

Full Length Research Paper

Satisfaction with living conditions in rural areas near urban centers: A case of Zagreb, Croatia

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Rural areas near city centres show significant demographic, infrastructural and economic differences in relation to remote ones. This is especially pronounced in countries experiencing significant, often sudden political, economic and other changes in a short period of time. Having become independent in 1991, the Republic of Croatia had replaced planned economy with the market economy, undergone a five-year period of war and in 2013 it will become a full member of the European Union. Generally speaking, rural areas can be preserved only by dealing with difficulties emphasized by domicile inhabitants as an element of the quality of life. Thus, depopulation can be prevented and attractive conditions can be created in order to make these areas immigration targets. This paper describes a research on the satisfaction of inhabitants with life in the rural areas of Zagreb, the capital of Croatia, the problems they are facing and measures of state support they consider necessary in solving major difficulties.

Key words: Rural area, urban centers, quality of life, Republic of Croatia.

INTRODUCTION

As of mid 20th century suburban areas of large cities in economically developed countries of the world become focal points of dynamic development. This process first appeared in the 1930s in the USA, and then in West Europe and Australia. The population growth of urban areas (partly as a consequence of baby boom) conditioned a demand for new housing space which, speeded by auto mobilisation, brought to the revalorization of the city surroundings. Cheaper land contributed also to the attractiveness of peri-urban areas (Mee, 2002). Planned measures, primarily in the USA, substantially influenced a dynamic demographic development of the city surroundings (Pacione, 2005).

Somewhat later, in the 1970s and the 1980s, demographic reasons of strengthening suburban zones were joined by economic ones as well. Many European countries experience spontaneous diversification of

economic activities in the transition urban-rural area. Economic consolidation of suburban zones was instigated by settling many small and medium companies that found their place on the world market. They got better adapted to the requirement of modern market (small lots of products, flexible organization, networked business and the like) (Saraceno, 1994). Their settling in minor centres of peri-urban zones explains the transfer of the "gravitation centre" of economic activities from the parent city towards local economies, thus the ones in rural areas too. In this process, the importance of agriculture is on a decrease. Nevertheless, the development based on the complementarities of modern technologies with traditional activities of agricultural areas is often emphasized as a measure of planned development policy of rural-urban inter-area (Cabus and Vanhaverbeke, 2003).

Social and environmental reasons are also important in understanding the dynamic growth of suburban areas. Saraceno (1994) points out how large urban concentrations generate new demand for rural areas. There occurs new sensitivity towards rural area that reflects incapability

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of urban areas to reproduce during time the conditions of their initial success in early phases of industrialization. As reasons for that, he states "that the costs of living and working in urban areas rise much faster than the income, then that negative effects of pollution have reduced the quality of living in urban areas and that the cost, the possibilities of habitation and of safer environment are more positive in rural areas". This is evidenced in examples of the world's cities for a long time already: London (Harrison, 1983), Sydney (Mee, 2002) and Rome (Battisti and Gippoliti, 2004). There is a multitude of definitions and models defining the term "quality of life". One of the rather comprehensive definitions define the quality of life "as an overall, general welfare that includes objective factors and subjective evaluation of physical, material, social and emotional fare, together with personal development and purposeful activity, and all evaluated through a personal set of values of a particular person" (Felce and Perry, 2006). However, still there has been no agreement about the definition of the quality of life, or the universally accepted "gold standard" of measuring. Rural area and the quality of life are often being brought into a common context. Yet, one cannot talk about equable quality of life in a rural area, as there are large differences between certain regions, even within one and the same region, being either a matter of environmental, economic and/or social criteria. The basic characteristic of rural areas is, on the average, insufficient access of population to the basic infrastructure both municipal and social one (Grgić et al., 2010).

Geographers have been dealing with the issues of the quality of life for several decades now. At first, the research was based on statistical analyses of numerous indicators and their cartographic presentation. The term quality of life in such analyses is approached as an objective category. Recently, such approaches are being supplemented with the research on subjective aspects of the quality of life. They are oftener reached for when researching on lower area levels, and the methods used are interviews, surveys and the like. Pacione (2005) points out that for proper understanding of the quality of life one needs to combine subjective and objective aspects of the quality of life or as he puts it "one needs to consider a real city in the area and a mental city in people's heads".

Great attention was dedicated to research of the city surroundings in the world literature especially in developed countries of the world where the process of suburbanization has gone the farthest (Campion, 2001; Pacione, 2005; Walker, 1981). Demographic and socio-economic aspects of suburbanization are getting deeper and deeper by researching on the quality of life. The quality of life is most frequently defined as the "condition of social welfare of individuals or groups, either in the way experienced by individuals or determined by measurable indicators" (Johnston, 2001). There is an array of possibilities to choose indicators. To analyze the

quality of living in Glasgow, Pacione (2003) used 64 different indicators related to demographic, social, economic and housing conditions. Seferagić (1993) points out that "elements of the quality of life could be listed to the infinity ... and one should select only the most important ones".

In his research he uses indicators of being equipped with elements for everyday life, availability of choice, access to information, security and decision making.

Rural area of the City of Zagreb is getting ever more prominent place for the quality living and working of the local population. Advantages of living in rural area of the City imply natural environment, absence of crowds and stresses brought by city life, and at the same time infrastructure, which is developed in the majority of settlements or can be found immediately near or in the urban part of the City.

Although the process of suburbanization is a topic present in geographical research in Croatia, lower area levels (like municipalities and settlements) have been rarely researched on, and the aspect of the quality of life has not been researched on at all. Papers by Seferagić (2000) are distinguished among many sociological papers on theoretical approaches to the research on the quality of life and the empirical analysis of the quality of living in the surroundings of Zagreb (Seferagić, 2000).

Until recently, the process of suburbanization of Zagreb was primarily secondary urbanization of former villages in the vicinity of the City, unlike many countries that applied the planned process. Time distance can also be observed: the intensive suburbanization of Zagreb begins in the 1970s, about twenty years after the same process in economically developed countries. Unlike economically developed countries where objective indicators of the quality of living in the suburban area such as infrastructure equipment and social and non-social functions are on the level of urban ones as a rule, the lack of it in Croatia is perceived as the greatest deficiency (Grgić et al., 2007).

MATERIALS AND METHODS

This paper aims to identify the level of satisfaction with the quality of life of people living in the rural area near an urban centre, the biggest problems they are facing and the role the State should have in solving these problems.

The basic data source used is the survey results. The research was conducted in July and August 2009 in 68 settlements of the rural area of the City of Zagreb by random choice of households and respondents. In total, 639 persons took part in the survey. The structure of respondents by settlements corresponded to the structure of the total number of inhabitants in this area and respondents had to be adults (over 18 not from the same household).

The questionnaire consisted of open questions and assessment questions with Likert type scale used for giving answers. Independent variables used are age, gender, educational level, profession and ownership of an agricultural household.

In the beginning, a null-hypothesis was formulated:

Table 1. Satisfaction with life in rural area.

Degree of satisfaction	Frequency	Percent	Valid percent	Cumulative percent
Very satisfied	120	18.8	18.8	18.8
Satisfied	310	48.5	48.5	67.3
Neither satisfied nor dissatisfied	148	23.2	23.2	90.5
Dissatisfied	38	5.9	5.9	96.4
Very dissatisfied	23	3.6	3.6	100.0
Total	639	100.0	100.0	

Source: Survey "Assessment of the Current Status and the Possibility of Rural Area Development on the Territory of the City of Zagreb for the Period from 2009 until 2016", July and August 2009.

H₀- regardless of age, gender, educational level, profession and ownership of an agricultural household, respondents are equally satisfied with living in the rural area, they have similar attitudes about the biggest problems facing the rural area and attitudes about the way the State should influence the improvement of the quality of life.

The survey data were processed with SPSS (*Statistical Program for Social Sciences 14.0*) package for statistical data processing and presented in tables and diagrams, and the χ^2 test was used to determine the connection between variables.

RESULTS

Basic characteristics of the researched area

Croatia is a country of central-east Europe with land area of 56.594 km² inhabited by about 4.4 million people. Since 1991 Croatia has passed the transition from planned to market economy and it is expected that in 2013 it will become the 28th member of the European Union. Croatia is a net importer of agricultural and food products (27% trade deficit), and agricultural production makes for 4% of GDP.

According to the EU criterion¹, the rural area of Croatia covers 47920 km² or about 90% of its continental territory. In 2001, 1.611.740 out of 4,437,000 inhabitants of Croatia in total lived in rural areas². The City of Zagreb is an economic, cultural and political centre of the Republic of Croatia. Approximately 18% of inhabitants of the Republic of Croatia live therein and participate in the GDP of Croatia with about 31%³. Rural area of the City includes 68 settlements most of them having less than 1000 inhabitants. In the period from 1991 to 2001 it has been an immigration area and the number of inhabitants increased by 20%. According to the Agricultural Census of 2003 there are slightly over 14,000 agricultural households on the territory of the City with about 20,500 hectares of agricultural land, and about 13,200 ha (64.6%) are being utilized. The basic characteristic of

these households is small average land area (less than 1.5 ha) broken down into many parts. Approximately half of the total number own up to 0.5 ha (45.8%) and as many as 90% up to 3 ha.

Socio-demographic features of the sample

The majority of respondents were men (79.8%), of an average age of 53 (male 54.4 and female 47.6). An average family in the sample has 4.1 members. Almost two thirds of respondents have a secondary school degree, and a significant percentage have only a elementary school (26.7%).

There were also 3.5% of respondents without any school degree. About 10% have a formal or informal agricultural education. The majority of respondents are employed non-farmers (31.2%), farmers (23.8%) and pensioners (20.1%). The majority in the sample (54.5%) does not live in a agricultural household.

Satisfaction with living in rural area

Very often the feeling of being satisfied with living in a certain area is subjective. Most often, the respondents compare their living area with the one closest to them, which is in this case the City of Zagreb. The City centre in the last twenty years is characterised not only by high prices of housing but by everyday crowds and the feeling of an individual being lost. Most respondents (67.3%) are satisfied with life in the rural area, and a much smaller percentage declare that they are dissatisfied (9.5%). Somewhat more than one fifth (23.2%) is neither satisfied nor dissatisfied (Table 1).

The satisfaction with living in rural area expressed by respondents results from the quality of the environment (water, soil, clean air), from living in a smaller community (less city noise and crowd, more interaction between villagers) and from the vicinity of Zagreb and availability of cultural, social and other programmes. The largest deficiencies affecting (dis)satisfaction include undeveloped and unfinished infrastructure, but also the lack of cultural, entertaining, educational and sports-recreation programmes especially for younger population.

¹ In addition to the EU criterion (150 inhabitants per km²), the OECD criterion is also often applied using the term rural for areas with less than 100 inhabitants per km².

² Census 2001, Statistical Bureau of Statistics of the Republic of Croatia

³ Statistical Yearbook of the City of Zagreb, 2010

Table 2. Respondents' satisfaction with life in the rural area of the City of Zagreb with regard to gender, age, education level, profession and ownership of an agricultural household.

		Very satisfied and satisfied	Neither satisfied or dissatisfied	Very dissatisfied and dissatisfied	χ^2	P
Gender N= 630	Male	67.4	22.9	9.7	2.786	0.594
	Female	66.9	24.4	8.7		
Age N= 639	19-25	83.3	0.0	16.7	24.172	0.235
	26-35	63.6	20.5	15.9		
	36-45	65.4	25.7	8.8		
	46-65	66.4	25.2	8.5		
	Over 66	73.2	17.0	9.8		
	Unknown	65.2	21.7	13.0		
Education level N= 621	University or college	63.6	27.3	9.1	7.902	0.793
	Secondary school	68.3	22.2	9.6		
	Primary school	66.9	24.7	8.4		
	No school	63.6	18.2	18.2		
Profession N= 626	Farmer	71.1	22.8	6.0	14.085	0.592
	Employed non-farmer	61.5	26.7	15.4		
	Craftsman or entrepreneur	72.2	22.2	2.7		
	Pensioner	69.0	20.6	8.7		
	Other	67.9	21.4	6.0		
Agricultural household N= 639	Yes	74.9	18.2	6.9	17.205	0.002
	No	60.9	27.3	11.8		

Source: Survey "Assessment of the Current Status and the Possibility of Rural Area Development on the Territory of the City of Zagreb for the Period from 2009 until 2016", July and August 2009.

There is no statistically significant difference between examinees when assessing the satisfaction with living in rural area regarding their gender (χ^2 2.786; P – 0.594), age (χ^2 - 24.172; P – 0.235), education level (χ^2 - 7.902; P – 0.793) and profession (χ^2 - 14.085; P – 0.592). There is significant difference in life satisfaction in relation to ownership of an agricultural household (χ^2 - 17.205; P – 0.002) (Table 2). There are some differences in life satisfaction regarding certain characteristics especially in the categories "very dissatisfied and dissatisfied". Dissatisfaction is more pronounced with younger respondents (up to 35 years of age), those with low levels of education and those who are not farmers.

The greatest problems in the settlement of examinees

Respondents mention poor municipal infrastructure (32.6% respondents) as the biggest problem of their settlement that is, the lack of water supply line and gas for

households, unsolved sewage regulations, drainage and the like, which is often caused by settlements being scattered around and the solution of which requires substantial financial resources. Inadequate traffic connections with urban centre and bad roads are a problem for 15.7% respondents, and the lack of social and cultural events for 11.6% of the sample. Although agriculture as a formerly dominant activity of the rural area slowly "retreats", the related problems and its general position are high on the problem scale (8.9%). Other problems of the rural area are the lack of shops and nurseries (8.2%), unemployment and low standard (5.6%), untidy public surfaces (4.3%) and the lack of the young people (2.4%) (Table 3).

There is no statistically significant difference when assessing the greatest problems of rural area regarding gender (χ^2 - 8.512; P– 0.809) and education level (χ^2 - 40.391; P – 0.409). There are significant differences regarding age (χ^2 - 95.095; P – 0.009), profession (χ^2 - 100.737; P – 0.001) and ownership of an agricultural household (χ^2 - 35.430; P – 0.001).

Table 3. The biggest problem in the respondents' settlement.

	Frequency	Percent	Valid percent	Cumulative percent
Bad municipal infrastructure	191	29.9	32.6	32.6
Bad connection with the city and bad roads	92	14.4	15.7	48.3
Lack of social and cultural programs	68	10.6	11.6	59.9
Other	63	9.9	10.8	70.7
Agricultural problems	52	8.1	8.9	79.5
Lack of shops, nurseries etc.	48	7.5	8.2	87.7
Unemployment and low standard	33	5.2	5.6	93.4
Untidy public surfaces and pollution	25	3.9	4.3	97.6
Old population, lack of the young people	14	2.2	2.4	100.0
Total	586	91.7	100.0	
Missing	53	8.3		
Total	639	100.0		

Source: Survey "Assessment of the Current Status and the Possibility of Rural Area Development on the Territory of the City of Zagreb for the Period from 2009 until 2016", July and August 2009.

Measures for the state to improve life in rural area

Although respondents pointed very precisely to problems existing in their settlement, it is more difficult for them to come up with recommendations on how to solve these problems. Similar previous research in Croatia showed high expectations from measures of State intervention (Grgić et al., 2007).

In this research many respondents (28%) did not have an idea which measures State could undertake to improve life in the rural areas, however, many respondents still consider state as a big influence in the creation of well being. The forms of State intervention and the level of expectations is rather heterogenous but it can be grouped into several parts.

Identifying rural areas with agriculture is still significant so one third (30.8%) of respondents thinks that support for agriculture equals the possibility of life improvement for rural population. A smaller proportion of respondents (13.3%) expect state intervention through higher investments in communal and social infrastructure. More efficient administrative services would be a good form of state help for 5.3% of respondents. Similar percentage (5.0%) of respondents think that any form of help for young population would be useful for rural areas. Some respondents (3.9%) believe that reducing communal expenses might help, and 0.3% thinks that State administration should work on the realization of pre-election promises (Table 4).

There is no statistically significant difference when assessing the measures for the State to solve the problems of rural area regarding gender (χ^2 - 65.193; P - 0.007), education level (χ^2 - 41.661; P - 0.076) and profession (χ^2 - 65.193; P - 0.007). There are only significant differences regarding age (χ^2 - 59.402; P - 0.170) and ownership of an agricultural household (χ^2 - 21.361; P - 0.019).

DISCUSSION

Croatia has had similar historical development as many other countries of Eastern Europe. Development programs planned by the State have significantly influenced the demographic and economic devastation of rural areas and directly or indirectly encouraged strengthening of urban centres. Transition into market economy has facilitated social stratification of previously homogenous social groups. These social groups tend to defend their particular interests the result of which influences their life satisfaction in the rural area.

Rural area that surrounds the City of Zagreb is experiencing changes typical for rural areas in the vicinity of state capitals in other European countries in transition. This area is characterized by tradition and modernity, emigration and immigration, a blend of old and new traditions, dissatisfaction of indigenous population and satisfaction of recent immigrants (Hirt, 2007). At the same time, rural areas have also been changed in the last twenty years as a consequence of war in Croatia and especially in neighbouring Bosnia and Herzegovina.

In designing this research we have encountered some difficulties. The first problem was to determine the area to include in the research of rural space which is to be expected especially in smaller countries such as Croatia.

Significant challenge is to define the term of satisfaction in general and apply it accordingly to life satisfaction in the rural area. In this research we used the subjective opinions of respondents and their satisfaction with life in the rural area at the time of survey.

Research results can be significantly influenced by selected research method and sampling procedure. Data collection was implemented using the survey method, random selection of respondents and face-to-face approach to interviewing. Survey has proven to be a reliable instrument in similar research (Brereton et al.,

Table 4. Measures for the State to improve life in rural area.

		Frequency	Percent	Valid percent	Cumulative percent
Valid	Support to agriculture	197	30.8	42.8	42.8
	Higher investments	85	13.3	18.5	61.3
	Other	85	13.3	18.5	79.8
	More efficient administration system	34	5.3	7.4	87.1
	Comprehensive help for the young people to stay	32	5.0	7.0	94.1
	Lower municipal expenditures	25	3.9	5.4	99.5
	Fulfil election promises	2	0.3	0.4	100.0
	Total	460	72.0	100.0	
Missing	System	179	28.0		
Total		639	100.0		

Source: Survey "Assessment of the Current Status and the Possibility of Rural Area Development on the Territory of the City of Zagreb for the Period from 2009 until 2016", July and August 2009.

2011). The option of open-ended answers in this survey offered a chance to get in-depth insights reducing the possibility of interviewers' influence. The disadvantage of this option is a high frequency of different answers especially regarding the question of the biggest problems facing the rural area.

Despite the limitations this kind of research are applicable to similar rural suburban areas, and results obtained can be useful for the local and state administration.

Conclusions

Rural areas near big urban centres become very desirable destinations especially in the countries of higher economic development. Values such as preserved landscape, lower level of pollution, less noise etc. most frequently are not the values relevant to the domicile population for its feeling of satisfaction and even for its staying in this area. Inhabitants of the rural area of Zagreb are generally satisfied with living in their area, whereby there are no significant differences in perceiving the issue regarding age, profession and ownership of an agricultural household, and there are statistically significant differences regarding sex and school degree. The state is still expected to provide a substantial help in solving the problems, most frequently in the sector of agriculture which points to the still significant importance of this activity both in the researched and total rural area of the Republic of Croatia.

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