

THE SITUATION WITH ORIENTAL TOBACCO IN MACEDONIA AND THE COUNTRIES OF THE REGION

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ABSTRACT

The long-term future of tobacco production in Macedonia will be ensured only through a quality production policy, proper investment, employee encouragement and motivation, capital increase, proper pricing policy, subsidy stimulation, education and advice from experts and proper market policy. In this context, it is inevitable to emphasize that the traditional method of tobacco production, favorable natural-climatic conditions, state interest, socio-economic aspects and export policy on a global scale are springboard for the continuation of the century-old tradition of tobacco production in our country. This paper analyzes the state of the tobacco production sector in the Republic of Macedonia compared to tobacco production in the countries of the region, with the aim of aligning the facts about future perspectives and trends in this industry.

Keywords: tobacco production, strategy, perspectives, trends, areas, yield

СОСТОЈБАТА НА ОРИЕНТАЛСКИОТ ТУТУН ВО МАКЕДОНИЈА И ЗЕМЈИТЕ ОД РЕГИОНОТ

Долгорочна иднина на тутунопроизводството во Македонија ќе се обезбеди само со квалитетна производствена политика, правилно инвестирање, поттикнување на вработеноста, на мотивираноста, зголемување на капиталот, правилна политика на цени, стимулирачка субвенциска политика, едукација и совети од стручни лица и правилна пазарна политика. Во овој контекст, неизбежно е да се нагласи дека традиционалниот начин на производство на тутун, поволните природноклиматски услови, државниот интерес, социјално-економскиот аспект и извозната политика во светски рамки, претставуваат отскочна даска за продолжување на векот на тутунопроизводството кај нас. Во овој труд направена е анализа на состојба во сферата на тутунопроизводството во Р.С.Македонија во споредба со тутунопроизводството во земјите од регионот, со цел да се согледа фактот за идните перспективи и трендови во оваа дејност.

Клучни зборови: тутунопроизводство, стратегија, перспективи, трендови, површини, принос

INTRODUCTION

Oriental tobacco is one of the most important industrial crops in the Republic of North Macedonia, with a long tradition and significant economic and social importance. Its production is characterized by high labor intensity, dominant participation of family farms and production of raw material with specific qualitative properties, especially in the varietal types "Prilep" and "Jaka", which are recognizable on the international market. Research shows that oriental tobacco in Macedonia plays a significant role in the sustainability of rural areas and is an important source of income for a large number of households (Pashovska, 2024). In recent years, the oriental tobacco production sector has faced significant structural and economic changes. According to the available analyses, a decrease in the area under tobacco is noticeable, but also a certain stability in terms of the quality of the produced raw material (Pashovska and Poposki, 2024). These trends are the result of several factors, including changes in agrarian policy, market movements and demographic changes in rural areas. In addition, modern research is aimed at improving agrotechnical practices, as well as optimizing production in different environmental conditions (Korubin-Aleksoska et al., 2018). In a regional context, the countries of Southeast Europe have a similar tradition and similar agro-ecological conditions for the production of oriental tobacco. Research indicates the need to adapt production to new market conditions, by improving quality and optimizing production practices. In this regard, the importance of scientific research work to maintain the competitiveness of oriental tobacco on the international market is emphasized.

Comparative analyses show that, although Macedonia has a competitive advantage in terms of the quality of oriental tobacco, there are limitations in terms of

productivity and economic efficiency of production. Some research indicates that improving production practices and the application of modern technologies can contribute to increasing yields and improving economic results (Arsov and Kabranova, 2020).

Compared to the countries in the region, the production of oriental tobacco in the Republic of North Macedonia is characterized by a specific structure and organization. Namely, while Macedonia is dominated by smaller family farms with a traditional production method, in certain countries in the region a greater degree of organizational association and application of modern production practices is observed. These differences affect the economic efficiency and competitiveness of production, with Macedonian oriental tobacco maintaining a high reputation for its quality, but facing challenges in terms of productivity.

Additionally, research shows that there are different approaches in the region in terms of improving the varietal composition and agrotechnical measures, in order to increase yields and maintain the quality of the raw material. In this regard, Macedonia has significant potential for improving production through the application of modern scientific achievements and experiences from the region, with maintaining recognizable quality remaining a key factor for its position on the international market (Pashovska and Poposki, 2024).

This paper examines the main trends and development perspectives of tobacco production in Macedonia in the context of regional and global developments. These aspects are addressed through the following:

- Acquisition of scientific knowledge about the trends and developmental perspectives of tobacco production in Macedonia, taking into account

- the intentions and needs at the global level.
- Highlighting the advantages and benefits for the production of quality tobacco in Macedonia, especially considering tradition and years of experience, favorable natural-climatic conditions, state interest from a financial perspective, socio-economic aspects and export policy on a global scale, representing an opportunity to continue the century-long tradition of tobacco production in our country.
 - Emphasizing the importance of the tobacco industry in our country, which plays a particularly significant economic and financial role, as tobacco is an export product contributing to a net foreign exchange inflow for the state budget.

- Making comparisons regarding the situation of tobacco production in Macedonia and neighboring countries.
- Pointing out the fact that tobacco production in Macedonia must adapt to global trends, with special consideration given to the indications provided by relevant factors and institutions in this domain.

A developmental strategy is inevitably needed for tobacco production as a framework for advancing the industry. This strategy should support the sustainable development of tobacco production through appropriate agricultural policy measures, including adequate financial support. Additionally, it should underscore the importance of considering tobacco as a high-ranking factor in calculations and projections for the economic and financial development of our country.

MATERIAL AND METHODS

The development of this study employs a scientific and analytical approach, with the obligatory use of statistical data from relevant sources such as the State Statistical Office of the Republic of North Macedonia, the Ministry of Agriculture, Forestry and Water Economy of the Republic of North Macedonia, Economic Chamber, AMIS (Agricultural Market Information System), data from the

EUROSTAT database, data from the Food and Agriculture Organization of the United Nations (FAO), data from the World Health Organization, etc. In the empirical part, statistical analysis was applied to the data obtained for the selected period, together with descriptive and comparative methods and tabular and graphical presentation of the results.

RESULTS AND DISCUSSION

Oriental tobacco, as a plant compatible with soil conditions that may not be suitable or profitable for cultivating other types of agricultural products, is traditionally grown in more than 15 countries worldwide. It is particularly prominent in Macedonia, Turkey, Greece and Bulgaria, which are the focus of analysis in this study. Although its productive cultivation requires favorable

soil and climatic conditions and a tradition of cultivation, it thrives even in poorer soils and areas with greater aridity. In the tobacco industry, it holds significance as an export-oriented high-quality product that generates substantial revenues for the overall economy. Oriental tobacco imparts a spiciness to tobacco blends, lending the flavor profile an extra dimension. It is especially valued for its spicy note,

making it a crucial component in developing new blends (<https://macbaren.com/about-tobacco/>).

Out of respect for this culture, we will first provide a brief overview of the quantities

of Oriental tobacco produced in Macedonia and neighboring countries, which are similar producers (Table 1).

Table 1. Production of oriental tobacco types in Balkan countries (2010-2022)

Year	Turkey	Macedonia	Greece	Bulgaria
2010	50.400	30.280	25.676	28.906
2011	41.498	26.537	23.211	25.846
2012	70.150	27.333	24.660	16.212
2013	89.109	27.859	31.486	23.562
2014	71.729	27.578	30.881	17.207
2015	65.230	24.237	26.103	11.982
2016	73.659	25.443	26.352	7.663
2017	91.107	22.885	24.830	6.690
2018	72.114	25.547	15.550	4.862
2019	82.212	26.234	15.185	4.246
2020	72.850	26.112	14.290	4.824
2021	69.430	24.329	11.500	5.400
2022	41.150	20.880	8.500	4.500
Total	890.638	335.254	278.224	161.900
Average production for the analyzed period	68.511	25.789	21.402	12.454

Source: Database of Philip Morris International (<https://www.pmi.com/tobacco-economics/tobacco-database>)

For better clarity of the data on Oriental tobacco production in the mentioned countries, they are presented in the following Figure 1. Presented data in Table 1 and Figure 1 indicate that the production of Oriental tobacco shows fluctuations with a decreasing trend from year to year. The main reason for the decline in tobacco production and consequently in the production of Oriental types of tobacco, is the discontinuation of direct subsidies in Greece, shifting towards olive cultivation as a less labor-intensive crop. In Turkey, the decrease is attributed to the development of tourism, especially in the Aegean region, which represents the largest tobacco production area in terms of volume. In Bulgaria, the reduction is linked to obtaining production quotas after its accession to the European Union, aligning the Common Agricultural Policy with Union regulations, which eliminates direct subsidy payments to tobacco producers and replaces them with area-

based payments. Additionally, a significant portion of the population in Bulgaria, especially the younger demographic, has been migrating to Western European countries after joining the European Union.

To sustain production in North Macedonia, it is crucial to continue the state's policy of subsidizing and stimulating this industry. Supported by the government's subsidy policy, Macedonia should aim to increase the production of Oriental tobacco, considering the continued decline in production in Greece, Bulgaria and Turkey. The trend in the production of this type of tobacco in Balkan countries shows a continued linear decline. Albania and Serbia have very small and almost negligible quantities of Oriental tobacco (Miceski and Pashovska, 2013). Figure 2 shows the average production for the analyzed period in the mentioned countries.

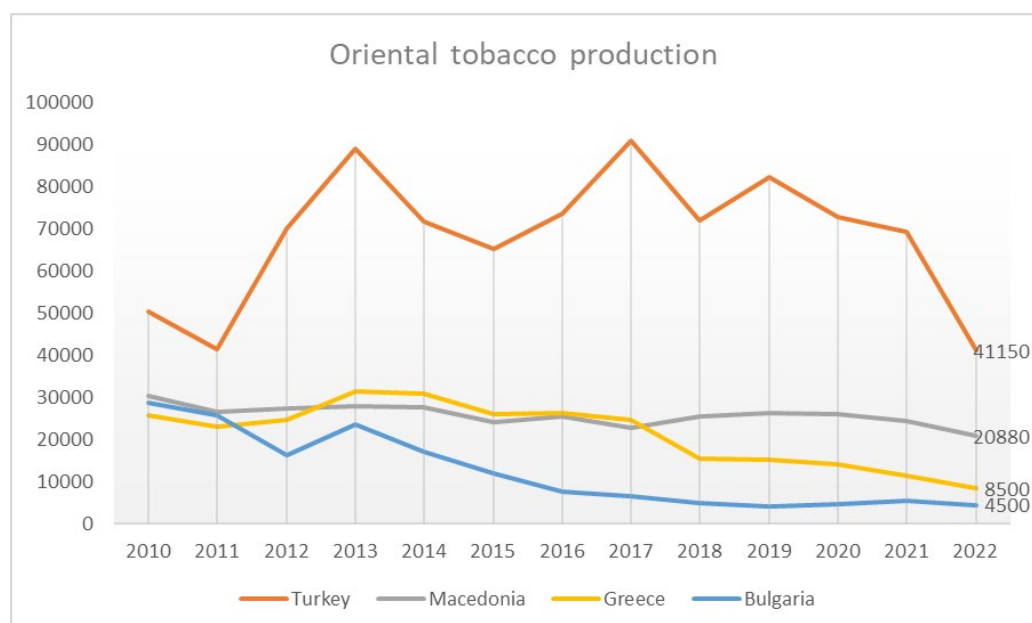


Figure 1. Production of Oriental types of tobacco in Balkan countries (2010-2022)

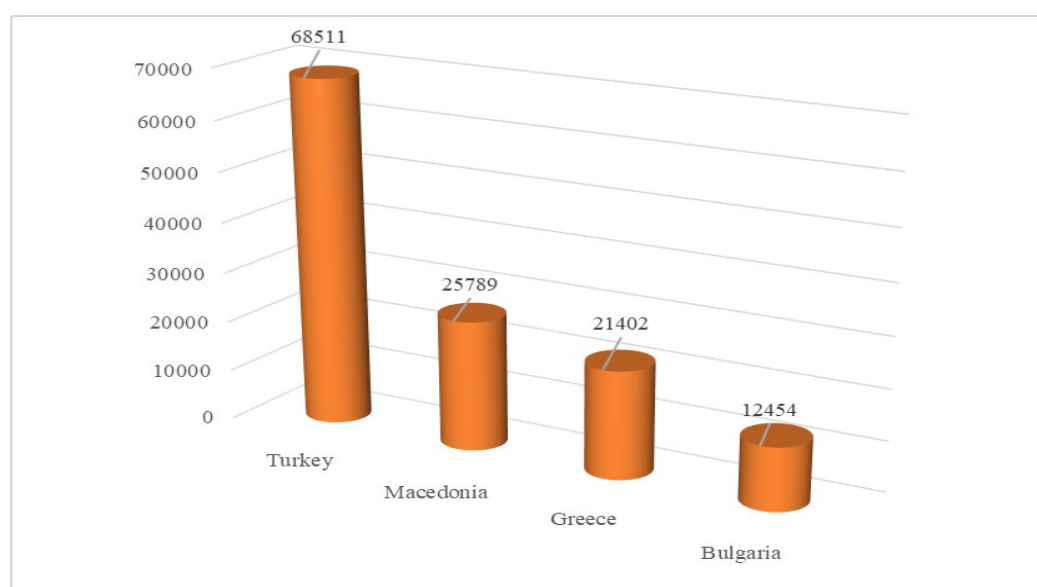


Figure 2. Average production of Oriental tobacco in Turkey, North Macedonia, Greece and Bulgaria (2010-2022)

The production and trade of Oriental tobacco and tobacco products have significant economic and social importance for the Republic of North Macedonia, contributing to 3.8% of the gross domestic product (GDP). The tobacco industry accounts for approximately 4.0% of the total industrial production and 4.1% of employment in the overall industry. In recent years, tobacco

production has shown a relatively stable trend, ranging from 20,000 to 25,000 tons on an area of about 13,500 hectares. However, as this production is directly influenced by climatic conditions, a decrease was recorded in the harvest of 2023. This reduction is attributed to excessive rains during the spring, leading to diseases in tobacco plants and causing significant thinning. Subsequently, a dry

period followed, further impacting the yield. Although the quality of the produced and harvested tobacco was considered good, the quantity was significantly lower compared to the 2022 harvest. Table 2

contains data on the number of concluded contracts, cultivated tobacco area, production in tons and yield in kg/ha (2010-2022).

Table 2. Number of concluded contracts, tobacco planted area, production in tons, yield kg/ha (2010-2022)

Year	Number of concluded contracts	Tobacco planted area	Production in tons (t)	Yield (kg/ha)
2010	40.743	20.300	30.280	1.492
2011	33.234	19.693	26.537	1.348
2012	29.090	19.656	27.333	1.391
2013	42.367	19.178	27.859	1.453
2014	34.445	17.758	27.578	1.553
2015	28.454	16.128	24.237	1.503
2016	27.380	16.379	25.443	1.553
2017	29.132	15.961	22.885	1.434
2018	34.104	16.582	25.547	1.541
2019	24.854	16.719	26.234	1.569
2020	29.531	16.592	26.112	1.574
2021	27.712	15.457	24.329	1.574
2022	29.653	13.237	20.880	1.577

Source: State Statistical Office of the Republic of North Macedonia (<https://www.stat.gov.mk/>)

Data from the table clearly indicate the fact that the number of individual tobacco producers (concluded contracts) and the cultivated areas have been decreasing over the years. However, produced quantities remain relatively stable as a result of using healthy seed material, modern mechanization, proper managerial approach in organization and implementation of the production process, and the application of Good Agricultural Practices (GAP). This contributes to a constant increase in the achieved yield (kg/ha), which serves as a special incentive for tobacco producers. In fact, with a proper policy of subsidizing and stimulating, along with maintaining relatively acceptable prices at purchase, the production of tobacco is expected to

continue at a stable level with good prospects for future growth. This is particularly important because previous analyzes indicate that there is no alternative crop that would absorb as much labor and have such an economic impact as tobacco, both from the perspective of tobacco producers and the state (Miceski and Pashovska, 2008).

For a clearer understanding and analysis of the state of tobacco production in Macedonia during the period 2010-2022, following graphical representations illustrate the trends of all individual parameters included in Table 2. Figure 3 depicts the mentioned trend of decreasing numbers of individual tobacco producers, i.e., concluded contracts.

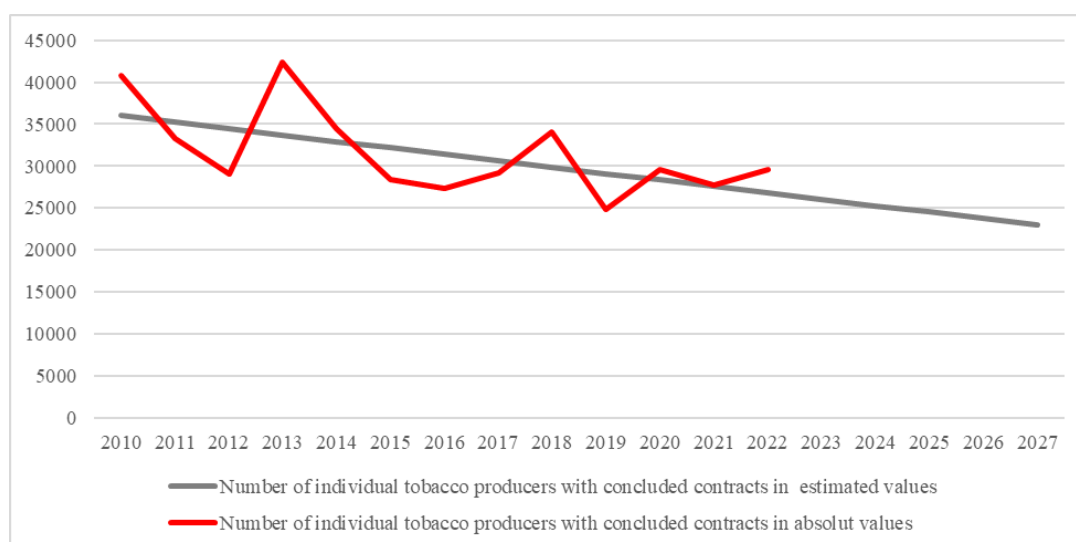


Figure 3. Number of individual tobacco producers with concluded contracts in absolute and estimated values

It is evident that the number of tobacco production entities fluctuates from year to year with a declining trend. Specifically, the number has decreased from 40,743 entities in 2010 to 29,653 entities in 2022. The same trend is observed in tobacco

planted areas, which have decreased from 20,300 hectares in 2010 to 13,237 hectares in 2022, with a continued declining trend, as indicated by the estimated values. This situation is depicted in Figure 4.

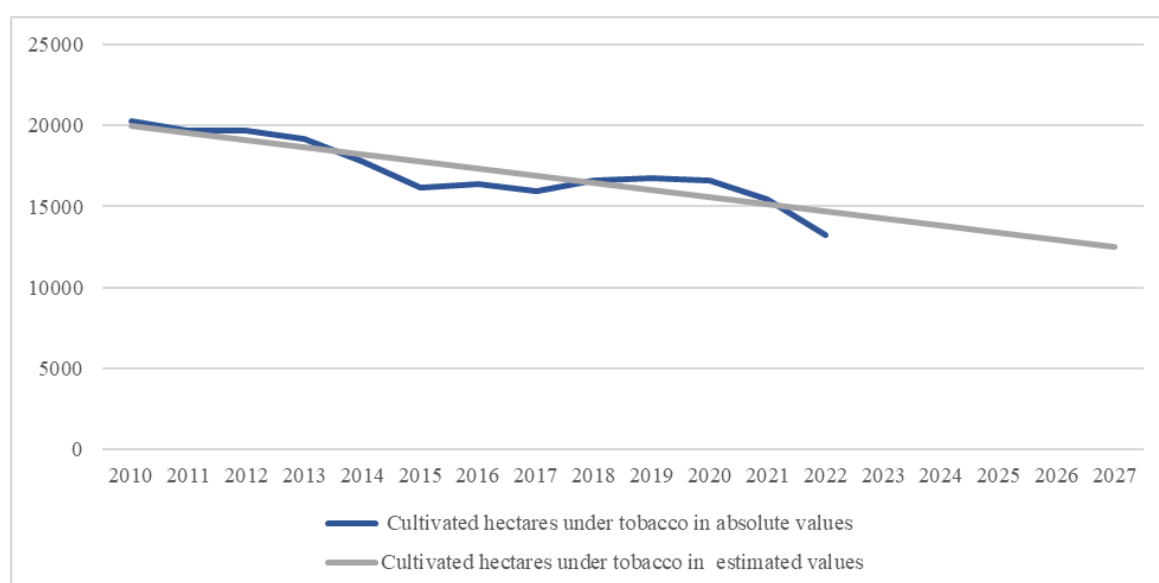


Figure 4. Cultivated hectares under tobacco in absolute and estimated values

Declining trend with a certain decrease is also present in tobacco production. However, it is maintained at a relatively stable level as a result of experience and tradition in the work process, the use of

modern mechanization, proper management and of course, the involvement of family members in a successful family business. This situation is depicted in Figure 5.

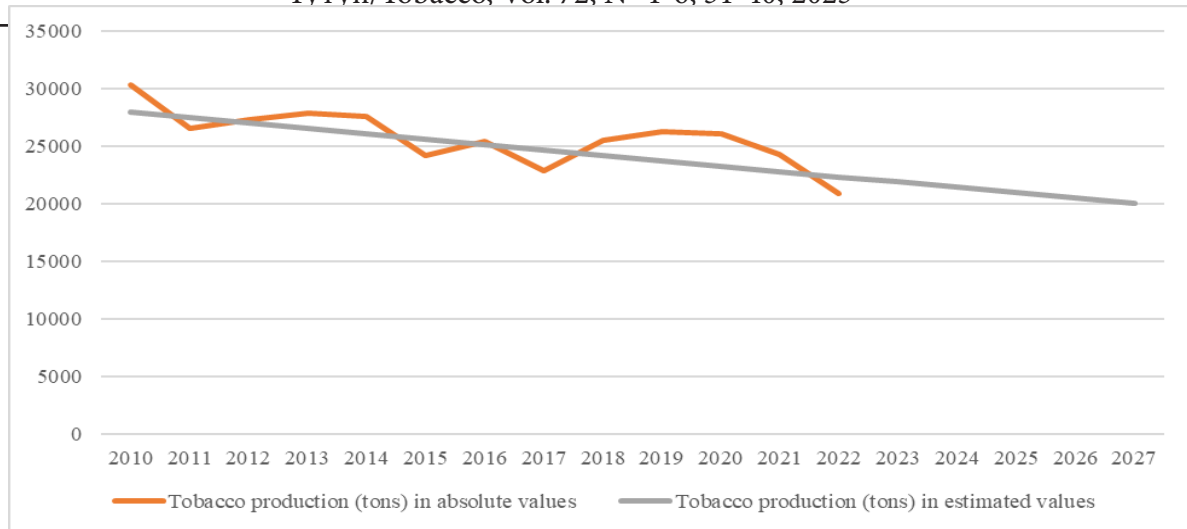


Figure 5. Tobacco production (tons) in absolute and estimated values

In contrast to the previously analyzed parameters from Table 1, which show declining trends, there is a trend of gradual increase in yield (kg/ha). This is

particularly significant for tobacco producers to consider in planning their future in this industry. This situation is depicted in Figure 6.

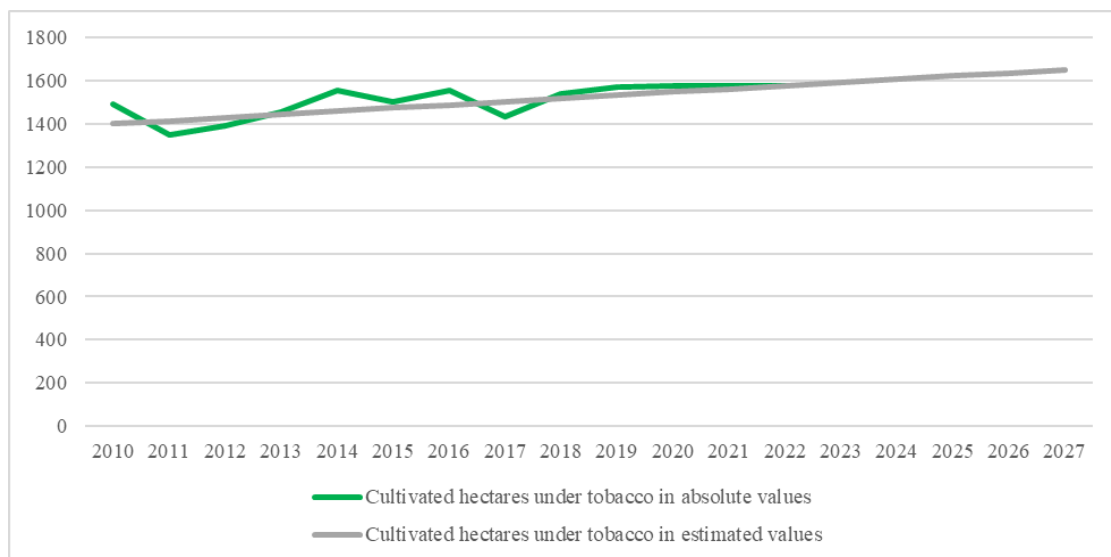


Figure 6. Yield of tobacco (kg/ha) in absolute and estimated values

In such circumstances, the question arises: How profitable is the Macedonian tobacco production, which brings in a significant foreign exchange inflow of around 120 million euros? In the period from 2010 to 2022, the annual production is about 25,000 tons of tobacco, stabilized at 22,000 to 23,000 tons annually, achieving continuity in tobacco production unlike neighboring countries where a decrease is observed and this trend should be utilized in the coming years. In fact, the reduced

production in neighboring countries such as Greece, Bulgaria and Turkey should be leveraged by our country to protect the production of Oriental tobacco, as we have competitive and renowned varieties on the world market, with valued tobacco raw material. The "Prilep" type, alongside the "Izmir" type, is second in the world in terms of placement as a type of tobacco (Pashovska and Miceski, 2016). Macedonian Oriental tobacco is sought after on the world market, especially when

global production stagnates, particularly for Oriental types, which are mostly produced in our country. Thus, in recent years, there has been a stagnation in the production of raw tobacco in the world, at around six million tons, across all types. The "Virginia" and "Burley" types, among others, have the largest share in global production, along with Oriental types. Of all types, the Oriental type has experienced the greatest decline, dropping from the former 300,000 tons to the current 120,000 tons in global production. For several years, Macedonian production remained relatively stable, with the exception of 2023. This does not currently pose a threat as there is a more significant decrease in other countries, such as Bulgaria, Greece and Turkey. This means that there is still a place for our tobacco in the global market. Macedonian tobacco producers are primarily concerned about the purchasing price, which they consider low when viewed from the perspective of expenses such as fuel, artificial fertilizers, protective measures and labor, all of which have become increasingly expensive. From this standpoint, there is a possibility of stagnation in Macedonian tobacco production, which could be addressed through higher purchase prices that follow inflation in this period. One of the main opportunities that needs intensive focus, especially in the upcoming period, is the utilization of uncultivated agricultural land owned by the state. Another opportunity that should be addressed is the reduction of fragmentation among existing tobacco production entities, aiming to improve their efficiency and effectiveness. Education of tobacco producers, encouraging both tobacco production and elevating it to the level of a family

business, is a third opportunity that should be explored, especially through participation in seminars, training, debates and greater involvement of expert public opinion, bringing it closer to on-the-ground issues. Introduction of production quotas for tobacco in the European Union member states, as well as the decrease in production in these countries due to the lack of interest among producers in this type of business, presents new opportunities for expansion of production in Macedonia, particularly during a period of stagnation in the production of oriental tobacco types, not only in our immediate neighborhood but globally as well. As a future prospect for current and potential tobacco producers, the development of ideas and plans for additional production is crucial, aiming for better utilization of production factors. To improve and increase tobacco production, it is essential to provide affordable credit lines, facilitating easy access to fresh capital for both modernizing outdated equipment and expanding production capacities, i.e., cultivating larger areas. The long-term future of tobacco production can only be ensured through quality production policies, proper investment, employment encouragement, motivation, capital increase, proper pricing policies, stimulating subsidy policies, education, advice from experts and proper market policies. In this context, it is inevitable to emphasize that the traditional method of tobacco production, favorable natural climate conditions, state interests, socio-economic aspects and export policies within global frameworks are primary factors for the continuation of the century-old tradition of tobacco production in Macedonia.

CONCLUSIONS

Viewed in perspective, tobacco production exhibits a relatively stable trend with certain fluctuations at the global level. Our country must track and adapt to these

trends. The future of tobacco production will heavily depend on a sound agricultural and export policy, as well as a well-implemented state subsidy policy. It

is crucial to encourage and direct the young population towards tobacco production, presenting not only an opportunity for existence but also space for development, expansion and, of course, profit. In this regard, motivation and leadership play an essential role among various related activities to foster an entrepreneurial spirit among the youth, who represent the future of our country. If all measures continuously offered by European commissions for the protection and improvement of agriculture, including IPARD funds, are utilized, the developmental course of tobacco production in our country will significantly progress. From the perspective of quantities of Macedonian oriental tobacco types concerning the total production of oriental tobacco globally, we observe that our role in this domain is relatively small, but our priority should be quality. We must not allow any compromises in either the quality or the typical and varietal

purity of our tobacco types. The tobacco production sector in Macedonia is characterized by enviable quality and global renown. Therefore, efforts are needed to enhance production and economic policies through the implementation of a development strategy, where pricing policy should serve as a necessary stimulus for tobacco production. In this context, maintaining the status of a traditional producer of oriental tobacco, with consistently stable production compared to surrounding countries – producers of oriental tobacco types (Bulgaria, Turkey, and Greece), is essential. Macedonia possesses outstanding opportunities for producing high-quality small-leaf aromatic tobacco types. Oriental tobacco types are an industrial culture with a high degree of globalization and represent a unique alternative unto themselves.

REFERENCES

1. Arsov Z., Kabranova R. (2020). A new approach in the production of oriental tobacco in North Macedonia, *Global studies of tobacco, tobacco products, and innovative nicotine-containing products*, 198-210.
2. Korubin Aleksoska A., Mitreski M., Aleksoski J., Ahmad M.A., Dojchinov S., Bebic Z. 2018. Study of quantitative characteristics in oriental tobacco genotypes, *Journal of Agriculture and Plant Sciences*, 97-105.
3. Mac Baren Tobacco Company. (n.d.). Oriental tobacco. <https://mac-baren.com/meet-the-master-blender/oriental-tobacco>.
4. Miceski T., Pashovska S. 2008. Development of family business in tobacco production, *Acetoni-Prilep*.
5. Miceski T., Pashovska S. 2013. Reengineering as a method and approach for adapting to organizational changes, *Yearbook - Faculty of Economics: Vol. 5*, 215-226.
6. Pashovska S., Miceski T. 2016. The Global Environment as a challenge to Corporate Competitiveness, *Journal of Economics: Vol. 1*, 69-77.
7. Pashovska S. 2024. Current conditions in tobacco production in Macedonia – sustainability analysis, development possibilities and future perspectives, *Journal of Agriculture and Sustainable Rural Development*, 2(3-4), 116-127.
8. Pashovska S., Poposki Lj. 2024. Movements and trends in the production of oriental tobacco in Macedonia, *Journal of papers, Society for Science and Art – Prilep*, 45-54.
9. Philip Morris International. (n.d.). Tobacco database. <https://www.pmi.com/tobacco-economics/tobacco-database>.
10. State Statistical Office of the Republic of North Macedonia. (n.d.). <https://www.stat.gov.mk/>.