Review Article

Economics of Agriculture 3/2013 UDC:331.56:631.1(497.113Vrbas)

ANALYSIS OF GENDER EQUALITY AND EMPLOYMENT IN THE VRBAS MUNICIPALITY

Olgica Bošković¹, Slavica Otović²

Summary

Transitional changes in Serbia have contributed to drastic rise in unemployment rate, significantly impacting women in rural areas. The constant rise of unemployment has increased the gap between rich and poor, causing many families to file for bankruptcy. Regular changes in the market place have enabled flexibility within operational and strategic planning for business. Solving unemployment problem should start at municipal level, where understanding of statistical analysis as well as considering non-statistical information is crucial. In order to measure results from the gathered information and create guidelines, involvement of professional services, advisory bodies and committees is needed. The potential development of Vrbas municipality as well as positive economic outcome on global level starts with the fertile soil, agricultural sector, agro-tourism and rural development.

Key words: transitional changes, employment, gender equality, rural development, agro-tourism

JEL: J01, J16

Introduction - unemployment as a direct result of transition

Vrbas was considered one of the economically developed municipalities with a long tradition in the production and processing of agricultural products in the Republic of Serbia, and the former Yugoslavia. The industry had the most significant part in the economic structure of the municipality earned income (58% of GDP). Company, or better to say former socio - agricultural products processing enterprises are mainly located in the work zone on the move - Vrbas and Kula, and before privatization they represented one of the most important factors of economic development of the municipality and the region: Factory oils and vegetable fats "Vital", Met Industry "Carnex", Sugar factory "Bačka" and Confectionery Industry "Medela". Famous brands are Vital margarine, Carnex pate, Medela "Štrudlice" (as well as other products such companies) that are so

¹ Olgica Bošković, Ph.D., Associate Professor, University of Belgrade, Faculty of Economics, Kamenička Street 6, Belgrade, Phone: +381 64 846 506, E-mail: <u>olga@ekof.bg.ac.rs</u>

² Slavica Otović, M.Sc., Head of President's Office, the municipality of Vrbas, Maršala Tita Street 89, Vrbas, Phone: +381 64 805 3154, E- mail: <u>slavica.otovic@vrbas.net</u>

recognizable across the Vrbas old Yugoslavia, and the Middle East market. Data on the number of employees in the company Vital says that since about 1200 workers, after privatization was reduced on about 200, talking about the imperative rationalization of market-oriented production, but also extremely disadvantaged social status around 1000 employees (actually 1000 families \rightarrow 1000 x 4 = 4000 people) who have lost their sources of income and ultimately the means of subsistence. Similarly, but in a much milder form of restructuring happened to other agricultural companies, bringing the Vrbas municipality position where, how jokingly talked about among the local population, was not employed "only one who did not want" - the devastating figures of over 7.000 unemployed.

In addition to developed industry, the tertiary sector of the economy has had a great significance trough in the development trade of manufactured products (partially and the raw materials) and catering industry that has been developed primarily through hunting tourism. Organized groups of hunters from home and abroad, had enjoyed in the abundance of wildlife, untouched nature on the stretch the settlements Kucura and Savino Selo, homemade meals, rural handicrafts and Agro-tourism. The newly established legislative framework that disables bringing out meat without the use of adequate storage transport vehicles, and without previous laboratory testing, hunting tourism has decimated. The consequence of untimely responses to the logical health measures in the storage and transfer of prey, the political situation and marginalization of our country, has conditioned the substantial direct consequences on significant possibility of earnings in populated areas, even in the whole municipality. Logically, this led to a reduction of income from the exercise of traffic, international trade relations and storage.

During the events of 90-years in Serbia and on the territory Vrbas municipality, due to transitional changes, but and acting of law and market there has been a decline of metal manufacturing industry, wood - processing and textile industries. Enterprises in Vrbas - metal industry "Metalogradnja", chemical Industry "Mepol", timber industry "Drina", knitwear industry "DP VIP", textile industry "Svilara Vrbas", construction company "Napredak", "Progres", etc. are ended up in bankruptcy and ultimate liquidation.

Cessation of knitwear, silk and others companies where women are largely employed (due to the nature of the job), has further threatened the economic status of women and gender equality. The salaries of employees in these product areas, typically been lower than other agricultural companies - manufacturing and food production in the municipality, and in these companies are mostly women working in jobs that are poorly paid in relation to the tasks they perform male employees half. A drawback of the women who lost their jobs cessation of these companies is that they mostly belonged to the age group over forty years and worked in jobs with lower education, and their redeployment and retraining required dealing with the problem of non-competitive age, the transition to the revised the labor market.

The aim of the paper is making a mini action plan in the form of recommendations to the competent institutions, and in the direction of economic empowerment and employment in the municipality of Vrbas (especially women in the urban areas of the municipality), as part of the Commission for Gender Equality.

Methodology

The following data will display: trend - the cycle of employed, the unemployed and employment at State level (Source: Statistical Office of the Republic of Serbia), review of unemployed Vrbas unemployed by educational attainment and sex, an overview of the unemployed by length of unemployed people by length of unemployment (the reporting period of December 2012 National Employment Agency – Department Vrbas), percentage of unemployed women in the comparison period, April 2011 - December 2012, and female unemployment in the urban areas of the municipality of Vrbas in relation to its population.

The analysis will compare the female unemployment rate compared to the male population in the urban areas of the municipality and the city; compare the ratio of unemployment in populated places Vrbas municipality (villages) and in the Vrbas town.³

Starting function of gender equality in employment

One of the most significant instruments of local self-help women is Commission to monitor in the monitoring and implementation of gender equality Vrbas municipality that functions 10 full years, regardless of the political structures authorities. Even though her role is primarily advisory, the Commission has established a network of cooperation with the following institutions: Provincial Secretariat for Economy, Employment and Gender Equality, local NGOs, Center for social work, police, schools, the Prosecutor's Office, the Health Center "Veljko Vlahović", Vrbas General Hospital, representatives of the media, the National Employment Agency - trying to synergistic action of pressure and media influence on public opinion and produce a concrete action of the local community. Successful work of the Commission is reflected primarily in recognizing problems encountered by women face (and not just women) in everyday life: family violence, health problems and unemployment. Starting from 2008, as a part of the planned activities of the Commission in cooperation with the NGO's "Autonomous Women's Center", continuous operation counseling "For a life without violence" have been organized. The goal of Counseling is that victims of violence of any kind in a patriarchal middle primarily be instructed to ask help. Doctors of different specialties have helped many victims (of both sexes) to document the psychological, physical, sexual, and economic violence - allowing their rights supported seek arguments and institutions of the judiciary, the police, etc.

Health care is raised to a higher level with check-ups like "Open doors" on the departments of Health and Hospitals or "Health bazar" (both in town and in residential areas), where patients in a simple way, without an appointment, and health

³ The goal of the analysis imposed the selection of the most recent data which dating from December 15th 2012 (reporting period to December 2012), the sake of comparison the data from the study of the Commission for Gender Equality of Vrbas municipality (April 2011) and the choice of stratified sample of four occupational groups with the highest rate of unemployment of both of these period.

cards can inspect his health, and, if necessary, be referred for further treatment. Held a series of educational lectures on reproductive health, as well as the transition on the occurrence of depression in women.

"In cooperation with the U.S. National Institute (NDI) conducted activities on data collection and analysis of unemployment in the municipality with special emphasis on the number and structure of women, both in town and in the settlements of Vrbas municipality"⁴

The result of the analysis pointed to the large number of unemployed young professionals as well as women with lower levels of educational attainment. In cooperation with local authorities and the Provincial Secretariat for Labour, Employment and Gender Equality, with project "First Chance" in 2012 was employed 25 young people - 13 women (7-high school education; 6-college education), while gerontology nurses training project employed 40 women for help older people, and people with special needs (high school degree).

Analysis of unemployment

Economic policy at the state and local level is based on updated information on current movements in the economy, as well as their long-term and / or cyclic behaviour.

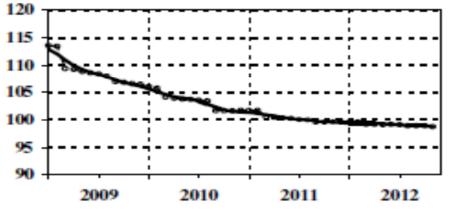


Chart 1. Total employment (at the level of the Republic Serbia per year)

Agenda: Ø 2011 = 100; ----- trend - cycle component; --- o --- the original series. *Source:* Republic Institute for Statistics (2012): Employment Trends as of December 2012, pg. 25, available at: <u>www.webrzs.stat.gov.rs/WebSite/Public/PublicationView.aspx?pKey...1</u>

⁴ Bjelivuk, A. (2012): An example of good practice, Voice, independent newspapers, XL, pg. 7, Vrbas.

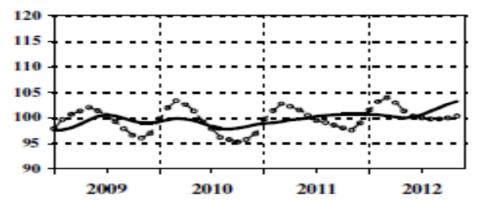
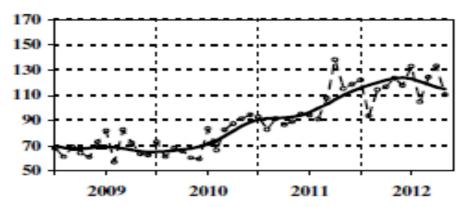


Chart 2. Unemployed (at state level)

Agenda: Ø 2011 = 100, ----- trend - cycle component, --- o --- the original series Source: Republic Institute for Statistics (2012): Employment Trends as of December 2012, pg. 26, available at: www.webrzs.stat.gov.rs/WebSite/Public/PublicationView.aspx?pKey...1

Chart 3. Employment records - National employment agency - RS



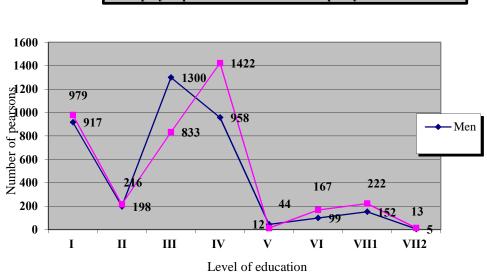
Agenda: Ø 2011 = 100, ----- trend - cycle component, ---- o --- original series. Source: Republic Institute for Statistics (2012): Employment Trends as of December 2012, pg. 25, available at: www.webrzs.stat.gov.rs/WebSite/Public/PublicationView.aspx?pKey...1

Comment: One of the base indicators is the trend of employment, the (above - mentioned) chart shows the trend - cycle component, along with the original monthly data, at the level of the Republic Serbia. In the tables listed original data, base or chained index - for the current year and the previous two years. Index data base is updated calculating the index of the every current year, compared to the average of the previous year as the base ($\emptyset = 100$). "In the third quarter of 2012, total employment (note of author: at the state level) is 0.6% below the average of 2 compared to the average of the previous year as the base the 201, and by 0.3% compared to the third quarter of 2011. For the first eleven months of the 2012 total

employment is 0.9% less than the average from 2011, and for 1.2% less than of total employment for the first eleven months of 2011."⁵

On the unemployment register the National Employment Agency - Department Vrbas at the end of the reporting period of 2012, there were 7538 registered people, of which 3865 are women.

Chart 4. Unemployed persons in Vrbas municipality, December 2012.



Unemployed pearsons in Vrbas municipality - December 2012.

Source: Employment Action Plan for the Municipality of Vrbas, 2013, pg. 5

Comment: The chart shows that in the Vrbas municipality higher unemployment of women. The exception is the third level of education, where unemployment significantly is higher at male population.

⁵ Source: Republic Institute for Statistics (2012); Employment Trends as of December 2012, page 25, available at:

http://www.webrzs.stat.gov.rs/WebSite/Public/PublicationView.aspx?pKey...1

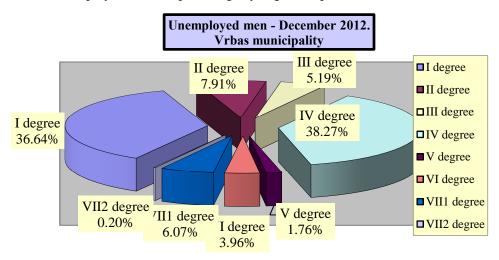
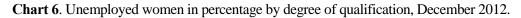
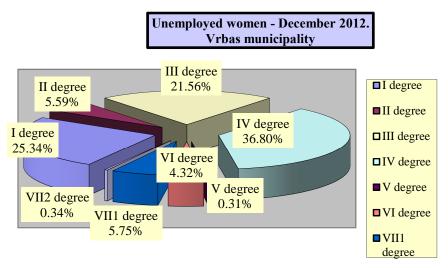


Chart 5. Unemployed males in percentage by degree of qualification, December 2012.

Source: Employment Action Plan for the Municipality of Vrbas, 2013, pg. 5





Source: Employment Action Plan for the Municipality of Vrbas, 2013, pg. 5

Comment: Percentage comparison of unemployment of both sexes per educational attainment, we came to the following results: I degree - men 24.97%, women 25.34%, II degree - men 5.39%, women 5.59% III degree - men 35.39%, women 21.56%, IV degree - men 26.08%, women 36.80%; V degree - men 1.20, women 0.31%; VI degree - men 2.70%, women 4.32%; VII1 degree - men 4.14%, women 5.75% VII2

degree - men 0.14%, 0.34% of women. Given the presented data it can be concluded that there is a relatively balanced unemployment both sexes, except with a lower degree of professional education, that assumed (III, IV) the involvement of physical characteristics, or possible gender inequality compared to female sex.

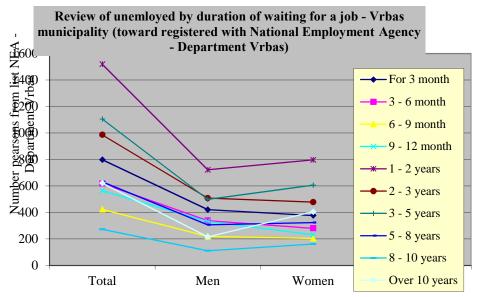


Chart 7. Review of unemployment duration of waiting for a job

Source: Employment Action Plan for the Municipality of Vrbas, 2013, pg. 5

Comment: The length of unemployment is significantly bigger for women in period over 10 years, which indicates the possible inelasticity compared to men in sense of retrain, acquiring new knowledge and skills of women who are in transition changes lost their jobs, or they lost during the privatization process.

Further analysis will show the original the data NEA – Department Vrbas outpost on the review of the unemployed persons on the day of April 30th 2011 and at the end of the reporting period, the 2012, with special emphasis on women in the town and settlements Vrbas municipality. "The rejection of information relating to the missing data can be correctly only if they are complete units that represent a random subsample of the original sample. This are simply checks by comparing laws of probability the specific variables (Yi), which is based only on the complete data, with the law of probability Yi2, which is now based on the missing data, and they were determined to enter into the original sample. Such procedures for testing are useful, but have weak power making decision when is small the percentage of missing data."

⁶ Vasic, V. (2001): Design of experiments and analysis of multi-dimensional variables in the statistics of data loss, Statistical Review, XLX, 1-2, pg. 119

The analysis is based on complete data, but have been omitted certain occupational groups with incomplete data, and smaller number of unemployed persons.

Data on unemployment will be compared with the number of population as relationship of *stratified sample* in relation to the overall sample of the unemployed. Stratified sample of unemployed represents occupations groups ([1] education, administration, law; [2] healthcare; [3] economics, finance, management; [4] beauty care, sports) with significant unemployment rates of both sexes.

For example:

Table 1. Unemployed in Vrbas 30.04.2011./15.12.2012. - Occupational groups:education, administration, law.

Education, Admin. Law	Entitled education	Total number	Women	Vrbas	Bačko Dobro Polje	Zmajevo	Ravno Selo	Savino Selo	Kucura
Prof. of Class	VII	28 /18	25/16	16/13		2/0	3/1	1/0	3/2
Prof. of Phil. and Logic	VII	3/2	3/2	3/2					
Prof. of History	VII	2/3	2/1	2/1					
Prof. Ops. theory	VII	1/0	1/0	1/0					
Prof. of Serbian language	VII	6/4	5/ <mark>4</mark>	4/3					1/ <mark>1</mark>
Prof. of Ruthenian lang.	VII	1/ <mark>0</mark>	1/ <mark>0</mark>	1/0					
Prof. of Italian lang.	VII	4/ <mark>0</mark>	4/ <mark>0</mark>	3/0		1/0			
Prof. of English lang.	VII	1/3	2	2					
Prof. of Art gr. of subject	VII	1/ <mark>1</mark>	0/ <mark>1</mark>						
Prof. of Physical education	VII	9/ <mark>7</mark>	5/1	5/1					
Prof. of Biology	VII	1/0	1/0	1/0					
Prof. of Geography	VII	2/ <mark>2</mark>	2/2	1/2	1/1				
Class teacher	VI	9/ <mark>7</mark>	9/ 7	5/4	1/0		1/0		2/3
Teacher of Russian lang.	VI	1/0	1/ <mark>0</mark>	1/0					
Math teacher	VI	1/0	1/0	1/0					
Univ. assist. of Philosophy	VI	1/ <mark>0</mark>	0/ <mark>0</mark>						
Master sc. and Mathematics	VII/2	1/0	0/ <mark>0</mark>						
Mathematic tech. associate	IV	8/3	5/1	1/1	1/0				3/0
Mathematic progr. associate	IV	1/7	1/ <mark>6</mark>	1/4				0/1	0/1
Philologist	VII	1/5	0/4	0/3	0/1				
Psychologist	VII	1/5	1/5	1/5					
Sociologist	VII	2/1	1/1	1/0	0/1				
Politicologist	VII	2/3	0/1	0/1					
Geographer	VII	2/ <mark>0</mark>	1/0	1/0					
Bech. of Law	VII	32/12	26/ <mark>6</mark>	21/5	4/1	1/0			
Lawyer	VI	10/9	7/ <mark>5</mark>	7/ <mark>4</mark>			0/1		
Uns. lawyers	VI/1	1/0	1/0	1/0					
Legal technician	IV	19/ <mark>18</mark>	11/14	11/ <mark>6</mark>		0/1	0/1	0/2	0/4
Legal operator	IV	2/ <mark>0</mark>	2/ <mark>0</mark>	2/0					
Managi. operator	IV	20/14	18/11	18/ <mark>3</mark>	0/4	0/1	0/1	0/1	0/1
Admin. techn.	IV	8/1	8/1	6/ <mark>0</mark>	2/1				
Uns. admin.	IV	7/ <mark>5</mark>	7/ <mark>5</mark>	7/2					0/3
Bookkeeper	IV	7/11	6/10	6/ <mark>6</mark>				0/1	0/3

Education, Admin. Law	Entitled education	Total number	Women	Vrbas	Bačko Dobro Polje	Zmajevo	Ravno Selo	Savino Selo	Kucura
Administrator	IV	1/8	1/7	1/3	0/1			0/1	0/2
Typist	IV	1/1	1/1						1/1
Auxiliary typist	III	22/18	22/18	22/ <mark>9</mark>	0/1	0/3	0/1	0/2	0/2
Aux.stenotypist	III	1/1	1/1	1/1					
Librarian	IV	1/0	1/0	1/0					
Grammar sch.maturant - ling. direction	IV	4/13	3/7	3/4	0/1		0/1	0/1	
Grammar sch.maturant - natural direction	IV	7/ <mark>3</mark>	2/2	2/1	0/1				
Schoolmaster and assoc. teach.	VII	3/ <mark>5</mark>	3/ <mark>5</mark>	3/4	0/1				
Total number of unemp. persons		238/ <mark>190</mark>	189/ <mark>147</mark>	161/ <mark>89</mark>	9/ <mark>14</mark>	4/ <mark>6</mark>	4/ <mark>6</mark>	1/ <mark>9</mark>	10/23

Source: National Employment Agency – Department Vrbas / Study Commission on Gender Equality of Vrbas

Table 2. Percentage analysis of unemployment on date 30.04 2011. / 15.12.2012.

Parameter		unemployed /15.12.2012	Percentage of unemployed 30.04 2011/15.12.2012		
Total	7845	7538	-	-	
Unemployed - start. sample	997	979	100%	100%	
Total women in the sample	766	735	76.83%	75.08%	
Women in Vrbas	482	418	48.35%	42.69%	
Women in Bačko Dobro Polje	76	73	7.92%	7.46%	
Women in Zmajevo	51	50	5.12%	5.11%	
Women in Ravno Selo	45	50	4.51%	5.11%	
Women in Savino Selo	60	68	6.02%	6.95%	
Women in Kucura	58	76	5.94%	7.76%	

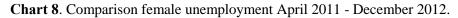
Source: National Employment Agency - Department Vrbas / Study Commission on Gender Equality of Vrbas (by comparison)

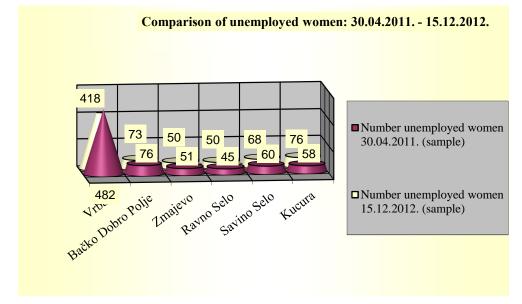
"Analysis of the data presented in this paper is difficult due to the problem of incomplete contingency tables. Formation of statistical tables as primary, compulsory and final tabulation of data types is the first result of statistical research. The statistical tables represent a form of displaying data in a series or summative or suitable form which makes it possible to review the results of statistical surveys as clearly, as well as to facilitate comparison and use of information from them. Contingency tables are a form of statistical tables and today represents one of the most commonly used tables. A particular problem that arises in the analysis of contingency tables analysis tables among their data are 0."⁷

As explained Wickens (1989): "Under most circumstances a few empty cell in a table of data present no difficulties to the analysis. Usually an observed frequency of the

⁷ Boškovic, O. (1997): *Quantitative Methods in Economics*, University of Belgrade, Faculty of Economics, pg. 25-27.

zero only means that the cell is rare, which may or may not be consistent witch the model and is incorporated into the test statistics. Usually an observed frequency of zero only means that the cell is rare, which may or may not be consistent which the model and is incorporated into the test statistics. However, where many cells are empty, adjustments in the degrees of freedom are sometimes necessary. The most obvious case occurs when a line of zeros in the data tables causes a marginal cell used by the fitting algorithm to be zero. If so, the effects, represented by these cells cannot be studies. If, by chance, no left-handed female machinists are sampled in a survey, then nothing can be said about the opinion of the left-handed female machinists as a separate category. Their opinions may not be consistent witch a model that is to be fitted, but without observations, one cannot tell. The analysis must be adapted to exclude the unobserved cell.⁴⁸





Source: National Employment Service – Department Vrbas / Commission for Gender Equality of Vrbas

Comment: At the designated time for a stratified sample of occupations with the largest number of unemployed persons, larger deviations are observes in the number of unemployed women in the urban environment - the number of unemployed women increased from 418 to 482.

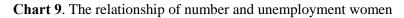
Comparing percentage mean value number of unemployed women in the municipality of Vrbas in stratified sample occupations with the highest unemployment rate at 30 April 2011, $766 \rightarrow 122 = 15.93\%$ and on 15 December 2012, $735 \rightarrow 129 = 17.55\%$, it can be concluded that the unemployment rate increased by 1.62%

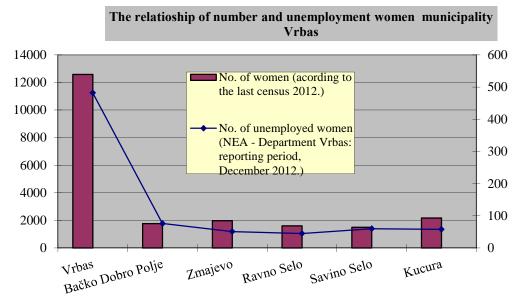
⁸ Wickens, D. T. (1989): Multiway Contingency Tables Analysis for the Social Sciences, p. 7

Teritory	Population	No. of women	Percentage of female population
Vrbas (Municipality)	42092	21660	51.46%
Vrbas	24112	12584	52.19%
Bačko Dobro Polje	3541	1764	49.82%
Zmajevo	3926	1980	50.43%
Ravno Selo	3107	1600	51.50%
Savino Selo	3058	1555	50.85%
Kucura	4348	2177	50.07%

Table 3. Number of population per the last census (2012)

Source: accessed on webrzs.stat.gov.rs/WebSite/Public/PageView.aspx?pKey=162, on 01/08/2012.





Source: Internet (webrzs.stat.gov.rs), accessed on 01/08/2012, and the National Employment Service - Department Vrbas (by comparison).

Comment: Although is indicated tendency of reduced employment of women in urban areas (Chart 8.), the parallel data of the number: woman by the last census in 2012, and the number of women at the last reporting period of December 2012. the National Employment Agency, we get the result of higher unemployment in the urban areas of the Vrbas municipality, especially in the rural areas Bačko Dobro Polje and Savino Selo. It should be stressed that the number of women in the inhabited place Bačko Dobro Polje by the last census (2012), by percentage is the smallest in Vrbas municipality: Bačko Dobro Polje 1764 – 49,82%.

The basic principles of statistical analysis, explains how Wickens (2010) require complete familiarity with meaning of data, significant statistical analysis cannot be performed without the non-statistical data, more non-statistical information gives the possibility for more proper conclusion.

"Roughly said, these principles are obvious, but it is surprising how often they are predictable. A rough distinction can be made between two types of statistical analysis. Sometimes, comes to research by series of already prepared questions. The goal of data analysis is to answer the questions. An analysis of this kind is called rationale analysis... In contrast, research analysis is with data in the mind of graphs and tables, no special issues. Its development is dictated by the data, not (goal - note author) answers to questions, so can be used for research and the confirmation (without the expected the final research results – note authors).

Without planned question for rationale of analysis, the research results of analysis are much weaker. The main goal of the statistical analysis is to separate the real phenomenon from random phenomena. For this reason, examines much wider range of potential results in the research analysis, seeking that evidences for each result be stronger than in the confirmation analysis. Therefore, it is not uncommon that confirmatory analysis answers to the question, but only research analysis may raise the matter for further study."⁹ – explains Wickens (1989).

In the scope of research about (un) employment - especially female population in Vrbas municipality, were used the data investigating the statistical analysis of the Statistical Office of the Republic of Serbia, National Employment Agency - Department of Vrbas, but the results are supplemented by explanations of static comparative analysis in the two time periods (April 2011 and December 2012) in relation to the town area and populated places of the municipality.

Conclusion – Employment opportunities for women through rural development

The statistical analysis revealed that the total number of employed in the Republic of Serbia has decreased by 0.9% in 2011, and 1.2% in comparison to the average employment rate in 2011. At the end of the reporting period of 2012, NEA unemployed register reported 7538 unemployed people within Vrbas municipality, of which 3865 are women.

Duration of unemployment is significantly higher for women in the period over 10 years, suggesting a possible inelasticity compared to men when it comes to retraining, acquiring new knowledge and skills of women who during transition lost their jobs or lost it in the process of privatization process.

Comparing an average value between the number of unemployed women in Vrbas municipality (in a stratified sample of occupations with the highest unemployment rate) on April 30^{th} 2011, $766 \rightarrow 122 = 15.93\%$ and on December

⁹ Wickens, D. T. (1989): *Multi-way Contingency Tables Analysis for the Social Sciences*, p. 5-6, available at: <u>www.amazon.com</u>

15th 2012, the $735 \rightarrow 129 = 17.55\%$, it can be concluded that the unemployment rate of women in Vrbas municipality has increased by 1.62% in less than two years. The initial analysis display decrease in numbers of employed women within urban areas, by comparison between e last census in 2012 of unemployed women and the number of women at the last reporting period of December 2012 from The National Employment Agency, we obtained the data on higher unemployment in rural places of Vrbas municipality (especially in rural areas Bačko Dobro Polje and Savino Selo). It should be noted that based on the last census of 2012, the percentage of unemployed women in the rural area Bačko Dobro Polje is largest within Vrbas municipality: Bačko Dobro Polje 1764 to 49.82%.

Statistical analysis supplemented with non-statistical data of exploratory study of the Commission for Gender Equality indicates that a certain number of women in the in rural areas of the Vrbas municipality are not reported to the National Employment Agency. It is clear that the percentage of unemployed women much higher. Rural women often work on unregistered farms, without the possibility of planning, decision-making and allocating financial gain.

The Commission for Gender Equality of Vrbas municipality has launched a range of important strategies in order to establish action plans and solutions for employment of women (and not just women!) in Vrbas municipality, and wider. Proclamation of gender equality, action to raise awareness about the health culture, education, computer knowledge and so forth, is the first step in addressing the issues of gender equality and employment.

Employment opportunities are directly related to **rural development**, which includes a good infrastructure within urban and rural areas: kindergartens (day-care centres for children), schools, institutions for care of elderly (day-care centres for the elderly, clubs for the aged persons, gerontology homes) hospitals, media availability through public information and internet.

Development of municipalities is directly related to establishing strategies that must include short-term and long-term guidelines for uniform treatment (respecting the localities and specific traditions of certain rural areas). A good starting basis is the recently finalized list of agricultural holdings, as well as an inventory of available resources and agricultural good.

"Analysis of economic implications of the sustainable agriculture can be conducted in light of theories of development thresholds and cost-benefit analysis. In this sense, a lower threshold of development (constraints that lead to increased costs of doing business) may be considered that all investments are made in a given area, but not exceeding a predetermined threshold of profitability. Threshold of development (which eliminates the restriction of a new way of doing business in a particular area) is primarily considered to be all that takes ecological, as well as causing excessive erosion or landslides activate, and accidental pollution of basic environmental media (soil, water and air), the destruction of indigenous flora and fauna. Also, the thresholds of development are considered and all the investments that exceed the threshold of profitability, that is no excuse to increase profits from a new way of doing business."¹⁰

Important foundation of rural development is association of citizens enabling them to exchange ideas and merge capital (considering that women have little to no resources for the production and distribution of products). At the same time it is necessary to focus on **encouraging the development of rural agro-tourism** (hunting tourism, health tourism), which involves developing production of souvenirs, traditional foods, lifestyles as well as planning cultural events.

"The modern world imposes technical-technologically demand to rural areas of Serbia, to network all actors of agro-tourism development, from the smallest, at the local level, to those of the highest, on level of national territory. All the travel society, regional tourism organizations, associations, cooperatives, non-governmental agencies, church and others, must constitute a component network of tourism development interests in all parts of the rural areas of Serbia. It follows, that the challenges of rural areas in tourism activity are also associated activities, primarily through the cluster, tourism stakeholders and partner organizations, in order to ensure the smooth business circulation of labor, capital and other elements of successful tourism development in Serbia. Finally, in order to rural areas of Serbia (Vrbas municipality) could realize all the distinctive challenges of tourism development, must comply with accepted systems of standardization and product quality in rural tourism, as well as at each position, with ratified certificates, to allow unimpeded growth and development of tourism as an integral part of the economic system."¹¹

Next step is obtaining resources for economic empowerment and product placement. This needs to be done at the provincial and state level as well as European Union level (business plan is necessary for applying for European Union funds). Office of Local Economic Development as a mediator enables filling out questionnaires and follow-up projects, offering information on the municipal website.

Consistent actions and media pressure should be used in order to influence formation of public opinion, which is directly reflected in the political response and will. The intention of this kind of pressure is to speed up acceptance of new strategies at local and national level in terms of reducing taxes, taxes for environmental protection, fee reduction if the farms, cooperatives, associations or companies are registered under women.

In conclusion, although Vrbas reflects the patriarchal mentality, there is great potential for solving the issues of gender equality, rural development of

¹⁰ Mrkša, M., Gajić, T. (2013): Sustainable agriculture as a basis for sustainable environmental development of rural municipality Vrbas, Economics of Agriculture, BSAAE, Belgrade, IAE, Belgrade, AES, Bucharest, Vol. 60, No. 1/2013, p. 159.

¹¹ Milenković, S., Utvić, S. (2013): *The challenges of rural areas in Serbia promising tourist activities*, Economics of Agriculture, BSAAE, Belgrade, IAE, Belgrade, AES, Bucharest, Vol. 60, No. 1/2013, p. 75.

municipality and employment. The most of the conditions of the action plan are largely in the process of resolving.

In cooperation with the National Employment Agency - Department Vrbas (and kindness of MSc Goran Kaluðerović, Head of service) data were collected on trends in unemployment in the Vrbas municipality.

Literature

- 1. Bjelivuk, A. (2012): An Example of a Good Practice, Voice, Vrbas, independent newspapers, No. XL, p. 7.
- 2. Bošković, O. (1997): *Quantitative Methods in Economics*, University of Belgrade, Faculty of Economics.
- 3. Milenković, S., Utvić, S. (2012): *The challenges of rural areas in Serbia promising tourist activities*, Economics of Agriculture, BSAAE Belgrade, IAE, Belgrade, AES, Bucharest, Vol. 60, No. 1/2013, p. 75.
- Mrkša, M., Gajić, T. (2013): Sustainable agriculture as a basis for sustainable environmental development of rural municipality Vrbas, Economics of Agriculture, BSAAE Belgrade, IAE Belgrade, AES, Bucharest, Vol. 60, No. 1/2013, p. 159.
- 5. Employment Service Vrbas (2012): *Employment Action Plan of the municipality* of Vrbas 2013, p. 5, Vrbas.
- 6. Municipality of Vrbas (2011): *Study of committee for Gender Equality within Vrbas municipality* (used to analyze the activity of the Gender Equality), Vrbas.
- 7. Republic Institute for Statistics (2012): *Trends of December 2012*, p. 25, available at: www.webrzs.stat.gov.rs/WebSite/Public/PublicationView.aspx?pKey...1
- 8. Vasić, V. (2001): *Design of experiments and analysis of multi-dimensional variables in the statistics of data loss,* Statistical Review, XLX, 1-2, p. 119, Beograd.
- 9. Wickens, D. T. (1989): *Multi-way Contingency Tables Analysis for the Social Sciences*, p. 5-6, available at: www.amazon.com.

RODNA RAVNOPRAVNOST I ZAPOŠLJAVANJE NA PRIMERU OPŠTINE VRBAS

Olgica Bošković¹², Slavica Otović¹³

Izvod

Tranzicione promene u Srbiji dovele su do izraženog problema nezaposlenosti, posebno žena u ruralnim područjima. Trend uvećanja nezaposlenosti uslovio je pojavu ekstremnih ekonomskih razlika kod stanovništva, tačnije - veliki broj porodica je doveden na rub egzistencije. Svakodnevne tržišne promene uslovljavaju proaktivno delovanje i elastičnost u formulisanju kako operativnih, tako i strateških planova u poslovanju. Polazna osnova je isrpna statistička analiza uz niz dodatnih, nestatističkih informacija koji navode na rešenje problema - počev od lokalnog nivoa.U tumačenju rezultata i kreiranju smernica neophodna je pomoć stručnih službi, savetodavnih tela i komisija. Potencijal razvoja opštine Vrbas i umanjenje posledica svetske ekonomske krize nalazi se u plodnom čarnozemu, organizovanoj poljoprivrednoj delatnosti, agroturizmu i ruralnom razvoju.

Ključne reči: tranzicione promene, zapošljavanje, rodna ravnopravnost, ruralni razvoj, agroturizam.

¹² Prof. dr Olgica Bošković, vanredni profesor, Univerzitet u Beogradu, Ekonomski fakultet, Kamenička 6, Beograd, Telefon: +381 64 846 506, E-mail: <u>olga@ekof.bg.ac.rs</u>

¹³ Slavica Otović, M.Sc., šefica kabineta predsednika opštine Vrbas, Maršala Tita 89, Vrbas, Telefon: +381 64 805 3154, E- mail: <u>slavica.otovic@vrbas.net</u>

UDC 338.43:63 ECONOMICS OF AGRICULTURE

CONTENT

1. Marković Todor, Ivanović Sanjin, Todorović Saša REDUCTION IN REVENUE VOLATILITY IN MAIZE PRODUCTION APPLYING THE INDIRECT-INDEX INSURANCE
 Shibaykin Vladimir, Dolbilova Ekaterina CRUDE MILK INDICATIVE PRICES: MECHANISM OF DEFINING AND APPLICATION
3. Stevanović Simo, Milanović Milan, Milačić Srećko PROBLEMS OF THE DEINDUSTRIALIZATION OF THE SERBIAN ECONOMY
4. Baturan Luka ECONOMIC ANALYSIS OF THE BAN ON FOREIGNERS ACQUIRING PROPERTY RIGHTS ON AGRICULTURAL LAND IN SERBIA 479
5. Bošković Olgica, Otović Slavica ANALYSIS OF GENDER EQUALITY AND EMPLOYMENT IN THE VRBAS MUNICIPALITY
6. Chmieliński Paweł LABOUR MARKETS FOR RURAL POPULATION: COMMUTING AND MIGRATION ABROAD
7. Jašarević Alija, Ličina Mile FRANCHISING AS A BUSINESS CONCEPT - CHANCE FOR MANY IN SERBIA
 Kuzman Boris, Tešić Aleksandra, Đelić Anastazija Tanja POSSIBLE ROUTES OF APPROACHING OF SERBIA (AGRO INDUSTRIAL COMPLEX) TO THE EU AND THE WTO 541
9. Mirović Vera, Bolesnikov Dragana APPLICATION OF ASSET SECURITIZATION IN FINANCING AGRICULTURE IN SERBIA

Economics of Agriculture, Year 60, No. 3 (437-6: :) 2013, Belgrade

10. Moroz Serhiy RURAL HOUSEHOLDS IN UKRAINE: CURRENT STATE AND TENDENCIES
11. Munćan Petar, Božić Dragica THE EFFECTS OF INPUT SUBSIDIES ON FIELD CROP PRODUCTION IN SERBIA
12. Papić Brankov Tatjana, Jovanović Marijana, Grujić Biljana AFLATOXIN STANDARDS AND MAIZE TRADE
13. Ratknić Mihailo, Braunović Sonja COST-BENEFIT ANALYSIS OF ESTABLISHMENT OF SCOTS PINE, AUSTRIAN PINE AND SPRUCE FOREST PLANTATIONS
 14. Saravia Matus Silvia, Louwagie Geertrui, Santini Fabien, Guri Gert, Lazdinis Marius, Ilić Boban, Gomez y Paloma Sergio CHALLENGES TO PARTICIPATORY DEVELOPMENT IN A RURAL CROSS-BORDER AREA OF THE WESTERN BALKANS
15. Simonović Zoran, Jeločnik Marko, Subić Jonel TAX POLICY IN SERBIAN AGRICULTURE
16. Vlasković Božin, Miladinović Zoran, Varga Siniša THE CONTENTS AND TERMINATION OF THE STATUS OF AUTHORISED USER OF INDICATIONS OF GEOGRAPHIC ORIGIN OF GOODS AND SERVICES
17. Vukelić Nataša, Živković Jasmina, Okanović Đorđe THE COMPETITIVENESS OF FUNCTIONAL FOOD PRODUCTION 665
18. Correction: Jasmina Ćetković, Aleksandra Despotović, Miroslav Cimbaljević ANALYSES OF ORGANIZATION AND MILK PRODUCTION ECONOMICS ON FARMS IN MONTENEGRO (vol. 59, pg. 9, 2012) 675
19. Correction: Milutin Đorović, Simo Stevanović, Verica Lazić THE WORLD AND DOMESTIC MARKETS FOR TOBACCO AND TOBACCO PRODUCTS (vol. 59, pg. 21, 2012)
20. Correction: Branislav Vlahović, Velibor Potrebić, Marko Jeločnik PREFERENCES OF WINE CONSUMERS ON SERBIAN MARKET (vol. 59, pg. 37, 2012)
21. Correction: Ivan Milojević, Milan Mihajlović, Marko Cvijanović IMPACT OF ORGANIZATIONAL FAILURE OF RELEVANCE CONSOLIDATED BUDGET (vol. 59, pg. 63, 2012)

22. Correction: Slavica Arsić, Nataša Kljajić, Predrag Vuković CATTLE STOCK AND THE ANALYSIS OF TOTAL MEAT PRODUCTION IN THE REPUBLIC OF SERBIA (vol. 59, pg. 99, 2012) 677
23. Correction: Svetlana Roljević, Aleksandra Nikolić, Rajko Tepavac THE CONSUMPTION OF MINERAL FERTILIZERS AND WATER RESOURCES' QUALITY IN THE EUROPEAN UNION AND THE REPUBLIC OF SERBIA (vol. 59, pg. 139, 2012)
24. Correction: Jasenka Bubić, Jasmina Hajnrih THE ANALYSES BUSINESS PERFORMANCES OF AGRICULTURAL ENTERPRISES IN VOJVODINA DURING THE CURRENT CRISIS (vol. 59, pg. 183, 2012)
25. Correction: Bojana Kovačević, Tamara Gajić, Mirjana Penić JOB SATISFACTION AMONG THE EMPLOYEES IN NOVI SAD'S TOURIST AGENCIES (vol. 59, pg. 217, 2012+
26. Correction: Vesna Miletić, Dušan Milosavljević, Boban Kostić INSTITUTIONAL INVESTMENT POLICY FRAMEWORKS FOR THE AGRICULTURE OF THE REPUBLIC OF SERBIA (vol. 59, pg. 363, 2012)
27. Correction: Slobodan Nešković AN AGRICULTURAL PRODUCTION AS A SIGNFICANT AREA OF A STATEGY OF ECONOMY DIPLOMACY OF SERBIA (vol. 59, pg. 589, 2012)
28. Correction: Simo Stevanović, Milutin Đorović, Milan Milanović THE DEVELOPMENT OF THE MARKET PRODUCTION OF CEREALS IN SERBIA: EXAMPLE WHEAT AND CORN (vol. 59, pg. 617, 2012)
29. Correction: Snežana Krstić, Slavko Vukša, Slobodan Andžić THE ROLE OF THE NATIONAL BANK IN CREATION OF PUBLIC DEBT OF INDEPENDENT KINGDOM OF SERBIA (vol. 59, pg. 687, 2012)