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s međunarodnog znanstveno-stručnog skupa

Duhan u Bosni i Hercegovini – jučer, danas i sutra

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TOBACCO PRODUCTION IN MACEDONIA

ROMINA KABRANOVA¹, ZLATKO ARSOV¹

Abstract

Tobacco is extremely important crop because of the great influence on the global political, economic, social and religious life of the world population. The first data on tobacco growing for the Balkans and Macedonia date back to the ancient time, from the beginning of the 17th century. The aim of this paper is to present the current situation regarding the structure of tobacco production in Macedonia, as well as area, quantity and yield (kg / ha). For material in this paper, which refers to the quantity produced oriental tobacco by species, data from the State Statistical Office of the Republic of Macedonia and the Economic Chamber of Macedonia were used. A large number of factors influence the growth and expansion of this crop (soil, climatic conditions, agro-technical measures during vegetation, etc.). Oriental tobacco is distinguished by numerous small leaves with thin ribs, material tissue of the leaves, which gives an extremely intense aroma of taste during smoking. Traditionally, it is a tobacco with high quality and estimated with a high usable value. The quantity of oriental tobacco produced in Macedonia has been stable in recent years. An over 22,000 tons of raw oriental tobacco are produced and about 20,000 tons processed, mainly exported to the international market. The amount of tobacco produced in Macedonia is symbolic compared to some countries, but it is extremely important for the Macedonian economy.

Keywords: oriental tobacco, area, yield, regions

Introduction

Tobacco is produced in almost 120 countries in the world. Macedonia produces tobacco from the period of the Ottoman Empire, and as a result of the good appraisal that an exceptionally favorable territory (natural conditions) and gives exceptionally high quality. Very cheap and numerous labor force are

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always making this production to be competitive and with the low prices for a refined dry tobacco. Because of the long tradition of people of Macedonia, today it is the greatest part of the world with small but exceptional quality of well-known all over the world oriental tobacco leaf. While in the world, the trend of production goes upward with the increase in the yield of unit area, in Macedonia there are frequent oscillations, which in some years are the result of climate change, but often also of the non-existent purchase prices for 1 kg of tobacco. The production varies both by number of producers, and by the production quantity of tobacco by region. The regional regions in the country are fully oriented towards the production of other agricultural products that provide a better turnover of assets in one current year. Since the disintegration of former Yugoslavia, to this day, the only common „business branch“ of the former fraternal republics was the smuggling of so-called excise goods, tobacco, alcohol and other products, of which every serious country in the world collects revenues (Hadžić Mersiha, 2014). Illegal trade in cut tobacco and cigarettes in all Balkan countries causes huge losses.

Material and method

The complexity of this topic has determined the need to use official data of the Bureau of Statistics of RM, Economic Chamber of Macedonia-Association of producers of tobacco and tobacco products and the use of other literature in the field of tobacco production (Surface: MAFWE) and tobacco processing in Macedonia and the region. In the processing of data, the analysis of the production was carried out for one long period. Method of calculating the average for ten consecutive years (2006-2016) was used.

Discussion

The tobacco industry is one of the most stable industries from which much benefit there Macedonian economy. The tobacco industry accounts for 4% of total industrial output and 4.1% of employment in the total industry. Tobacco use has emerged as a reliable source of income. Therefore, economic point of view, the economy of the Republic of Macedonia, the tobacco is extremely important. A large proportion of urban population (not agricultural) is additionally involved in tobacco production in order to increase their family budget

and improve their livelihoods. From the presented assortment, mainly fine leafy aromatic types of tobacco (*Prilep, Jaka, Basmak*). Yield and quality of oriental tobacco types and varieties are closely dependent on soil and climate conditions, and their combined action in the area of cultivation. The requirements set by this type of tobacco are much warmth, little rain and not very fertile soils (Gjeorgjievski 1990). For these reasons, long ago in this region legally regulate the types and varieties of tobacco production by regions. Filipovski (2004) states that since 1931 the Office of the State monopoly made a decision (no. 803 from 10.01.1931 year), which despite maximum number tobacco ropes to be propagating in certain areas, and also was fortified and variety composition in areas at state level. Last constructive decision or judgment for determining the production regions and areas types of raw tobacco, in relation to the previous Law on Tobacco in 1996 was published in Official Gazette no. 24/1997 year. With this clarification 5 production regions were established (North, West, Southwest, Central-East and South-East). At that time, the division by region is not correlated with the real statistical regions of the country. The existing law on tobacco and tobacco products in 2006, does not provide for classification of tobacco types, ie, purchasing companies according to their needs make contracts with producers planned. Macedonia has municipalities where the main occupation and existence of the inhabitants is the production of tobacco.

Republic of Macedonia for the purpose of harmonization with the Regulation 1059/2003 of the European Parliament in 2007 adopted the Nomenclature of Territorial Units for Statistics - NTES (Official Gazette of the Republic of Macedonia No. 158/2007). This provides a unique and unified division of territorial units at regional and local level. The nomenclature of the territorial units consists of 5 levels. The first and second levels are for the whole territory. The third level consists of 8 non-administrative units, the fourth level consists of 84 municipalities and the fifth level of 1776 settlements. The eight non-administrative regions according to this classification are: Vardar region, East region, Southwest region, Southeast region, Pelagonia region, Polog region, Northeast region and Skopje region.

Table 1. Tobacco production by statistical regions for the period 2011-2015, according to the planted areas in ha

Regions	2011		2012		2013		2014		2015		Average	
	ha	%	ha	%	ha	%	ha	%	ha	%	ha	%
Vardar	2139	8.06	1182.72	8.10	1316.14	6.65	1142.65	8.37	923.32	6.54	1340.8	7.56
Eastern	607	2.29	361.08	2.47	324.9	1.64	307.7	2.25	196.23	1.39	359.4	2.03
South – Western	67	0.25	26.26	0.18	48.82	0.25	52.7	0.39	42.85	0.30	47.5	0.27
South - Eastern	11581	43.64	4305.02	29.47	6333.64	31.98	3539.98	25.94	3259.77	23.07	5803.9	32.71
Pelagonia	11469	43.22	8460.13	57.91	11557.09	58.35	8418.72	61.69	9484.55	67.14	9877.9	55.67
Polog	2	0.01	0	0.00	0	0.00	0	0.00	0	0.00	0.4	0.00
North - Eastern	75	0.28	4.15	0.03	5	0.03	4.1	0.03	1.7	0.01	18.0	0.10
Skopje	597	2.25	269.51	1.84	220.76	1.11	180.33	1.32	218.49	1.55	297.2	1.67
Total	26537	100.0	14608.9	100.0	19806.4	100.0	13646.2	100.0	14126.9	100.0	17745.1	100.0

Source: MAFWE – Sector Field Crops – Annual reports (2006-2017).

From the presented data in Table 1, it can be noted that during the analyzed period (2011-2015), traditionally the largest tobacco areas are in the Pelagonia region, an average of 55.67% for the period, followed by the Southeast with 32.71% and Third place is the Vardar region with 7.56%. Other regions are not important for tobacco production. This distribution remains unchanged all the time during the analyzed period and even ten years ago. In other statistical regions, other agricultural crops and activities are dominant. So the most tobacco is grown in Pelagonia (Prilep, Krivogastani, Krusevo and Bitola) and the Southeast region (Radovis and Strumica). The region of Skopje for the analyzed period has little participation in the planted tobacco areas with a share of 1.67%. Skopje as a major consumer center for food products is more characteristic in the production of garden crops, and the Polog region after the livestock production.

Average yield of raw tobacco per type of tobacco by statistical regions is presented in Table 2.

Table 2. Average yield per type of tobacco and region for the 2013 harvest

Variety	Regions*								Agronomic parameters	
	1	2	3	4	5	6	7	8	Number of plants per hectare	Average yield (t/ha)
	Vardar	Eastern	South – Western	South - Eastern	Pelagonia	Polog	North - Eastern	Skopje		
<i>prilep</i>	1.8	1.8	1.8	1.8	1.7	/	1.8	1.9	**150 000	1.8
<i>yaka</i>	1.5	1.6	1.5	1.6	1.6	/	0.0	1.5	**150 000	1.5
<i>basmak</i>	1.4	1.4	1.4	1.3	1.4	/	1.5	1.4	** 150 000	1.4

*Nomenclature of Territorial Units for Statistics of the Republic of Macedonia.

The data in Table 2 show that mainly where tobacco is grown, planting is machine-made (for this reason, the 150 000 plants per unit area is the same for all regions). The average yield is the highest for varieties of the type Prilep (1.8 t / ha), and the lowest for the type of basmak (1.4 t / ha), which is certainly due to the biological potential of the varieties of the appropriate types, ie this proves that in certain regions it is necessary to cultivate those types of tobacco that most suit the soil type and the area, for obtaining higher yield per straw, and a raw material of appropriate quality.

For the 2014 harvest, the region's share is as follows: Pelagonia region participate with 11681.4 tons, southeast region with 9.499.0 tons, Vardar region with 2079.4 tons, the Eastern region with 837.1 tons and Skopje region with 382.5 tons (Souce: MAFWE – Sector Field Crops – Annual report 2015). Other regions have a very low production of tobacco. One part of the population is engaged through seasonal jobs in industries, and trade in tobacco and tobacco products.

The number of producers (number of tobacco production contracts), area and yield of dried (unprocessed) tobacco is presented in Table 3.

Table 3. Number of contracts, Area, Yield

Crop	Number of contracts	Area, ha	Yield, kg/ha
2007	29.646	17.132	1.287
2008	29.827	17.064	1.001
2009	37.195	17.088	1.412
2010	40.743	18.846	1.400
2011	33.234	15.677	1.341
2012	29.090	14.609	1.916
2013	42.367	19.806	1.577
2014	34.445	14.030	1.772
2015	28.454	14.127	1.341
2016	27.380	13.980	1.799
Average	32.874	16.345	1.480

Source: MAFWE – Sector Field Crops – Annual reports (2006-2017).

The largest tobacco area in the last ten years was 19,806 ha in 2013 (Table 3), and in the same year it had the highest purchase of 30,997 tons of tobacco (Table 4). This purchased quantity of raw tobacco is repeated after twelve years (1999 harvest) when a record 32398 tons of tobacco were purchased. The number of concluded contracts on average for the analyzed period is 23874, and the average yield is 1480 kg / ha. The areas under Oriental tobacco in the Republic of Macedonia are only in a small part are covered with irrigation systems. Therefore, the yield over the years varies from 1001 kg / ha to 1799 kg / ha mainly as a result of climatic conditions (low or optimal precipitation in the vegetation period).

For the 2017 harvest, the number of concluded contracts is the same as for the 2016 harvest. About 19,000 tons of tobacco is expected to be completely oriental. This decrease in quantities is the result of an extremely dry summer in 2017, but high quality is expected. The production of quality tobacco is the ultimate goal both for producers and for purchasers. The poor quality of tobacco is not good for both sides.

Table 4. Purchased price and subsidies (1999-2016)

Crop	Purchased quantity, t	Average price, eur/kg	Subsidies, eur/kg	Subsidies Total, euro
1999	32.398	1,90		
2000	28.212	1,67		
2001	20.097	1,87	0,24	4.901.707,32
2002	21.401	2,00		
2003	23.000	1,27		
2004	19.830	2,23		
2005	23.206	2,04	0,24	5.660.000,00
2006	19.681	1,92	0,24	4.800.243,90
2007	16.290	2,29	0,49	7.946.341,46
2008	16.126	2,72	0,73	11.799.512,20
2009	23.222	3,12	0,98	22.655.291,71
2010	26.393	2,22	0,98	25.749.268,29
2011	21.024	2,68	0,98	20.511.219,51
2012	27.993	2,93	0,98	27.310.243,90
2013	30.997	2,49	0,98	30.240.975,61
2014	24.857	1,90	0,98	23.619.837,40
2015	18.910	3,01	0,98	18.448.780,49
2016	25.154	3,20	0,98	24.540.487,80
Average	23.990	2,30	/	/

The average production of oriental tobacco is for analyzed period is 23990 tons per year. There are large differences in the purchased quantities, from 16126 tonnes for the 2008 harvest to the maximum for the analyzed period of 32398 tonnes for the 1999 harvest. This is mainly due to the demand for tobacco and the next occurrence. After several years, a subsequent increase in the purchase price follows its decline. After that price drop, for example, 2013 and 2014, the next 2015 harvest is with a declining interest in tobacco production, with less planted areas, but the price is beginning to grow again. With the average price of around 1,90 eur/kg (crop 2014), for the purchase of the entire last year's production of 24857 tons, it took 2.9 billion denars or 213,6 million euros for purchasing. The purchase price of tobacco was approximately the same, 1,92 eur/kg, in 2006. The highest purchasing price was for the 2016 crop, 3,20 eur/kg. Subsidies for producers are paid by the Paying Agency of the Republic of Macedonia directly to the producer's account. In the last 10 years, the value is 0,98 eur (60 den) per kilogram of purchased tobacco, for all purchased classes.

The dependence between the price and the quantities purchased is shown in Figure 1.

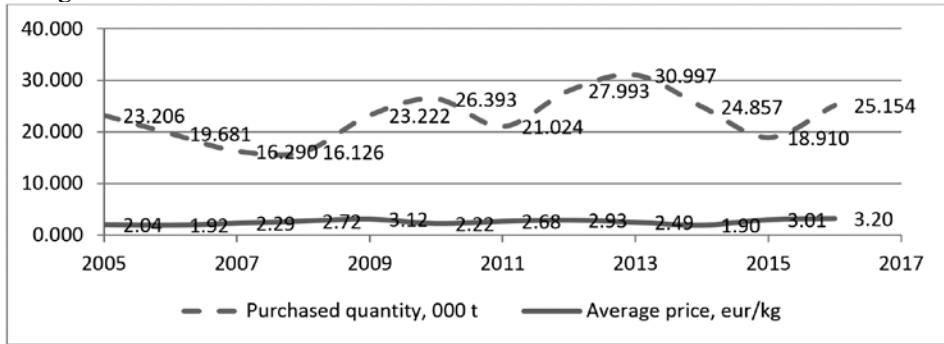


Chart 1.- Dependence between the price and the purchased quantities

Domestic consumption of Oriental tobacco is very small, it is estimated that it is no greater than 1000 tons. So much tobacco is used by both domestic cigarette factories. Accordingly, we can freely say that 98% of produced tobacco is exported. Tobacco exports are presented in Table 5.

Table 5.-Tobacco exports for the period 2006-2015, tons

Year	Quantity, tons	Value, USD	Average export price USD/ kg
2006	29.408	92.128.000,00	3,20
2007	24.015	89.012.000,00	4,00
2008	19.739	97.104.150,00	5,03
2009	16.112	87.529.610,00	5,63
2010	16.839	88.517.520,00	5,46
2011	21.849	118.222.500,00	5,50
2012	22.954	119.048.600,00	5,30
2013	25.444	155.208.400,00	6,10
2014	22.558	126.324.800,00	5,60
2015	22.493	94.470.600,00	4,20
Average	21.559	83.176.382,11	4,24

Source: Economic Chamber of Macedonia-Association of producers of tobacco and tobacco products

From the data presented in Table 5, it can be noted that the average tobacco export for the analyzed period is 21559 tons and is value 83.176.382,11 USD, at an average export price of 4,24 USD/ kg. The smallest amount of exported tobacco is in 2009 year, 16112 tons, and the largest quantity in 2006 is 29408

tons. The highest export value was recorded in 2013, when the highest export price of 6,10 USD / kg was achieved.

Conclusion

Tobacco is one of the most intensive crops. Tobacco production as the first link in the tobacco business chain, and at the same time traditional agricultural activity, which involves engagement of up to 15% of the entire population in Macedonia, requires the need for its modern development in accordance with world and scientific achievements. On the other hand, in the developed modern tobacco production, implementation of the modern scientific and expert achievements in the field is necessary. In particular, the quality, yield, management, teamwork, improvement in operations, use of scientific and expert consulting services, motivation and control are expressed. The use of scientific and expert consulting services is a basic factor for the development of a modern family business of tobacco growers. Tobacco production depends primarily on price policy (state concern / protection policy), which should ensure market stability and motivation among individual producers. The strategy should be developed in the direction of stable production policy in terms of investments / capital, investments, employment opportunities, price policy, use of professional and scientific services, etc. The tradition and centuries-old specialization in the production of this crop is the basis for further efficient and high-quality tobacco production. Special attention should be paid to the protection and improvement of the variety structure on the territory of the Republic of Macedonia, the continuous control of the variety representation, following the needs of foreign buyers in terms of the quality and quantity of the raw material.

References

- Arsov Z., Kabranova R., Dimov Z., Spirkovska M. (2012). Analysis of Production and Purchase of Oriental Tobacco in Balkan; International Symposium for Agriculture and Food - Skopje, Macedonia, 12-14 December, 2012. UDC: 338.439.4:633.71; UDC: 339.187.6:633.71; 497.
- Filipovski Gj. (2004).

- Gjeorgjievski K. (1990). Tobacco and tobacco products - with emphasis on ecology of tobacco. Business publishing - Skopje, 556.
- Hadžić Mersiha: Novija istorija šverca duvana na našim prostorima (25. avgust 2014). Гето Србија <https://getosrbija.wordpress.com/author/getosrbija>
- MAFWE – Sector Field Crops – Annual reports (2006-2016)
- Mukaetov D. (2013). Assessing Agriculture Vulnerabilities in Republic of Macedonia for the design of Adaption Measures to Climate Change with Bio-MA. Skopje, May 2013; 83.
- Economic Chamber of Republic Macedonia (2016). Expectations of tobacco industry after completed purchase of tobacco - (16.3.2016.).
- State Statistical Office of Republic of Macedonia (2008). Nomenclature of Territorial Units for Statistics of the Republic of Macedonia, Skopje. Classifications, methodologies, nomenclatures and standards; ISSN 1409-7044; ISBN 978-9989-197-32-1 COBISS.MK-ID; 53.
- State Statistical Office of Republic of Macedonia (2016). Regions of the Republic of Macedonia; Regional Year Book, 2016. ISSN: 1857-6141; 131.

PROIZVODNJA DUVANA U MAKEDONIJI

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Sažetak

Duvan je kultura koja je izuzetno značajna zbog velikog uticaja na globalni, politički, ekonomski, socijalni i verski život svetske populacije. Prvi podaci o gajenju duvana za Balkan i Makedoniju datiraju nazad u davna vremena, još od početka XVII veka. Cilj ovog rada je da predstavi trenutnu situaciju o strukturi proizvodnje duvana u Makedoniji kako i površine, količinu i prinos (kg/ha). Kao materijal u ovom radu, koji se odnosi na količinu proizvedenih orijentalnih duvana po tipovima; korišćeni su podatci iz Državnog zavoda za statistiku Republike Makedonije, kako i sa strane Privredne komore Makedonije.

Veliki broj faktora utiču na rast i razvoj ove kulture, istovremeno i na biološkim, morfološkim i tehnološkim osobinama duvana (tlo, klimatske uvjeti, agrotehničke mere u toku vegetacije itd.). Orijentalni duvan odlikuje se brojnim ali malim listovima, nežne nervature, a visoka mirišljivost lista daje izuzetnu i intenzivnu aromu ukusa tokom pušenja. Tradicionalno, to je duvan sa visokim kvalitetom i visoke upotrebne vrednosti. Količina proizvedenog duvana u Makedoniji u zadnjim je godinama visoka i stabilna. Proizvodi se nešto više od 22.000 tona sirovog orijentalnog duvana i oko 20.000 obrađenog. Obradeni duvan, oko 19.000 tona, izvozi se na međunarodnom tržištu. Količina proizvedenog duvana u Makedoniji je simbolična u poređenju sa nekim zemljama, ali je izuzetno važna za makedonsku ekonomiju.

Ključne reči: orijentalni duvan, površine, prinos, regioni