

CATEGORIZATION OF POVERTY IN THE REPUBLIC OF SERBIA IN THE PERIOD 2006-2010

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Summary

The aim of this paper is overviewing a real picture of poverty in Serbia in the period 2006-2010, using the data of the Statistical Office of the Republic of Serbia (consumer price index - CPI) and the Social Inclusion and Poverty Reduction Unit (Cabinet of Deputy Prime Minister for European Integration of RS), as well as research results of relevant domestic and foreign literature. The percentage of the poor is categorized by: type of settlements, regional distribution, household type, age and participation of children and adults, level of education, and socio-economic status of the household. Survey results from 2010 pointed out that poverty is widespread among people living in rural area (13.6%), particularly among children under 13 years of age (13.7%), in Central Serbia (12.0%), in multi-member households (16.4%) and in households where the head has a lower educational level (14,2%) or is unemployed (17.9%). The fact that poor live in rural areas should not lead to deterioration of the principle of equality in the rights for all citizens of the Republic of Serbia.

Key words: *poverty, poverty rate, categories of poor.*

JEL: *R00, R51*

Introduction

EU Council of Ministers held in 1975 has defined the poor as “*individuals or families whose resources are so small as to exclude them from the minimum acceptable way of life in the Member State in which they live.*” Resources are defined as “*goods, services and cash income from public and private sources*” (SPC, 2011). For purposes of measuring poverty in RS absolute and relative poverty line is used. Below the **absolute poverty line** are adults whose monthly expenditures are lower than the minimum required for food and other expenses, which include clothing, housing, health, education, transport, recreation and culture, and expenditures on other goods and services. Imputed rent and expenses for

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durables are not included in the analysis. **Relative poverty** defines poverty line compared to the national standard of living, and is defined as 60% of median average consumption per adult equivalent.

There was a strategic decision, carried in 2004, to calculate the absolute and relative poverty line on the basis of aggregate consumption from the Household Budget Survey (HBS), which is regularly conducted by SORS. The analyses of poverty in RS is based on household consumption, as a more reliable measure of well-being of the population, because of its stability, comprehensiveness and consistency over a long period, as opposed to household income, which is subject to short-term fluctuations. HBS provides data on income, but is primarily used to provide an appropriate context for getting expenses.

According to HBS, 2010 applying the absolute poverty line, the poor were all households where consumption was below 8,544 dinars per month per consumer unit (9.2%), while the relative poverty line shows that the poor were all households where consumption was below 9,763 dinars per month per consumer unit (14.5%). In this paper, the poverty rate according to the following categories is analysed: type of settlements, regional distribution, household type, age, participation of children and adults, the level of education of the household and the socio-economic status of the household.

Materials and methods

Working method is based on using the data of the Statistical Office of the Republic of Serbia (SORS), the Social Inclusion and Poverty Reduction Unit, and the Office of Deputy Prime Minister for European Integration of Republic of Serbia, as well as research results relevant from domestic and foreign literature. Selected data are then systematized in a tabular display and used for the interpretation of the extent of poverty in the RS by selected categories.

Defining Poverty and Social Exclusion

The definition of poverty is based on the notion of participation. The EU Council of Ministers in 1975, defined poor as “*individuals or families whose resources are so small as to exclude them from the minimum acceptable way of life in the Member State in which they live.*” Resources are defined as “*goods, services and cash income from public and private sources.*” In this way poverty is defined in relative terms (SPC, 2011).

Republic of Serbia signed Stabilization and Association Act applied for EU membership, and the issues of social inclusion and poverty reduction in the future become a mandatory component of the EU integration policies. The Serbian government is committed to meet the requirements defined by the EU within the framework of the new EU development document *Europe 2020*, which was accepted in June 2010. *Kronja et al. (2011)* point out that the *Europe 2020* strategy aims at economic development of the EU, based on knowledge of the environment while maintaining a high level of employment, productivity and social cohesion.

However, the measurement of poverty is considerably more complex, and poverty is analysed in accordance with other dimensions of social exclusion. First, it is necessary to mention that poverty represents only one dimension of economic exclusion and one that points to the exclusion of the material resources distribution and levels of consumption, as meeting the needs below a certain limit.

Measuring Social Exclusion and Poverty

For purposes of **measuring poverty** in the Republic of Serbia the absolute and relative poverty line is used. Below **the absolute poverty line** are adults whose monthly expenditures are lower than the minimum required for food (minimum nutritional – 2.288 calories a day, prescribed by the UN Food and Agriculture Organization - FAO) and other expenses, which include clothing and footwear, housing, health, education, transport, recreation and culture, and expenditures on other goods and services. Imputed rent and expenses for durables are not included in the analysis.

To determine the equivalent size of the household a modified OECD² scale is applied, which allows comparison of different households in size and composition. The equivalent size of a household is calculated as a weighted sum of household members, where the first adult in the household counts as 1 unit, any other adult member of the household as 0.5 units, and each child under 14 years of age as 0.3 units. **Relative poverty line** defines poverty compared to the national standard of living, and is defined as 60% of median average consumption per adult equivalent³.

Household Budget Survey (HBS)

Socio-economic structure of the family farm is an important indicator of overall economic diversification and the situation in Serbia. The transition period was marked by significant changes in the socio-economic structure of households, caused by natural reproduction processes, and the influence of social and economic reforms (*Bozic et al., 2006*).

Strategic decision dated with 2004th year's statistics are basing poverty on data from the *Household Budget Survey (HBS)*, efforts were made to ensure full national ownership and continuity of monitoring data related to poverty. Absolute and relative poverty line is calculated on the basis of aggregate consumption from the HBS, which is regularly conducted by the *Statistical Office of the Republic of Serbia* on the recommendation of the *EU Statistical Office (EUROSTAT)* and the *International Labour Organization (ILO)*. HBS data regarding years 2004/2005 are not sufficiently well-based in methodology and the data for these two years are not published. Aiming to track trends since 2006, SBS has accepted the recommendations of the World Bank to determine the absolute poverty line used by the application method *Consumer Price Index - CPI*.

The absolute poverty line is obtained by calculating the food basket in 2006 which is

2 OECD – The Organisation for Economic Co-operation and Development.

3 http://www.inkluzija.gov.rs/?page_id=1180&lang=cs

increased by the appropriate amount of inflation (CPI) for each year⁴. Poverty in the RS analyses is based on household consumption, as a more reliable measure of well-being of the population, because of its stability, comprehensiveness and consistency over a long period, as opposed to household income, which is subject to short-term fluctuations. HBS provides data on income, but is primarily used to provide an appropriate context for getting expenses.

Household consumption is defined as the sum of expenditures for food and other current expenditures, which include purchased products, own production and gifts. The main components of *households' expenditure* by COICOP⁵ classification are⁶:

- 1) consumption of food and non-alcoholic beverages,
- 2) consumption of alcoholic beverages and tobacco,
- 3) expenditure on clothing and footwear,
- 4) costs for housing, water, electricity, gas and other fuels
- 5) household expenditures and routine maintenance,
- 6) health care expenditures,
- 7) expenses for transportation,
- 8) expenditures for communications,
- 9) costs for recreation and culture,
- 10) expenditure on education,
- 11) expenditure for restaurants and hotels,
- 12) expenditure on other goods and services.

The survey collected is based on data regarding the demographic, economic and social characteristics of the households. HBS is conducted continuously throughout the year on a sample of 4,800 randomly selected households, so that the sample for each year is separately defined, in other words there is no part of the panel sample (households are not repeated). Tracking the same population (panel sample) over a long period of time would allow a comparative analysis of the factors that contribute to changes in their situation, particularly among targeted population groups who are socially excluded or at risk of social exclusion, in order to evaluate the degree to which a given intervention succeeded to improve their situation.

Poverty Statistics in the Republic of Serbia (2006 - 2010)

According to *Cvejić et al. (2010)*, Serbia is a low urbanized country in European terms, not only by the low share of urban population, but also at a low qualitative urban development (weak territorial capital, particularly infrastructure), which many rural areas make less attractive for economic investment (economic capital) and housing (contrary to tendencies in highly developed countries).

4 Ibid.

5 COICOP classification - Classification Of Individual Consumption by Purpose.

6 http://www.inkluzija.gov.rs/?page_id=3376&lang=cs

About 45% of the total population lives in rural areas, which cover three quarters of the country. According to the *Living Standards Measurement Survey (LSMS)*, carried out in May / June 2002, approximately 58% of the poor population in Serbia lives in rural areas. The share of the poor among the rural population is 14.2%. That is more than the percentage of the poor at the total population, which amounts to 10.6%, almost double compared to urban poverty, which is 7.8%. This means that one in seven rural residents is poor (*Popovic et al., 2008*). LSMS, which was implemented in 2002/2003, showed that 14% of the population, or approximately one million people are living in the Republic of Serbia below the absolute poverty line and the poverty line was 4,970 dinars per month per household.

The absolute poverty line indicates that poverty rate in the period 2006 - 2008 fell by 2.7 percentage points, and in 2010 compared to 2008 (minimum rate of poverty) increased by 3.1 pp. So, from 2006 to 2010 the incidence of poverty increased by 0.4% pp., although the absolute poverty line is higher for 2323 dinars, i.e. 37%. Overall, the five-year period, the absolute poverty line has steadily increased, while the poverty rate varies (decreases and increases), (Table 1).

Table 1. Percentage of the poor – Absolute poverty line

2006	2007	2008	2009	2010
Poverty line = 6,221 dinars / month/consumer unit	Poverty line = 6,625 dinars / month/consumer unit	Poverty line = 7,401 dinars / month/consumer unit	Poverty line = 8,022 dinars / month/consumer unit	Poverty line = 8,544 dinars / month/consumer unit
8.8	8.3	6.1	6.9	9.2

Source: SORS, retrieved from http://www.inkluzija.gov.rs/?page_id=3179&lang=cs

The relative poverty line, which is defined as 60% of median personal consumption per adult equivalent, shows that in 2010, the Republic of Serbia had 14.5% of the population as poor, and the poverty line was at the level of 9763 dinars per month per consumer unit. Percentage of poor in 2006 was 14.4% and the poverty line was at 7171 dinars level per month per consumer basket. The lowest percentage of poor was in 2008 (13.2%), and the level of the poverty line was at 8923 dinars. Accordingly, while the poverty line is increasing, the percentage of poor people has varied (from 2006 to 2008 is decreasing and since 2008 to 2010 is growing) (Table 2).

Table 2. Percentage of the poor in the RS - Relative poverty line

2006	2007	2008	2009	2010
Poverty line = 7,171 dinars / month/consumer unit	Poverty line = 7,747 dinars / month/consumer unit	Poverty line = 8,923 dinars / month/consumer unit	Poverty line = 9,583 dinars / month/consumer unit	Poverty line = 9,763 dinars / month/consumer unit
14.4	13.4	13.2	13.6	14.5

Source: SORS, retrieved from http://www.inkluzija.gov.rs/?page_id=3179&lang=cs

In accordance with previous findings for both forms of percentage of the poor population expression, it is reasonable and obvious to accept as an explanation that there a simultaneous increase in unemployment and inflation existed, which in turn influenced the increase in the poverty rate of RS.

Percentage of poor by settlement type. The percentage of the poor who are below the absolute poverty line recorded a growth in urban and in rural areas, but the increase in the number of citizens living below the absolute poverty line is more presented in the rural area (Table 3).

Table 3. The poor by type of settlements - the absolute poverty line

Area \ Year	2006	2007	2008	2009	2010
Metropolitan area	5.3	6.0	5.0	4.9	5.7
Rural Area	13.3	11.2	7.5	9.6	13.6
Total	8.8	8.3	6.1	6.9	9.2

Source: SORS, retrieved from http://www.inkluzija.gov.rs/?page_id=1490

In urban areas, the number of poor in 2010 grew by 0.8 pp. compared to 2009, by 0.7 compared to 2008 and by 0.4 compared to 2006. The percentage of poor people in urban areas was highest in 2007 (6.0%) and the lowest in 2009 (4.9%). In rural areas the number of poor rose in 2010 by 4.0 pp. compared to 2009, by 6.1 pp. compared to 2008 and by 0.3 pp. compared to 2006. The percentage of poor people in rural areas was at the highest level in 2010 (13.6%) and lowest in 2008 (7.5%).

Percentage of poor by age. Increasing poverty was recorded among children and adults since 2008, but it is terrifying that the number of poor children in Serbia is growing significantly (Table 4).

Table 4. Percentage of the poor children and adults

Age \ Year	2006	2007	2008	2009	2010
Children	11.6	10.5	7.1	9.3	12.2
Adults	8.2	7.8	5.8	6.4	8.5
Total	8.8	8.3	6.1	6.9	9.2

Source: SORS, retrieved from http://www.inkluzija.gov.rs/?page_id=1490.

In this period, child poverty increased by 5.1 pp. (from 7.1% in 2008 to 12.2% in 2010 respectively). Poverty among adults in the same period increased for 2.7 pp. (from 5.8% in 2008 to 8.5% in 2010 respectively).

The increase in poverty was recorded in all age categories, but the lowest in the category over 65 years (Table 5).

Table 5. Percentage of the poor by age

Year \ Age (years)	2006	2007	2008	2009	2010
Children up to 13	11.6	11.2	7.3	9.8	13.7
Children from 14 to 18	11.7	8.8	6.9	8.4	9.1
Adults from 19 to 24	7.2	6.6	5.9	7.5	11.5
Adults from 25 to 45	8.4	7.4	5.0	6.4	8.9
Adults from 46 to 64	7.0	6.6	5.4	5.3	8.0
Aged 65 and over	10.0	10.3	7.5	7.5	7.9
Total	8.8	8.3	6.1	6.9	9.2

Source: Social Inclusion and Poverty Reduction Unit and SORS, 2012.

According to 2010 data, the most affected are children under 13 years of age (13.7%) and adults in the category of 19 to 24 years (11.5%). In comparison to 2009 the largest increase in poverty among children is just under 13 years (3.9 pp.) and among adults from 19 to 24 years (4 pp.). Obviously, the crucial is 2008, when the smallest percentage of the poor in all categories was recorded and when the two most vulnerable groups had single-digit poverty rate (children up to age 13 and 7.3% of adults 19 to 24 years 5.9%).

Percentage of poor by region. Structure of the poor can be shown on the basis of regional distribution, with the most vulnerable region of Central Serbia (Table 6).

Table 6. Percentage of the poor by regions

Year \ Area	2006	2007	2008	2009	2010
City of Belgrade	4,3	2,4	2,9	3,8	5,3
Vojvodina	8,6	11,9	6,8	4,9	6,8
Central Serbia	10,7	9,0	7,0	9,3	12,0
Total	8.8	8.3	6.1	6.9	9.2

Source: Social Inclusion and Poverty Reduction Unit and SORS, 2012.

The highest percentage of poor population in 2010 was in the region of Central Serbia (12.0%), with the largest recorded increase in the number of poor in comparison to 2009 (9.3%). That same year, the lowest number of poor was at the City of Belgrade (5.3%), while the percentage of poor people in Vojvodina was 6.8%. The lowest poverty rate in the City of Belgrade is recorded in 2007 (2.4%), in Vojvodina in 2009 (4.9%) and in Central Serbia in 2008 (7.0%). It is interesting to note that the region of Vojvodina in 2008 and in 2010 had the same percentage of poor (6.8%), and is the only region with negative rate of change in 2010 compared to 2006 (- 1.8 pp.).

Percentage of poor by type of household. The most vulnerable are households with five, six or more members since their poverty index is above average and was the highest compared with other demographic groups. A slight decrease in the number of poor is found only in single-person households (Table 7).

Table 7. Percentage of the poor by type of household

Year \ Households	2006	2007	2008	2009	2010
One-person	8.6	8.8	6.6	5.7	5.6
Two-persons	8.7	9.2	5.5	5.6	5.9
Three-persons	5.2	4.9	5.1	5.0	7.0
Four-persons	5.7	5.3	4.7	4.7	7.1
Five-persons	8.3	8.1	5.2	5.7	11.7
Six and more members	17.3	14.4	10.0	14.2	16.4
Total	8.8	8.3	6.1	6.9	9.2

Source: Social Inclusion and Poverty Reduction Unit and SORS, 2012.

Comparing the 2010 to 2006, the largest increase is recorded for households with five members (3.4 pp.), and the largest decrease for households with one (-3.0 pp.) or two members (-2.8 pp.).

Percentage of poor by educational level of the head of household. The largest number of poor is recorded in the category of people with incomplete primary education and primary education. It is evident that the level of education has a direct impact on the poverty of society. Among the population with college or university education a lowest percentage of poor people is apparent (Table 8).

Table 8. Percentage of poor by educational level of the head of household

Year \ Education	2006	2007	2008	2009	2010
Uncompleted primary school	21.0	18.8	9.0	14.8	14.2
Primary school	13.7	13.2	10.5	9.2	12.7
Secondary school	5.5	5.4	4.8	3.0	4.8
High school	0.6	0.1	2.7	1.8	2.4
Higher school	1.8	0.4	1.9	0.6	0.8
Total	8.8	8.3	6.1	6.9	9.2

Source: Social Inclusion and Poverty Reduction Unit and SORS, 2012.

Comparing the 2010 to 2006 we can see a decline in the poor population in all categories, except in the case of a person with a college education. General conclusion is that higher education creates less chance for heads of households of falling below the poverty line.

Percentage of poor by socio – economic status of the head of household. The highest percentage of poor people among heads of households in 2010 belongs to the category of unemployed (17.9%) and to the category of other inactive population (17.1%), (Table 9).

Table 9. Percentage of poor by socio – economic status of the head of household

Year Socio – economic status of the head of household	2006	2007	2008	2009	2010
Self-employed	10.2	10.9	5.1	6.0	9.7
Employees	5.2	5.3	3.9	4.6	5.2
Unemployed	14.7	10.9	16.9	17.5	17.9
Retirees	8.8	7.6	5.7	6.1	6.1
Other inactive	28.2	24.2	15.5	29.3	17.1
Total	8.8	8.3	6.1	6.9	9.2

Source: Social Inclusion and Poverty Reduction Unit and SORS, 2012.

Rural population in the Republic of Serbia is more exposed to poverty, especially multi-member households with several children and unemployed and less educated heads of households.

Conclusion

Generally, in the five years period observed in this paper, absolute and relative line of poverty were increasing constantly (the value of the monthly food basket), while the poverty rate varies (decreasing in the period 2006-2008 and growing in the period 2008-2010). In accordance with previous findings, it is reasonable and obvious explanation that there is a simultaneous increase in unemployment and inflation, which in turn affects the growth rates of poverty in Serbia.

Poverty, quality of life and the degree of vulnerability of the population are the main determinants of inequality and lack of social justice viewed in urban as well as in rural areas. When it comes to fair and equitable social policy in relation to rural areas, this issue should be considered in three levels. The *first level* is related to the general support for the development of rural areas. The *second level* involves consideration of the rural characteristics that make them different from urban areas. The *third level* involves specific recognition between the very rural territories (Živkov *et al.*, 2012). Poverty is more pronounced in rural areas, caused by lower wages and incomes, poor infrastructure, etc. But, whether rural poverty causes poor demographic structure of the population, or some other reason of lagging, the social policy of the state would have to be the same for all citizens. The fact that poor live in rural areas should not lead to deterioration of the principle of equality in the rights for all citizens of the Republic of Serbia.

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KATEGORIZACIJA SIROMAŠTVA U REPUBLICI SRBIJI U PERIODU 2006-2010⁷

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Rezime

Cilj rada je realno sagledavanje siromaštva u Republici Srbiji u periodu 2006-2010. godine korišćenjem podataka Republičkog zavoda za statistiku Srbije (RZS). Siromaštvo u Republici Srbiji prati se od 2006. godine primenom metode indeksa potrošačkih cena (CPI). Metod rada baziran je na korišćenju podataka RZS-a i Tima za socijalno uključivanje i smanjenje siromaštva (kabinet potpredsednice Vlade za evropske integracije Republike Srbije), kao i rezultata istraživanja relevantne domaće i strane literature. U radu je analiziran procenat siromašnih prema: tipu naselja, regionalnoj rasprostranjenosti, tipu domaćinstva, godinama starosti, učešću dece i odraslih, stepenu obrazovanja i socio-ekonomskom položaju nosioca domaćinstva. Rezultati istraživanja iz 2010. godine ukazuju da je siromaštvo najrasprostranjenije u Centralnoj Srbiji (12,0%) i među stanovništvom koje živi na vangradskom području (13,6%), u višečlanim domaćinstvima (16,4%), domaćinstvima čiji je nosilac nižeg obrazovnog nivoa (14,2%), kod dece do 13 godina starosti (13,7%) i kod nezaposlenih lica (17,9%). Činjenica da neko ko je siromašan živi na selu ne bi trebalo da dovodi do umanjenja prava koje imaju svi građani Republike Srbije.

Ključne reči: *siromaštvo, procenat siromašnih, kategorije siromašnih.*

7 Rad predstavlja deo istraživanja na projektu 46006: *Održiva poljoprivreda i ruralni razvoj u funkciji ostvarivanja strateških ciljeva Republike Srbije u okviru dunavskog regiona*, kao i na projektu 179028: *Ruralno tržište rada i ruralna ekonomija Srbije - diverzifikacija dohotka i smanjenje ruralnog siromaštva*, finansiranih od strane Ministarstva prosvete, nauke i tehnološkog razvoja Republike Srbije.

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