

## CHALLENGES AND TRENDS IN THE DEVELOPMENT OF VEGETABLE PRODUCTION IN BULGARIA

Teodora STOEVA

Agricultural University-Plovdiv, 12 Mendeleev Str., Plovdiv, 4000, Bulgaria, Email: teodorastoeva@gmail.com

*Corresponding author:* teodorastoeva@gmail.com

### *Abstract*

*Vegetable production has always been a specific sector of agricultural production. It is characterized by the possibility of growing a wide range of cultivated plant species, many of which are of important significance for the economic contribution of the plant production sub-sector not only to the agriculture, but also to the national economy. The social and economic changes that followed after 1990 have had a catastrophic impact on vegetable production in Bulgaria. What was known as large-scale specialized vegetable production has become multi-assortment, small-scale, low-performance and precarious production. Bulgaria has lost its strong position as a traditional vegetable producer and exporter. A major challenge facing Bulgarian vegetable production is its modernization – it would help increase the production competitiveness so that the vegetable products meet the current quality requirements and compete with the imported vegetables. The purpose of this article is to analyze the challenges and trends in the development of Bulgarian vegetable production which is characterized by great intensity related to the context of the Common agricultural policy with a view to enhancing its competitiveness and sustainable development. For the purposes of the research different information sources have been used - scientific journals, publications by Bulgarian authors, as well as the author's own research. Based on the analysis of vegetable production in Bulgaria and the economic results obtained from the production of the main vegetable crops grown we can draw the following conclusions: The land productivity in Bulgaria regarding field vegetable production is low despite the favorable soil and climatic conditions typical of the area; Average yields of the main vegetables grown in Bulgaria are lower than their potential biological productivity; Enhancing the national support for the vegetable production sector; A major challenge facing Bulgarian vegetable production is its modernization – it would help increase the production competitiveness so that the vegetable products meet the current quality requirements and compete with the imported vegetables.*

**Key words:** vegetable production, trends, competitiveness

### INTRODUCTION

Vegetable production has always been a specific sector of agricultural production. It is characterized by the possibility of growing a wide range of cultivated plant species, many of which are of important significance for the economic contribution of the plant production sub-sector not only to the agriculture, but also to the national economy. The social and economic changes that followed after 1990 have had a catastrophic impact on vegetable production in Bulgaria. What was known as large-scale specialized vegetable production has become multi-assortment, small-scale, low-performance and precarious production. Bulgaria has lost its strong position as a traditional vegetable producer and exporter [1].

For comparison only, for the period from 1948 to 1990 on a number of indicators, such as grain production per capita, production of vegetables and grapes, white brine cheese, etc., Bulgaria used to be at the forefront in Europe [1].

As a whole, there is a prevalence of the tendency to increase the production costs in vegetable growing in Bulgaria. A lot of changes have occurred in the level of vegetable production cost price for this period. To a significant degree the increase in cost price is formed by the increase in production costs for 1 ton production.

The purpose of this article is to analyze the challenges and trends in the development of Bulgarian vegetable production which is characterized by great intensity related to the context of the Common agricultural policy

with a view to enhancing its competitiveness and sustainable development.

## MATERIALS AND METHODS

For the purposes of the research different information sources have been used: scientific journals, publications by Bulgarian and foreign authors, on-line (electronic) periodicals, as well as the author's own research.

Today in Bulgaria, small vegetable production is prevalent and it is distinguished by a low technological level. The reasons for the serious drop in the production of vegetables and the relatively weak competitiveness of vegetable production observed after the accession of Bulgaria to the EU in 2007, are rooted in the failure of the land reform. As a result of this reform, small-scale farms which are ineffective due to the low degree of specialization, insufficient availability of agricultural equipment and modest level of production organization, dominate the structure of specialized vegetable outdoor farms. The strong competition of vegetable production from other European countries after the accession of Bulgaria to the Common European market in 2007 and the imports of fresh vegetables have pressed further Bulgarian vegetable production [5].

## RESULTS AND DISCUSSIONS

The crisis, in which our vegetable production is, as well as the constant price increase of the main vegetable crops and the lagging incomes of the population, reveal the negative trends associated with consumption and demand of vegetables by Bulgarians. The reduced domestic production of vegetables is unable to satisfy the demands on Bulgarian market which requires the import of vegetables from countries neighboring to Bulgaria. Bulgaria once used to be a traditional exporter of vegetable production, now it has become an importer. The import of certain crops at relatively low prices from neighboring countries, such as Turkey and Greece, where the climatic conditions are more favorable nearly throughout the year, puts pressure on

the Bulgarian production. The lack of responsible national policy and a long-term strategy in the field of agriculture, and in particular the vegetable sector, in recent years has contributed to this state of collapse [10].

Most of the output is marketed on the domestic market, but consumption has significantly decreased and is moving below the recommended daily allowance of the World Health Organization. The export of vegetables is symbolic, especially of greenhouse vegetables. The exported vegetable production is negligible in quantity while the number of imported vegetables is unrealistic since it is impossible to trace the illegal imports. Today, Bulgarian vegetable production is facing the dilemma: production or import? The financial assistance under the programs is only BGN 10-15/dca. For areas of 5 to 50 dca, this assistance reaches up to BGN 750, rarely BGN 1,500/dca. At the same time, the cost of this intensive production is BGN 700-800/dca, while in greenhouse production they are measured in thousands of BGN [1].

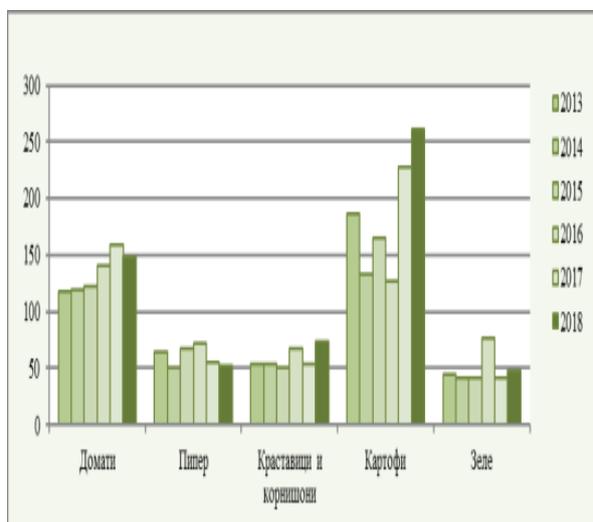


Fig. 1. Comparison of production of vegetables by years (thousand tons)

Source: Ministry of Agriculture and food, Agrostatistics Directorate, 2013-2018 [6].

Bulgarian vegetable production has faced serious challenges after the accession of our country to the EU. This traditional sub-sector of Bulgarian agriculture has been subjected to a constant pressure by the competitive import of cheap vegetables from other European countries.

The prerequisites on which the development of vegetable production depends differ in importance. They can be divided in three main groups: environmental factors, economic factors and subjective factors [3].

A report published by the Institute of Economic Research at BAS (Bulgarian Academy of Sciences) focuses on restoring the traditional structure of agricultural crops imposed in recent years. A conventional type of seasonal vegetable production is required. Also, another type of trade is required – markets and food chains located at a short distance from the producers.

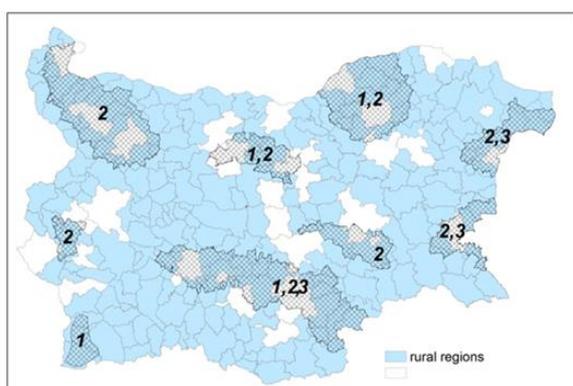


Fig. 2. Regionalization of production strands in field vegetable production

Legend: 1- early field production; 2-medium early field production; 3-late field production.

Source: Kartalov et al. 1990 (Rural Development Program 2007-2013) [3].

According to the scientists, Bulgaria's participation in the EU's common agricultural policy shows that for the period 2007-2023, 75% of the subsidy under the first pillar /direct payments/ was received by 3,700 physical persons and legal entities. For the second pillar /rural development/: from the total EUR 3,240 billion, EUR 2,609 billion was used, of which 67% were absorbed by the 100 related parties [1].

These deformities, according to the authors, have emerged as lasting trends for the past 20 years, namely:

- Concentration of land and capital;
- The state neither manages nor directs the land trade; at the same time it avoids the problem of consolidation. The consolidation that is taking place in Bulgaria is not because

of the production itself, but to facilitate the sale of land or its lease [4];

- Monopoly in land lease; declining livestock production, vegetable production and fruit growing;

-Production of low value added production, mainly grain.

-Land reform has eliminated Cooperative Farms (the so called TKZS) before restoring the land ownership. No liability has been claimed for the criminal transactions. The chaotic structural changes that followed have led to the elimination of what have been achieved in the past without the intervention of the state. The loss of old markets and severely limited access to European markets is the other important reason for the current state of the agriculture. The lack of the state's regulatory role has led to the decline and destruction of intensive industries such as fruit and vegetable production, etc. [1].

Given the current development of agricultural industry, the notable significance of vegetable production has not been realized so far. In recent years, there has been a steady tendency towards reduction of harvested areas and realization of average yields, which is far from the biological potential of the cultivated vegetable varieties. Often, the production harvested is of weak competitiveness in terms of the increasing quality demands of the national, regional and common European market [11].

After the accession of Bulgaria to the EU-27, despite the overall positive impact that CAP 2007-2013 has on the agricultural business environment, some significant structural changes are registered at sub-sectoral and sectoral level [7].

The reasons for the serious drop in the production of vegetables and the relatively weak competitiveness of vegetable production observed after the accession of Bulgaria to the EU in 2007, are rooted in the failure of the land reform. As a result of this reform, small-scale farms which are ineffective due to the low degree of specialization, insufficient availability of agricultural equipment and modest level of production organization, dominate the structure of specialized vegetable outdoor farms [8, 9].

In terms of the Vegetable sector, the nature of this process is determined by the method of subsidizing under the Single Area Payment System [12]. Area Payment needs to be changed and other factors in the farm should be taken into account in addition to the size of the land [2].

## CONCLUSIONS

Based on the analysis of the development of vegetable production in Bulgaria and the economic results obtained from the production of the main vegetable crops grown we can draw the following conclusions:

-The land productivity in Bulgaria regarding field vegetable production is low despite the favorable soil and climatic conditions typical of the area.

-Average yields of the main vegetables grown in Bulgaria are lower than their potential biological productivity.

-Enhancing the national support for the vegetable production sector [13].

A major challenge facing Bulgarian vegetable production is its modernization – it would help increase the production competitiveness so that the vegetable products meet the current quality requirements and compete with the imported vegetables.

A strategic approach is needed in order to regain the pride and glory of Bulgaria as the ‘orchard and vegetable garden of Europe’; This in turn is connected to the promotion of projects that bring not only profit and rapid returns, but contribute to the increase of labor productivity, employment of the rural population and the profitability per unit area [1].

## ACKNOWLEDGEMENTS

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## REFERENCES

- [1]Angelov, P. et al., 2018, Agriculture and food industry of Plovdiv District - past - present - future, 2nd Vol., Poligrafyug Publishing House, p. 133, 134, 138, 204.
- [2]Kaneva, K., Nikolov, D., Yovchevska, P., 2018, Bulgarian Agriculture: Ten Years of CAP – Results and Future Challenges After 2020, Economics and Management of Agriculture Magazine, 2/2018, pp. 3-13, Sofia.
- [3]Kartalov, P., Hr. Petrov, M. Doykova, P. Boshnakov 1990. Vegetable production with selection and seed production, published by Zemizdat, Sofia, p.145
- [4]Kirovski, P., Nikolov et al., ‘Analysis of Fruit and Vegetables Sectors’ pp.22-25, pp.34, in: ‘Analysis of the sectors with coupled support’, Published by Institute of Agricultural Economics /IAE/, Sofia, 2015, pp.119
- [5]Ministry of Agriculture and Food, National strategy for sustainable development of agriculture in the Republic of Bulgaria for the period 2014-2020.
- [6]Ministry of Agriculture and food, Agrostatistics Directorate, 2013-2018.
- [7]Stoeva, T., 2015, Competitiveness of Bulgaria vegetable production after the EU enlargement, Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Vol. 15(2): 391-394.
- [8]Stoeva, T., 2015, Prerequisites and conditions for the development of Bulgarian agriculture and vegetable production-Current situation, issues and priorities in the context of the CAP, Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Vol. 15(2):397-400.
- [9]Stoeva, T., Dirimanova, V., 2020, The role of the new land relations for the development of vegetable production in Bulgaria, Scientific Papers Series Management, Economic Engineering in Agriculture and Rural Development Vol. 20(4):507-512.
- [10]Tonchev, T., 2013, 12 times is the decline in fruit production, Bulgarian farmer, Interview.
- [11]Yovchevska, Pl., Nikolov et al., 2015, Significance of vulnerable sectors for Bulgarian agriculture, pp.20 In: ‘Analysis of the sectors with coupled support’, Published by Institute of Agricultural Economics, Sofia, 2015.
- [12]Yovchevska, Pl., 2016, Effect of the application of the coupled support schemes, Agricultural economics and management, Vol.2-4/2016, pp.65-66.
- [13]Yovchevska, Pl., et al., 2019. Studio Land relations: theory, practice, perspectives, Published by Institute of Agricultural Economics, Sofia, pp. 18.