production in the country and in the consumer habits of the population. Due to these circumstances, their presence and sufficiency are a guarantee for the food security of the country,

and a prerequisite for increasing the reliability of their production - quantitatively and species-wise, is a crucial condition for achieving stability in order to respond primarily to the formed structure of food consumption, the necessary foodstuffs of national origin, which, under normal conditions and in emergency situations, ensures the relative food independence of the country.

An object of analysis are products with a consistently high share in the total food consumption. They are basic in the daily consumption of food, meet rational, essential needs for food energy, building and protective elements and are closely related to the health status of the population, on which the pandemic caused by coronavirus-19, apparently sharpened attention of society. Ensuring a good level of our health is increasingly associated with directing consumption to products produced under the rules of organic farming (Branzova, P., 2019). For preserving the usefulness of the products it is significant the overall effect of spatial organization along the production-supply-consumption chain (Branzova, P, 2018).

It is important to be noted that the critical moments and highlighted problems in food security are derived on the basis of scientifically sound, regulated institutionally recommended norms of consumption, which are consistent with the development of technological innovations in production and changes in food culture. However, unconditional and decisive in the regulation of a basic set of food products - such as volume, structure, range and quality- remains the requirement to meet basic food needs, which ensure full maintenance of human vital functions from a physiological point of view, provide healthy and responsive to modern requirements for quality of life and last but not least, provide an opportunity to build social competencies.

In the structure of the total consumed food products, there are specifics, which are related to their value, in terms of usefulness. This is the basis for their grouping. The products in each group are interchangeable, and the assortment diversity in their consumption, within the group, is determined by the individual taste preferences, financial capabilities and / or health status of consumers. When tracking and assessing

individual consumption, characteristics are identified by individual products and product groups, which raise questions about the state of security and outline problem areas for our national production. In this context, the development of our national capabilities to provide the needs of the country with basic food depends on whether the existing problems will remain in the field of future challenges to food security of the country.

Highlighting the main parameters in consumption and comparing the relative share of own and external resources in terms of meeting food needs, allows to assess the state of food security of the country and its commitment and / or dependence on different channels for the formation of the final food volumes.

With the traditionally high use of starch-rich products in Bulgaria - cereals and potatoes, despite the persistent trend of reducing their intake, it remains within the scientifically based norm. The products from this group also have the largest relative share in the total food energy intake. The most significant is the share of consumed bread and pasta, despite the constant contraction of their consumption - in 2016 compared to 2011 the decrease is by 17.5%, and in 2019 compared to 2016 it is by 6.4%. The national production of the raw material - wheat, is almost four times higher than the necessary norm for domestic consumption. Potatoes are the other product with a high share of consumption. There is also a characteristic decline in their volumes - in 2016 the quantities consumed were 10.7% less than in 2011 and in 2019 the decrease was 2.9% compared to 2016. The self-sufficiency of the country with food products is high, but on average about 15% of consumption for the period 2011-2019 is covered by imports, with the largest deficit registered in 2017.

There is a positive trend of increase in the consumption of foods rich in vitamins, fiber, minerals and biologically active substances - vegetables and fruits. In 2019, in quantitative terms, their total consumption compared to 2011 increased by over 5%, mainly due to the significant increase in fruit consumption. The unfavorable tendency of increasing the external resource to cover the needs of the country is

maintained throughout the period 2011-2019 in both positions.

The level of satisfaction of domestic consumption of tomatoes, cucumbers and peppers was 67%, 78% and 70%, respectively, at the end of the period, with registered decline in the volumes of all three products compared to the beginning of the period. In the case of cabbage and onions there is an increase in the share of local production in consumption, respectively by 4% and 12% at the end of the period, but here too, especially in the case of onions the relative share of external resources in consumption is significant - 48%. The choice to focus on these five products is not accidental. Their relative share in the total consumption of vegetables is significant - in 2011 it was 82.2% and in 2019 - 79%.

The consumption of fruits increased by about 10% for the analysed period, as half of it (5.4%) is covered by the increased consumption of southern fruits (citrus and bananas), for which there are no objective natural conditions for production. In 2019, they account for 30% of the consumption of all types of fruits, which determines the importance of external resources for our country in providing with this product group. With a high relative share in the total consumption of fruits in 2011 as well as in 2019, respectively with 25.8% and 24.6% are apples, pears, watermelons and melons. For the first two products, although the country has suitable climatic conditions for cultivation, the share of national production in consumption in 2019 is 50% and 47%, respectively. Self-sufficiency is higher for watermelons - 81% and melons - 79%.

The unfavorable tendency of dependence on imports in providing the country with products rich in complete protein remains. The main reason is low self-sufficiency in meat. Consumption of meat of all kinds in 2019 increased by 11.2% compared to 2011, and in pork and poultry increased by 24.2%. These are both types of meat with the highest relative share in the consumption of all types of meat - in 2011 with a share of 56.7% and in 2019 with a share of 63.3%. At the same time, the coverage of consumption by national production is very low for pork - about 40% and for poultry - just over

60%. Another main product in this group are eggs, for which consumption increased by 14.6% during the period observed. This is also the product, the consumption of which, together with beans (beans and lentils are also items from this product group) has full coverage of local production.

Milk and dairy products are the other important group of products rich in complete protein, calcium, a wide range of vitamins and animal fats. Their consumption is relatively stable. Leading in consumption are three products - yogurt, milk and cheese. Their relative share in the total consumption of milk and dairy products in 2011 was 92.3%. In 2019, this share was 88.8%, mainly due to a registered decline in the consumption of fresh milk and cheese. The degree of self-sufficiency with the primary basic raw material - milk, is markedly declining. Domestic production of raw milk is not able to meet the needs of the country. After 2014, the import of finished dairy products has been growing steadily - yellow cheeses, butter, fermented milk, and since 2016 the import of raw milk for processing has increased sharply. The shortage is covered by external for the country sources, which provide between 15% and 20% of milk protein consumption in the country for the period 2011 - 2019. The products of this group are traditional for the diet of the population. The expectations are for an increase in their consumption, which will increase the dependence of consumption on external sources of both finished products and raw materials for domestic production.

RESULTS

The production of basic food products from agriculture and the food industry is steadily declining. As a result, food shortages arise. They reflect the quantitative dimensions of raw materials for the processing industry, of resources for domestic consumption and for export.

The production of basic food products in Bulgaria should be developed in such a way as to overcome the emerging food deficits, to adapt to the changing conditions of the external environment and to the requirements of the consumers, to increase the competitiveness of the Bulgarian food products to the domestic and

international food products markets, full use of the country's natural resources for the production of more qualitative products.

Deepening problems and real status of food dependence of the country in ensuring the consumption of three of the four food groups; quantitative changes in consumption are registered in all groups - in two of them (fruits and vegetables, meat) consumption is growing, in one (milk and dairy products) it is relatively stable - these are the groups with the lowest share of national resources, and a decrease in the consumption in the group of cereals and potatoes, in which the national resource is almost four times larger than the one needed for the country. The largest, which has become chronic over time, is the dependence of consumption in the country on external resources in two of the main product groups - fruits and vegetables. Only for three of the 10 products observed their consumption is based on (watermelons, melons and cucumbers) national resource within relatively acceptable limits (78% - 81%); in the case of products providing intake of high-quality protein (meat, eggs, beans, lentils) - only two products have full coverage of consumption from local production.

CONCLUSION

The problems with providing the country with the most widely consumed types of food products of national origin are deepening. The negative tendencies, based on the formation of a sustainable food resource is by imports, as an important component of quantitative and qualitative component, guaranteeing the

consumption of the main types of food, are intensifying. It is obvious that there are no temporary but systemic deviations, imposing a model of providing the population with food, asymmetric to the interests of the country related to its food security. The state and its institutions can and must take measures with regard to the unfavorable changes, which are essential for feeding the population and for the food security of the country.

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