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TOBACCO BASED ON PURCHASE CLASSES

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Abstract: The analysis of purchased tobacco quality and its correlation with quantity should give an answer whether the government subsidies per kg produced tobacco need to be transformed into purchase quality groups of raw tobacco. The indicators of quality of the purchase classes, as well as the current situation and tendencies will be presented through tobacco purchase in the Republic of Macedonia, with particular reference to Tobacco Company (Tutunski Kombinat) — Prilep — one of the most authentic representatives in the production of raw tobacco, accounting for over 10% of the total production in R. Macedonia. This research is done in order to find whether the current subsidy per kilogram of produced tobacco should be transformed into a subsidy for purchased tobacco classes. The information obtained should reveal whether the current stimulation per kg is appropriate and whether it takes into account the quality of tobacco bought at given purchase price, according to quality groups contractually determined by tobacco purchasers and producers and their associations as factors that determine the internal parity and internal quality of tobacco.

Data on tobacco output over the past period and the quality of purchased tobacco by classes will be elaborated in detail in this scientific paper through analytical method, using comparative results of a multi-year investigation.

Keywords: quality, yield, raw tobacco, purchase classes, subsidies

1. Introduction

The analysis of raw tobacco yield by purchase classes through several decades can lead to the requested information and confirmation whether the current subsidy per kilogram of produced tobacco should be transformed into a subsidy for purchased tobacco classes. The information obtained should reveal whether the current stimulation per kg is appropriate and whether it takes into account the quality of tobacco bought at given purchase price, according to quality groups contractually determined by tobacco purchasers and producers and their associations as factors that determine the internal parity and internal quality of tobacco. In the present science and practice there is a difference in stimulation of tobacco production in terms of quality and quantity. Manufacturers make efforts to obtain tobacco with better quality characteristics and byers stimulate it through agreed purchase prices per classes, while the stimulation of tobacco production per kilogram leads to increased production and this stimulation is provided by the government which has a special economic and social interest. The purpose of the stimulation of higher quantity production is to compensate for a certain cost-effective and profitable structure, which can not be provided by purchase price for a variety of objective and subjective reasons (natural reasons, market, etc.).

2. Analysis of the quality of purchased tobacco by classes

he quality of purchased tobacco in various periods (years) is presented in the following table:

Table 1. The quality of purchased tobacco in the Republic of Macedonia by quality groups, in%

Purchase classes	Tobacco purchase in 1990	Output according to expertise	1991	1992	1993	1994	1995	1996	Average% 1991- 1996
I	8	2,2	8,3	10,8	6,3	1,6	2,6	5,8	5,9
II	11,6	22,6	48,9	45,4	38,6	18,7	15,6	52,1	36,5
III	47,6	40,7	35	33,6	36	41,8	39,5	34,5	36,7
IIIA			6,5	7,7	12,9	25,7	27,4	6,6	14,5
IV	24,7	23,8	1,2	2,3	4,3	10,2	12,8	1	5,3
V	8,1	10,7	0,1	0,2	1,9	1	2,1	0	0,9
Total	100	100	100	100	100	100	100	100	100

Source: Yugotutun-Skopje, Scientific Tobacco Institute-Prilep.

According to the above data, the following average output was obtained: I class - 5.9%; II

class -36.5%; III class - 36.7% and III A class - 14.5%; IV class - 5.3% and V class - 0,9%. The average value for the I, II, III and III A class is 93,5%. The average value for the year 1990 from the I, II and III class is 67,2% and the outcome according to the performed expertise is 65.5%.

The outcome recorded in 2007 will be presented on a segment of 10.077.976 kg

Table 2. Purchased quantities and the outcome of tobacco classes in 2007, in kg and %

Purchase classes	Purchased kg	%	I,II and III
			class,
			in %
I	534.934	5,3	
II	5.998.100	59,5	
III	3.527.628	35,0	
IV	18.314	0,2	
Total	10.077.976	100	99,.8

Source: Ministry of Agriculture, Forestry and Water Economy of R. Macedonia, 2008

The outcome of purchased classes (I-III) from the crop of 2007 was very close to the average achieved in 1991-1996.

The outcome of purchased tobacco in the last five years is presented in the following table.

Table 3: Purchased quantities of tobacco in tons and the outcome of purchase classes in %

	tons and the officerne of purchase crasses in 70					
Purchase classes	Tons 2013	%	Tons 2014	%	Tons 2015	%
I	318,00	10,00	103,00	4,30	238,00	10,00
II	1,82	57,40	682,00	28,40	1547,00	65,00
III	1800,00	25,20	1056,00	44,00	547,00	23,00
IV	235,00	7,40	554,00	23,30	48,00	2,00
Total	3176,00	100,00	2400,00	100,00	2380,00	100,00

Tons 2016	%	Tons 2017	%	Average
446,00	15,70	753,00	30,70	14,20
2 067	72,70	1588,00	64,70	57,60
304,00	10,70	110,00	4,40	21,50
26,00	0,90	4,00	0,20	6,70
2843,00	100,00	2455,00	100,00	100,00

Source: Tobacco Company (Tutunski Kombinat) – Prilep

The table shows that the average purchase of the I-III class tobacco is 93.3% and of the IV class it is 6.7%. Based on the previously presented outcomes of tobacco purchase by classes (I - III class), the average values by years are the following:

- 1990 67.2%
- 1991-1996 93.5%
- 2007 99.8%
- 2013-2017 93.3%

Herefrom it can be concluded that tobacco purchase in the above-mentioned periods is oscillating as a result of the influence of environmental factors on tobacco quality.

3. Transformation of fixed subsidies for tobacco into subsidization by purchase classes

Lately, there has been an increasing tendency to transform the existing subsidy of 60 denars per kg into subsidization by classes, i.e. 60 denars for the III class, 70 denars for the II class and 80 denars for the I class tobacco. For this purpose, calculations will be made on the effects of fixed form of subsidization versus differentiated subsidization by purchase classes. transformation itself brings essential differences between these two forms. Namely, the fixed subsidization aims to increase the quantity of tobacco production and it also affects the stabilization and intensification of the production. The differentiated subsidization by purchase classes is actually stimulating the quality of tobacco, which can be observed in the structure of purchased tobacco classes by years of production and in average (Table 3).

The same method will be used to present differences between the two principles: subsidy per kg and differentiated subsidization by purchase classes.

Table 4: Assessment of subsidization for an average tobacco production in 1991-1996

Year	Kg
1991	25.000.000
1992	27.000.000
1993	24.000.000
1994	19.000.000
1995	16.000.000
1996	15.000.000
Total	126.000.000
Average	21.000.000

Source: Yugotutun – Skopje

The average tobacco yield in 1991-1996, which amounts to 21,000,000 kg, will be transformed into purchase by tobacco classes to see the participation of classes in the total production.

Table 5: Transformation of the average amount of purchased tobacco

(1991-1996) by purchase classes

	(of principle even
Purchase	Production by	Participation
classes	classes	of classes in
		%
I	1.260.000	6,0
II	8.190.000	39,0
III	11.550.000	55,0
Total	21.000.000	100,0

Source: Yugotutun – Skopje

The purchased average yield shown in the above table, allocated by purchase classes and estimated according to the subsidy predicted for this purpose, are presented in the following table:

Table 6: Assessment of subsidies for the average purchase of tobacco (1991-1996) by classes

Purchase	Production	Subsidy per	Total
classes	by classes	classes,	stimulation
	-	denars/kg	
I	1.260.000	80	100.800.000
II	8.190.000	70	593.000.000
III	11.550.000	60	690.000.000
Average	21.000.000		1.384.100.000

Data presented in Tables 5 and 6 reveal the following:

- the total subsidy, calculated at 60 denars/kg purchased tobacco, for the average purchased amount of 21.000.000 kg is 1.260.000.000 denars.
- the total subsidization per purchase classes is 1.384.100.000 denars.

The difference obtained in subsidization calculated by purchase classes and by fixed subsidies was 124.100.000 denars (1.384.100.000 - 1.260.000.000), i.e. it is 10.9% higher.

Thus, the subsidy per classes was increased to 66 denars per kg, compared to the 60 denars for the fixed subsidization (1.384.100.000 : 21.000.000kg = 66 denars).

The situation with fixed subsidies and differential subsidization by purchase classes in 2007, calculated on a segment of 10.077.976 kg purchased tobacco in R. Macedonia, is presented in Table 7:

Table 7: Assessment of subsidy for tobacco purchase in 2007 by classes

Purchase	Production /kg	Participati on of classes, in	Subsidy by classes	Total value
I	534.934	5,3	80	42.794.720
II	5.998.100	59,5	70	419.867.000
III	3.527.628	35,0	60	211.657.680
IV	18.314	0,2		
Total	10.078.976	100,0		674.319.400

Source: Ministry of Agriculture, Forestry and Water Economy of R. Macedonia

- -The subsidy, calculated at 60 denars/kg, for the average amount of 10,078,976 kg purchased tobacco is 604,738,560 denars.
- -The subsidy according to purchase classes is 674,319,400 denars.

Difference between the two forms of purchase is 69,580,840 denars (674,319,400-604,738,560), which is an increase of 11.1%. Thus, the subsidy per classes reaches 66.9 denars/kg, which makes an increase of 6.9 denars/kg.

The purchase of tobacco from 2017 crop by Tobacco Company - Prilep amounted to 2.455.410 kg up to January 25, 2018 (the end date of purchase is January 31 2018).

Table 8: Assessment of subsidy for tobacco purchased by Tobacco Company – Prilep in 2017

				by classes
Purchase	Production /kg	Participati on of classes, in	Subsidy by classes	Total value
I	752.848	30,7	80	60.227840
II	1.588.450	64,7	70	111.192.200
III	109.589	4,4	60	6.575.340
IV	4.512	0,2		
Total	2.455.410	100,0		177.995.380

Source: Tobacco Company - Prilep

- Subsidization by differentiated classes for the purchased tobacco crop is 177.995.380 denars. -Fixed subsidy calculated at 60 denars per kg purchased tobacco is 147.324.600 denars.

The difference between the two forms is 30,670,780 denars.

Thus, the subsidy per purchase classes reaches 30,670,780 denars, which is 72 denars/kg or 18,8% higher compared to the fixed subsidy.

4. Conclusion

Based on our analysis and research, it can be concluded that the existing subsidy system per kilogram of produced tobacco is good and gives good results both in terms of quantity and quality. The resulting difference between fixed subsidy and subsidy according to purchase classes is not big, but it can be problematic since the quality of purchase classes varies from year to year. The data on participation of purchased tobacco classes show large fluctuations, suggesting that quality is variable, complex and influenced by a number of objective factors. For the first time after many years, the share of the first class tobacco from the 2017 crop accounted for 30.7% of the outcome of purchased tobacco.

Since its establishment, subsidization per kilogram of produced tobacco is continuously intensifying the production both by unit area and by co-operatives. This system of subsidization is efficient in stabilization of the production and it is actually realized simultaneously with the current crop, which is proved by the reduced tobacco stocks. This implies that the supply is much lower than the demand, which should be used both by buyers and producers.

References

- 1.Colin Gilligan and Richard M.S. Wilson, 2012. "Strategic marketing planning", USA
- 2. ., 2012. ,,
 - ",
- 3. ., 2015. ,, ",
- 4.Paul Newbold, William L. Carlson, Betty Thorne, 2010. "Statistics for business and economics", USA
- 5.
- 6.
- 7.Tobacco Journal International 2014-2017 8.FAOSTAT (Food and agriculture organization of the United Nations statistics), 2012/2017