

TOBACCO INFLUENCE ON REDUCTION OF POVERTY AMONG HOUSEHOLD FARMING

Mile Peshevski¹, Dragić Zivković², Miloš Kocić³, Marjana Trajkoska⁴, Ljupčo Maneski⁴

¹*Mile Peševski, PhD, regular professor, University "Ss Kiril and Methodius" in Skopje, Faculty of Agricultural Sciences and Food, Blvd Edward Kardelj bb, 1000 Skopje, Republic of Macedonia.
e-mail: milepesevski@yahoo.com*

²*Dragić Zivković, PhD, regular professor, University of Belgrade, Faculty of agriculture, Nemanjina 6, 11080 Zemun- Belgrade, Republic of Serbia*

³*Miloš Kocić, Mr, manager, Komercijalna Banka a.d., Niš, Republic of Serbia*

⁴*Marjana Trajkoska, postgraduate students in Scientific Tobacco Institute, str. Kicevski pat bb, 75000 Prilep*

⁴*Ljupčo Maneski, postgraduate students in Scientific Tobacco Institute, str. Kicevski pat bb, 75000 Prilep*

ABSTRACT

In this paper the authors will present a few definitions about poverty, followed by a comparative analysis of resources available for living and personal consumption in the Republic of Macedonia and in the Republic of Serbia. The results had shown that Macedonian citizens spent 14.9% more money than they had available. The situation in Republic of Serbia was quite reversed, because they had 12.1% more than actual spending. In both countries, over 41% of overall consumption went to food and non-alcoholic beverages.

Republic of Macedonia has 3.4 times smaller surface area (when observing the whole territory) than the Republic of Serbia, the production of tobacco used by 2.3 times more arable land.. The Virginian tobacco is the reason why average tobacco production in the Republic of Serbia was 200 kg/ha higher than in the Republic of Macedonia.

In both countries gross margin is grater than all other cultures, even in breeding dairy cows. This implies that in the future tobacco area should be enlarged, which in turn would be useful in poverty reduction or to increase the family budget from agricultural activities.

Key words: tobacco, gross margin, poverty.

ВЛИЈАНИЕ НА ТУТУНОТ ВРЗ НАМАЛУВАЊЕТО НА СИРОМАШТВОТО КАЈ СЕМЕЈНИТЕ СТОПАНСТВА

Во трудов, најнапред се даваат неколку дефиниции на поимот сиромаштво, а потоа се прави компаративна анализа на расположливите средства за живот и личната потрошувачка во Република Македонија и во Република Србија. При тоа е констатирано дека македонските граѓани трошат 14.9% повеќе отколку што имаат на располагање. Состојбата во Република Србија е обратна, тие имаат 12.1% повеќе отколку што вистински трошат. И во двете земји над 41% од вкупната потрошувачка се троши за храна и безалкохолни пијалоци.

Република Македонија иако е помала (според вкупната територија) за 3.4 пати од Република Србија, таа за производство на тутун користи за 2.3 пати повеќе обработлива површина. Просечните приноси во Република Србија се повисоки за по 200 kg/ha во однос на

приносите во Република Македонија, поради фактот дека таму се произведуваат и вирџински тутуни.

И во двете земји бруто маржата е поголема во споредба со сите други култури, па дури при одгледувањето на млечни крави. Врз основа на тоа се констатира дека во иднина може да се зголеми површината со тутун, кое што, пак ќе придонесе за намалувањето на сиромаштијата, односно за зголемување на семејниот буџет од земјоделска дејност.

Клучни зборови: тутун, бруто маржа, сиромаштво.

INTRODUCTION

Poverty is most frequently defined as a lack of material goods needed for the normal satisfaction of fundamental needs. According to Organization of United Nations, poverty is defined as lack of comfort and dignity at a certain stage of life in humans. Along with insufficient income for normal life, i.e. for satisfaction of basic human needs, poverty means lack of employment opportunities, inadequate housing conditions, lack of social and health care as well as lack of funds for education and utility services. Furthermore, poverty should consider situations when people do not have a chance to use their right to live in a healthy environment and do not have access to natural resources. First of all, this includes clean drinking water and clean air to breathe. According to Social Security Glossary, CARDS, Skopje, 2006, poverty is defined as the level of income below which life of the family or individual is compromised. Absolutely poor are unable to meet basic human needs such as food, clothing, housing, etc.

Along with changes in social norms, the measurement of the level of poverty has been changed. Therefore, poverty was sub-divided into destitution or absolute poverty, relative poverty, pauperism (impoverishment of workers) and the new poverty.

Living standard is constantly changing, unfortunately in decline. Social and other issues concerning human development in Macedonia for the last two decades, derive not only from the transition of the economic and political system (although these are factors causing strong negative influence), but also from inherited level of economic development from a preceding period. Society is characterized by a process of social restructuring, i.e. the formation of new social groups. On one side are those who enrich themselves very fast, and on the other side are those

poor. On the right side is the small number – the rich and the left are numerous – the poor. Every nation has an assignment to create conditions for reducing absolute poverty. In this category are adults whose daily food consumption has nutritive values below 9,579.4 kJ (2,288 kcal). This nutritive minimum is prescribed by FAO (Food and Agriculture Organization). Member States of EU, measure the relative poverty. Relative poverty in the Republic of Macedonia is defined as 70%, and in the Republic of Serbia as 60%, of median equivalent expenditures. However, considering age differences in population, in practice, equivalence scale of OECD (recommended by Eurostat) is applied. Accordingly, the head of household bears the weight 1, each grown up household member (14+) bears the weight 0.7, and children (below 14 years of age) bear the weight 0.5. E.g. three-member household with one child (below 14 years of age) would bear the weight 2.2. Based on the quantities and prices of products (which meets the nutritional minimum is) poverty line value is expressed.

Jakimovski (2003) states that poverty in rural areas in Republic of Macedonia increased from 23.33% in 1997 to 17.19% of population in 2000.

In accordance with figures of State Statistical Office (News release, No: 4.1.11.48, Year XLIX), in Republic of Macedonia in 2009, 31.1% of people had lived under the absolute level of poverty. When analyzed by profiles, most vulnerable group of households was one where the head of the household had no education, or had finished only elementary school. Namely, 54.2% of impoverished had lived in such households. Then, 42.8% of those in need had lived in households with 6 or more members. The rate of relative poverty among the unemployed was 40.5%, i.e. 42.7% of all impoverished were

unemployed. In rural areas the relative level of poverty was 48%, which is 25.7 index points higher than in 2003. In the Republic of Macedonia 42.2% of the population lived in rural areas, and in the Republic of Serbia about 45%. The struggle to reduce poverty Popovic Vesna (2008) sees, amongst others, in the active role of the state budget, especially the Ministry of Agriculture, Water Management and Forestry of Republic of Serbia, whose engagement can be seen in programming and funding measures to support sustainable agriculture and rural development. In Serbia, (according to the Statistical Office of the Republic of Serbia, Belgrade, 2011), below this level were 6.9% of the total population. As a result of strategy for reducing poverty in the Republic of Serbia, the poverty rate in 2002 amounted to 14.2% in rural areas and in urban areas 7.8%. In Bulgaria, in 2009 (according to data from the National Statistical Institute), 21.8% of

the population had lived under the absolute poverty line and in Croatia 18.0% (State Statistical Office of Republic of Croatia). The Statistical Office of Montenegro stated that in 2009 general poverty rate was 6.8%, while in rural areas 14.8% of population were those in need. The absolute poverty line was 169.13 EUR/equivalent adult.

Jelic, et al (2011) concluded that poverty is more expressed in family agriculture households in rural areas and concentrated in traditional undeveloped area in southern and southeastern part of the Republic of Serbia.

According to the survey of income and living conditions (SILC), percentage of the population who lived in poverty risk in EU countries, was between 10% and 26% in 2008. The lowest poverty rate was in the Netherlands and the Czech Republic and the largest in Latvia. In Bulgaria, there were 21% of those at risk. (Chart 1).

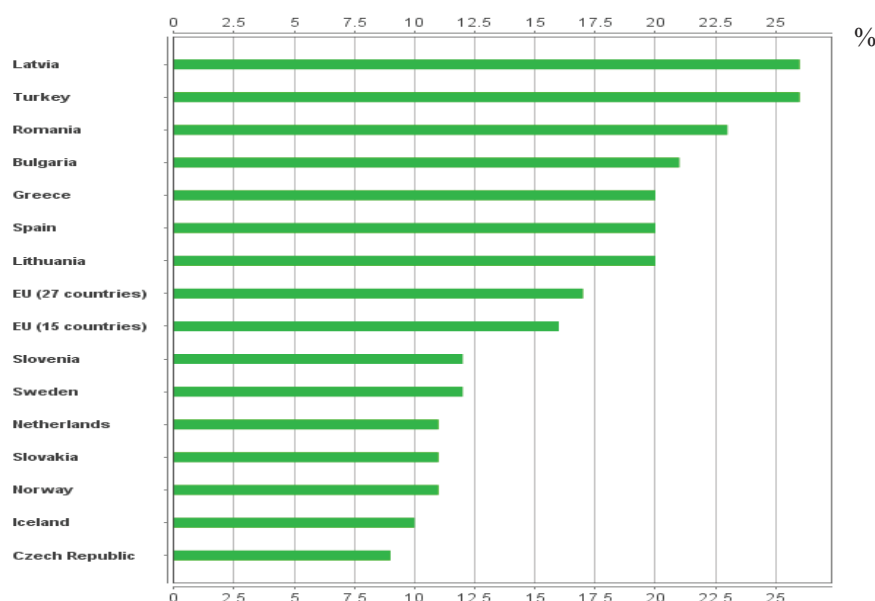


Chart 1 - % of poverty in some European countries and Turkey

Drummond E. H. and Goodwin W. H. (2004) in their book *Agricultural Economics 2/e*, pg. 422, say: most of the statistics showing the difference between impoverished and developing countries are not as obvious as the percentage of employees in agriculture is. By that criterion, the Republic of Macedonia had 30.18% (in 2007) and the Republic of Serbia 35.17% (in 2002) of poor people. A well known Nobel Prize winner in

Economics in 1979, Theodore W. Schultz (1978) began his acceptance speech observing: "Most of the people in the world are poor, so if we knew the economics of being poor, we would know much of the economics that really matters. Most of the world's poor people earn their living from agriculture, so if we knew the economics of agriculture, we would know much of the economics of being poor" [1].

The goal of this research, based on statistical data, is to compare availability and spending of resources throughout households in the Republic of Macedonia and Republic of Serbia. Then, based on personal research (questionnaire)

of income in agricultural households, as well as revenues and expenses in the tobacco industry, we will analyze the influence of revenue from tobacco on poverty across rural areas.

DATA AND METHODS

The amount of available resources as well as personal consumption is determined based on statistical data for annual available and used funds in households. Based on average number of persons in the household, the amount of assets is reduced to monthly per capita.

Revenues per crops and livestock species are determined based on a direct inquiry of the head of the household. Therefore authors interviewed 50 households in the Pelagonia region in the Republic of Macedonia and 15 households (five in Nis, five in Jablanica and five in Pcinja region) in southern and eastern Serbia, which in the last three years (2008-2010) had produced aromatic tobacco, amongst others. Having determined the percentage share of revenue from tobacco in total household income, we selected nine households from the Republic of Macedonia

and four from the Republic of Serbia, where tobacco had over 50% of the total annual revenue.

The gross margin was established based on the analytical calculation of validity of production and variable expenses of 13 selected economies. Due to valid comparison of financial indicators, money values of domicile currencies are transformed to EUR. The relationship between domicile currency and currency in EU, in 2009 was: 61.27 MKD/EUR and 93.93 RSD/EUR.

The transformation of the household's in full working capacity was conducted with coefficients [8]: 1.0 for men aged 18-65, 0.8 for women aged 18-65 and boys aged 14-18; 0.6 for men and women over 65 years of age and girls aged 14-18; 0.1 for children aged 7-14.

RESULTS AND DISCUSSION

1. AVAILABLE RESOURCES OF HOUSEHOLDS

Available resources include all money income, with consumer credits and investment loan values included. While observing agricultural households, the monetary value of natural consuming (self-production) is included. Employees in these households often receive products (instead of money) from their employers as part of their monthly pay. These revenues are calculated into the total available funds.

Structural analysis of the total amount of available funds (in 2009) had shown that people in Macedonia had more money income than those in Serbia (95.04% against 94.6%), in comparison to the total funds available. Nevertheless, the fact is that people in Serbia had over 52% higher total funds than those in Macedonia (Table 1). Bulgarian citizens had 164.8 EUR at disposal, and Croats 362.3 EUR, or 3.3 times more than Macedonians. The income from regular work-

ing relationship had had the highest share of the total funds available (57.12% in Macedonia, i.e. 45.81% in Serbia). Compared to Macedonia, every member in Serbian households had 22% more income from the monthly pay. Moreover, pensions were higher (more than 169%) in the Republic of Serbia than in the Republic of Macedonia. Republic of Serbia assigned more funds for social insurance, also more than the Republic of Macedonia. Macedonian citizens, unlike the Serbian, earned slightly more money from engagement elsewhere after working hours. On the other side, Serbian citizens had had four times more funds obtained as monetary gifts and winnings from games of chance. They also had more money in savings deposits in banks and more cash "under the mattress" (hidden somewhere).

Table 1 – Average monthly available funds per member of households in 2009

Indicators	Republic of Macedonia		Republic of Serbia	
	EUR	%	EUR	%
1. Regular salaries and wages	63.4	57.12	77.4	45.81
2. Other income comprises	9.6	8.65	5.3	3.16
3. Pensions (old-age, family, disablement and other)	19.5	17.57	52.5	30.96
4. Other social insurance related receipts include	1.7	1.53	3.0	1.77
5. External receipts include	3.0	2.70	2.5	1.48
6. Income from agriculture, hunting and fishing includes	5.1	4.59	5.5	3.25
7. Real estate related income	0.4	0.36	0.9	0.51
8. Donations and awards	0.5	0.45	2.2	1.28
9. Customer and investment credits	2.0	1.80	2.3	1.34
10. Other receipts	0.3	0.27	8.4	4.97
Total income of household in money	105.5	95.04	160.0	94.67
Household receipts in kind	5.5	4.96	9.0	5.3
Available budget - total	111.0	100.00	169.0	100.00

Sources: Statistical Office of the Republic of Macedonia – Skopje;
Statistical Office of the Republic of Serbia – Belgrade.

Average nett salary (in 2009) per worker, in Republic of Macedonia amounted to 325.7 EUR, and in the Republic of Serbia 3.7% more. There was a higher difference between employees in agriculture. Namely, Serbian farmers earned 23.5% more than those in Macedonia (271.4 EUR against 219.7 EUR). This finding indicated

that employees in the Republic of Serbia had the possibility to spend more than Macedonians. Croatian citizens, compared with Macedonian, had 2.2 times higher netto salary, and compared with Bulgarian citizens, almost 6.5 times higher. Same relations could be found when observing netto salaries in agriculture.

2. HOUSEHOLD CONSUMPTION

Poverty can also be analyzed on the basis of household consumption, because it represents an appropriate measure of social well-being of the population, due to its stability, comprehensiveness and consistency over a rather long period, unlike incomes of households who are submissive to short-term fluctuations. The means for personal consumption are quantified in groups, in accordance with the COICOP classification (Classification of Individual Consumption by Purpose).

It may seem that there is parallelism between available resources and personal consumption. Citizens of the Republic of Macedonia had spent 127.5 EUR per month, or 15.5% less than Serbian citizens (Table 2). Bulgarian citizens, on the other hand, had spent 5% less than Macedonians. Citizens of Republic of Croatia had spent the most of all – 285.4 EUR per capita.

In all of countries above mentioned,

expenses for food and non-alcoholic drinks dominated. When observing an absolute number, Croatia had the highest expenses (92.8 EUR per capita), and Bulgaria the lowest (51.8 EUR per capita). Nevertheless, when we observe a relative number, Republic of Macedonia had the highest (43.52%), and Republic of Croatia the lowest expenses (32.51%). Second largest, as absolutely and relatively, are housing expenses. The Macedonians had the lowest (16.7 EUR per capita) and Croats the highest expenses (41.6 EUR per capita). Within the structure of expenses, third place in Serbia, Bulgaria and Croatia went to transportation costs, while in Macedonia, importance of clothing and footwear had overtaken this position. Croatian citizens had paid 2.3 times more than Serbian, 3.7 times more than Bulgarian, and by 4.3 times more than Macedonian citizens for transportation costs.

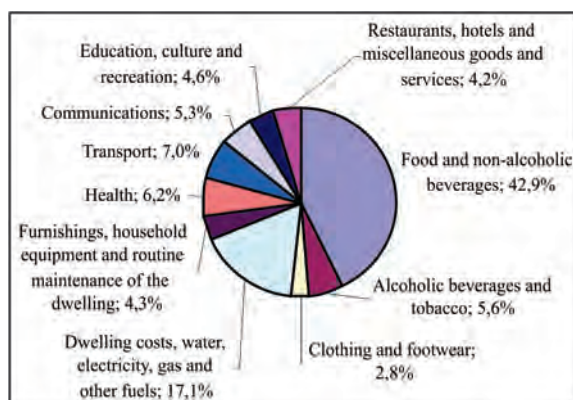
Table 2 – Average monthly personal consumption per member of household in 2009

Indicators	Republic of Macedonia		Republic of Serbia	
	EUR	%	EUR	%
1. Food and non-alcoholic beverages	55.5	43.52	62.3	41.31
2. Alcoholic beverages and tobacco	5.6	4.39	6.7	4.44
3. Clothing and footwear	9.3	7.29	7.7	5.11
4. Dwelling costs, water, electricity, gas and other fuels	16.7	13.10	24.2	16.05
5. Furnishings, household equipment and routine maintenance of the dwelling	6.5	5.10	6.6	4.38
6. Health	4.0	3.14	5.6	3.71
7. Transport	7.3	5.73	13.6	9.02
8. Communications	5.4	4.24	5.5	3.63
9. Recreation and culture	4.0	3.14	7.5	4.97
10. Education	1.1	0.86	1.5	1.01
11. Restaurants and hotels	6.2	4.86	3.0	1.99
12. Miscellaneous goods and services	5.9	4.63	6.6	4.38
Total	127.5	100,00	150.8	100.00

Sources: Statistical Office of the Republic of Macedonia – Skopje;
Statistical Office of the Republic of Serbia – Belgrade.

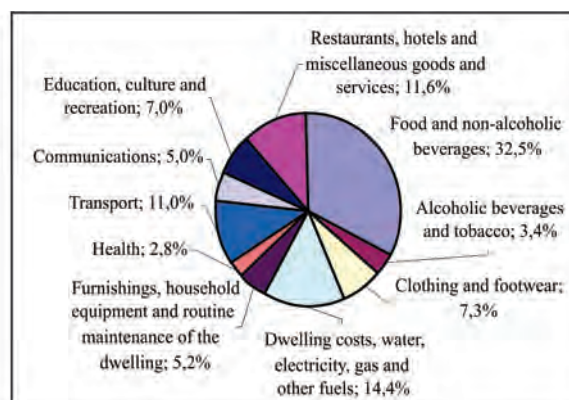
Along with personal consumption, households use their funds for other purposes, like: membership fees, taxes, customs duties, servicing of borrowing and lending operations, savings, housing costs, house or other property, gifts, contributions for humanitarian purposes, etc. The funds for these purposes, in Republic of Macedonia occupy 6.2%, and in the Republic of Bulgaria 14.3% of all used assets. There wasn't any relevant data in this category for Republic of Serbia and Republic of Croatia.

However, Macedonian citizens in 2009 spent 16.5 EUR per capita per month more than they had had available. That means that in the future they should try to earn more money outside their working place than in 2009 (9.6 EUR per capita), or they should search for other sources of income, preferably in cash. Citizens of Republic of Serbia had 18.2 EUR per capita more in their funds than they needed. Croatian citizens had 26.9%, and Bulgarians 36.5% more money than required.



a) Republic of Bulgaria

Sources: Statistical Office of the Republic of Bulgaria - Sofia;
Statistical Office of the Republic of Croatia - Zagreb.



b) Republic of Croatia

Chart 2 – The structure of personal consumption

When analyzed by social groups, in Macedonia in 2009, agricultural households had shown themselves more modest than the others, in terms of minimum required funds for a normal life. For example, data from the State Statistical Office (News release, No: 4.1.11.48, Year XLIX) had

shown that 33.2% of all agricultural households reviewed, thought they needed 375.4-789.6 EUR, while 40.4% of all other households (non-agricultural and mixed households) thought they would need more than 789.6 EUR.

3. TOBACCO AREAS AND TOBACCO PRODUCTION

Republic of Serbia has 3.4 time larger surface area (including whole territory) than Republic of Macedonia. There are 7,320,807 people living in Serbia, or 3.6 times more than in Macedonia. It also has 3.9% higher population density (82.85 people/km² against 79.76 people/km² in Macedonia). Republic of Serbia furthermore has a larger area capacity (4.3 times larger agricultural land and 6.9 times more arable land

and gardens). Industrial cultures in Republic of Macedonia occupy 26,500 ha, or over 15 times less than in the Republic of Serbia.

Tobacco production in the Republic of Macedonia took over 17,123 ha – 20,538 ha, or approximately 70% of the area under industrial crops. Republic of Macedonia, compared with the Republic of Serbia has 2.3 times more area with tobacco.

Table 3 – Dynamics of usage of cultivated areas in Republic of Macedonia and Republic of Serbia

Year	Agricultural area (‘000 ha)		Arable land and gardens (‘000 ha)		Industrial crops (‘000 ha)		Tobacco (ha)	
	RM ¹⁾	RS ²⁾	RM ¹⁾	RS ²⁾	RM ¹⁾	RS ²⁾	RM ¹⁾	RS ²⁾
2001	1244	5112	612	3355	33	323	20074	11707
2002	1316	5107	577	3351	31	328	20538	11080
2003	1303	5115	569	3345	28	420	18008	8565
2004	1265	5113	461	3344	27	389	17716	7855
2005	1229	5074	448	3330	27	414	18488	7219
2006	1225	5066	439	3318	23	436	17438	6821
2007	1077	5053	431	3299	22	413	17132	8043
2008	1064	5055	424	3302	23	416	17064	7129
2009	1014	5058	420	3301	24	403	17800	6103
2010	1121	5051	415	3295	27	439	20300	5828
Average	1185.8	5080.4	479.6	3324	26.5	398.1	18455.8	8035

RM¹⁾ Republic of Macedonia; RS²⁾ Republic of Serbia

Sources: Statistical Office of the Republic of Macedonia – Skopje;
Statistical Office of the Republic of Serbia – Belgrade.

This ratio of surface with tobacco crops in real practice is not reflected proportionally. Namely, quantity of tobacco in the Republic of Macedonia is only 1.9 times more than in Republic of Serbia. This may be due to 13.7% lower average yields in Republic of Macedonia in relation with ones in Republic of Serbia (Table

4). Average yields were lower, due to the fact that the Republic of Serbia (especially in Vojvodina) besides aromatic tobacco grew Virginian tobacco, and in the Republic of Macedonia there was only aromatic tobacco, which caused incomes to be rather low.

Table 4 – Dynamics of tobacco production and incomes from tobacco in Republic of Macedonia and Republic of Serbia

Year	Production (t)		Yield (t/ha)	
	RM ¹⁾	RS ²⁾	RM ¹⁾	RS ²⁾
2001	23217	16586	1,1	1,4
2002	22911	17993	1,1	1,6
2003	23986	11500	1,3	1,3
2004	21630	12474	1,2	1,6
2005	27691	11336	1,5	1,6
2006	25036	10808	1,4	1,6
2007	22056	11136	1,3	1,4
2008	17087	10839	1,0	1,5
2009	24122	9847	1,4	1,6
2010	30280	10440	1,5	1,8
Average	23801.6	12295.9	1.3	1.5

RM¹⁾ Republic of Macedonia; RS²⁾ Republic of Serbia

Sources: Statistical Office of the Republic of Macedonia – Skopje;

The analysis of data by region had showed that there was relatively large differentiation. The presence of tobacco in the range of production was dependent on natural conditions, but also by tradition, average yields of the variety and type,

and the degree of intensity or the level of investment of effort and resources. The largest area with tobacco in the Republic of Macedonia (51.6% of overall territory) is in Pelagonia region. The yields range between 1.0 and 1.7 t/ha (Table 5).

Table 5 – Surface and yields per region in 2009

Republic of Macedonia			Republic of Serbia		
Region	Area (ha)	Yield (t/ha)	Region	Area (ha)	Yield (t/ha)
Skopje	268	1.3	Belgrade	40	1.5
Northeast	51	1.3	Vojvodina	3613	1.6
East	580	1.4	Sumadija and West Serbia	1114	1.5
Southeast	6349	1.4	South and East Serbia	1336	1.7
Vardar	1255	1.7	/	/	/
Pelagonia	9190	1.1	/	/	/
Polog	2	1.0	/	/	/
Southwest	105	1.2	/	/	/
Total / Average	17800	1.4	Total / Average	6103	1.6

Sources: Statistical Office of the Republic of Macedonia – Skopje;
Statistical Office of the Republic of Serbia – Belgrade.

In the Republic of Serbia 59.2% of total tobacco area is located in region of Vojvodina. There the Virginian type of tobacco is grown and yields range between minimum and maximum. We can argue that in South and East Serbia only aromatic tobacco is produced. This region occupies 21.9% of the total area in the country.

In Nis, Jablanica and Pcinja region (where we performed our research) tobacco was grown to a total of 1,264 ha, which is 94.6% of the total area in the region. Interestingly, there have been maximum yields (1,600-1,930 kg/ha) in this regions, probably due to higher investments in production process.

4. FAMILY BUDGET IN RURAL HOUSEHOLDS

Families from rural areas were generating incomes mainly from their agricultural activity. There are those who have incomes from other sources, such as pension, social incomes etc. According to the register of agriculture conducted in 2007 in the Republic of Macedonia, the number of persons whose main activity is agriculture was 167,992, and in the Republic of Serbia, also according to register of agriculture in 2002, that number was 454,732, or 2.7 times more.

Depending on the type of the economy, the range varied between households. Some dealt

exclusively with vegetable production, and others had livestock production along with plants, making them mixed economies.

Economies that we investigated were mixed type. The volume of used arable land (total and components) reflects the general situation in the country. The number of working members of the family economies is slightly above the overall average number of household members in both countries. This is due to the fact that usually there are more rural households than the urban ones.

Table 6 – Gross margin in rural households (average)

Indicators	Republic of Macedonia				Republic of Serbia			
Average number of working members in household	3.6				Average number of working members in household	3.3		
Arable land (ha) - average	2.6				Arable land (ha) - average	2.4		
	Area (ha / No head)	Total income (EUR/ha/ head)	Total costs (EUR/ha/ head)	Gross margin (EUR/ha/ head)	Area (ha / No head)	Total income (EUR/ha/ head)	Total costs (EUR/ha/ head)	Gross margin (EUR/ha/ head)
Wheat	/	/	/	/	1.4	884,2	455,0	329,2
Barley	1.0	1247.8	518.4	729.4	/	/	/	/
Corn	/	/	/	/	1.2	1000,9	712,0	288,9
Alfalfa	0.5	1983.0	838.7	1144.3	0.5	1240,4	507,8	732,6
Pepper	0.7	10918.8	8186.7	2732.1	/	/	/	/
Tobacco	0.4	8165.0	3404.5	4760.5	0.2	4270,4	3426,6	843,8
Cows	2	1907.1	1410.6	496.5	5	2229,2	1896,0	333,2

Gross margin, the difference between total revenue and total variable costs is different per crops (products) and livestock species. There is visible difference between gross margin by country (Table 6). The share of gross margin per crops and countries is also different. For example, with Macedonian farmers alfalfa reached 57.7% and with Serbs 59.1% of gross margin, cow breeding 26.0% against 14.9%. Macedonian tobacco producers brought about the highest gross margin (4,760.5 EUR/ha or 58.3% of the value

of production) compared to other crops. Serbian farmers in tobacco production also realize the highest absolute value of the gross margin per unit of capacity (843.8 EUR/ha). When observing relative indicator, alfalfa accomplished better results than tobacco.

Survey results show that tobacco has and will have significant role in poverty reduction among rural households, both in Republic of Macedonia and the Republic of Serbia.

5. CONCLUSION

The survey showed that poverty is generally increasing, besides many efforts made by the authorities in the countries hoping to achieve conditions for its reduction. Poverty is asymmetrically distributed. It is more emphasized in rural areas, compared with urban ones, and lowest in capital cities. The situation is even more concerning knowing that in rural areas almost all households are agricultural.

Agricultural rural households cultivate restricted area. The average size of arable land

in researched economies was: in the Republic of Macedonia 2.6 ha, and in the Republic of Serbia 2.4 ha. But, besides that, their effort gives relatively high income. The earnings, expressed through gross margin, in Macedonian households reach 320.9 EUR and in Serbian households 314.8 EUR per capita. Considering fact that tobacco gives the highest gross margin, it was, and still can be, significant part in poverty reduction in rural households.

REFERENCES

1. Влада Републике Србије, 2003. Стратегија за смањење сиромаштва у Србији. Београд.
2. Drummond E. H. and Goodwin W.H., 2004. *Agricultural Economics*, 2/e (превод на македонски јазик). Издавачки центар ТРИ, Скопје, 2010.
3. ДЗС, 2010. Статистички годишник на Република Македонија. Скопје.
4. ДЗС 2008. Попис на земјоделството, 2007, книга II. Скопје.
5. Завод за статистику Црне Горе, 2010. Саопштење: Анализа сиромаштва у Црној Гори у 2009. години, бр. 117, Подгорица.
6. Јакимовски Ј., 2003. Сиромаштијата и фрагментацијата. Социјалната положба на населението во РМ, 23-33, ИСППИ, Скопје.
7. Jelić S., Živković D., Tatjana Jovanović, 2011. *Gazdinstva i domaćinstva u promenama*. Univerzitet u Beogradu, Poljoprivredni Fakultet, Beograd-Zemun.
8. Maciolek T., 1978. *Nakłady pracy w indywidualnim gospodarstwie rolnym*. PWN. RNR seria G - *Ekonomika Rolnictwa*, t. 82, 121-136, Warszawa.
9. Поповић Весна, Миловановић М., Томић Д., 2008. Подршка пољопривреди и руралном развоју у функцији смањења сиромаштва у Србији. ЕП 2008 (55) 1 (69-82), Београд.
10. RSZ, 2010. *Statistički Godišnjak Srbije*. Beograd.
11. RSZ, 2010. *PoljBilten 2009*, No. 523, Beograd.
12. РСЗ, 2010. Анкета о потрошњи домаћинства, 2009. Билтен бр. 526, Београд.
13. РСЗ (2003). Попис пољопривреде 2002, Београд.
14. Cervantes – Godoy D., Dewbre J., 2010. *Economic Importance of Agriculture for Poverty Reduction*. OECD Food, Agriculture and Fisheries Working Papers, No. 23, OECD Publishing. Doi: 10.1787/5kmmv9s20944-en.

www.nsi.bg/otrasal.php.

www.dzs.hr/

www.stat.gov.mk/

<http://webrse.stat.gov.rs/WebSite/>

www.monstat.com

www.stips.minpolj.gov.rs