THE MAPPING OF RURAL SERBIA ACCORDING TO THE INDEX OF NATURAL AMENITIES

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ABSTRACT: Amenities are recognized as a new source of comparative advantage of rural areas, which is strategically used for the popularization of the reverse migration flow from urban to rural areas, as well as for enforcing a new development approach defined as the “rural industrialization”. Climate conditions, topography, forest land and water resources have been identified as the main drivers of the migration flow from urban to rural areas. Additionally, they are highly related to economic growth in rural areas with high natural amenities.

The current paper has two aims. The first is to highlight the importance of the concept of rural amenities for economic development, with special emphasis on the natural amenities. The second aim is to describe the concept of natural amenities on the example of rural areas in Serbia by introducing a set of measures of natural amenities, as well as a summary natural amenity index which allows the classification of the rural areas in Serbia with respect to their natural amenities.

Natural amenities have a significant influence on the total amenity value of rural areas in Serbia. There are significant differences in climate conditions and landscape amenities among rural areas. The mapping of rural Serbia according to the developed index of natural amenities is only the first necessary step in creating an efficient rural policy for the purpose of ensuring sustainable rural development in the future. Rural areas with high natural amenities in Serbia include Raška, Zlatibor, Moravica, Pčinja, Bor and Toplica.¹

¹ Due to the lack of data, the survey will not cover the rural areas in the territory of Kosovo and Metohija.
In the literature, amenities are recognized as a new source of comparative advantage of rural areas, which is strategically used for the popularization of the reverse migration flow from urban to rural areas, as well as for enforcing a new development approach defined as “rural industrialization”.

The concept of rural amenities can be explained by three main types of amenities: natural, built and cultural ones. Natural amenities refer to the physical rural environment, such as climate, topography, forest land and water areas. Today, rural agricultural landscapes are valued not only because of their ability to produce different agricultural outputs, but also because they make rural areas attractive as places for residence, work and active outdoor recreation. The most attractive rural areas are those which are characterized by a mild climate, topographical variation and a mix of forest and open land. The built amenities refer to the availability of various recreational activities in rural areas serving as an important segment of local economy which induces income from tourism. The main role of the built amenities is reflected in adding value to the natural amenities and they are defined in the literature together with natural amenities as outdoor rural amenities [Beale and Johnson 1998; McGranahan et al. 2011]. The cultural amenities refer to the local diversity or homogeneity, cultural richness and integrity, and the presence of higher educational and other cultural institutions [Power 2005: 65].

In the developed economies, the population and employment change in rural areas in the last 40 years has been highly related to the natural, built and cultural amenities. The rural areas with high amenities experience a substantial population and employment growth and the growth of entrepreneurship activities. The main characteristics of a specific rural environment in these rural areas include a mild climate, varied topography with hills and mountains, and significant forest and water resources.

The main research question of the current paper is the following: If different features of natural amenities that shape the local amenity value in rural areas can be summarized by the natural amenity index, then it is possible to make a classification of rural areas in Serbia according to their level of natural amenities.

After the introduction, the remainder of the paper is divided into five sections. Section two provides a brief background on the role of the concept of rural amenities for economic development. Section three covers the measurement of natural amenities and provides an explanation of the methodology used to gauge the relative amenity value of each rural area in Serbia and to analyse the impact of different natural amenities on the local amenity value. In section four, we present the results of the ordinary least-squares (OLS) regression analysis of the amenity value, with climate, landscape and population density as independent variables. In section five, we develop the methodology for classifying rural areas in Serbia with respect to their natural amenities. The last section provides the conclusions.
LITERATURE REVIEW

In the USA and EU countries, the rural area migration pattern has been shaped by economic factors and site-specific qualities defined in the literature as rural amenities. Rural amenities represent location-specific public goods and services, like local climate, the level of congestion, air and water quality, landscape characteristics, rivers, outdoor recreation opportunities and the rich cultural heritage. Climate and landscape amenities are very important quality-of-life indicators, as well as the major sources of the rapid rural population and employment growth in rural areas. During the 1970s and 1990s in the USA, the flow of people out of urban areas to rural areas exceeded the flow of people from rural to urban areas. Using the simultaneous equation model of the 1990–2000 change in jobs and net migration in the USA, McGranahan [2008] showed that the four preferred landscape variables (topography variations measured by a topography scale, land in forest, water area and cropland) influenced migration directly, not through effects on employment. The most significant part of this flow of people to rural areas with high natural amenities was a high quality of human capital, comprised of people in occupations such as management, business and financials, engineering, science, education and arts. These results are consistent with the results of an empirical study of Goe and Green [2005]. Using the econometric methods for panel data, they showed that during the period from 1980 to 2000 the highest growth in population and employment was in the rural areas with high levels of warm weather, outdoor recreation and historical/cultural amenities.

Previous studies have managed to solve the problem of empirical measuring of rural amenities by using multiple indicators of natural and built amenities and grouping them into a corresponding composite index, based on which rural areas can be classified and their economic growth can be analysed. In order to analyse the population and employment change of rural areas in the USA during the period from 1970 to 1996, McGranahan [1999] used six natural amenity measures and grouped them into one statistical measure, namely, the natural amenity index. The four used measures include climate measures (average January temperature, average January days of sun, average July temperature and average July humidity), and the other two refer to landscape measures (topography scale and lake, pond and ocean area as a percent of rural area). According to empirical results, the relationship between the level of the natural amenity index and the population and employment growth is quite strong. While many rural areas in the top quarter of the natural amenity index succeeded to double their population and experienced employment growth, rural areas in the bottom quarter of the natural amenity index were faced with a decrease in population and employment. In order to present the classification of rural areas in USA from the perspective of natural and built amenities, McGranahan et al. [2011] used nine outdoor amenity measures (eight natural and one built amenity measure) and grouped them into one statistical measure, the outdoor amenity index. The eight used natural amenities measures include average January temperature, average January days of sun, average July temperature, average
July humidity, topography scale, water area and percent of forest land and its square. The share of employment in hotels and restaurants is included as an approximation for the possibility for different recreational activities in rural areas (built amenities). In the developed economies, the rural areas which are not only identified as areas with high levels of natural amenities but also as recreational areas have the highest rates of population and employment growth.

DATA AND METHODOLOGY

Empirical research that will be presented in this paper has two aims:
1. The first aim is to gauge the relative amenity value of each rural area in Serbia in order to test the hypothesis:
   H1: Natural amenities (climate and landscape) have a significant influence on the total amenity value of rural areas in Serbia.
2. The second aim is to develop a summary natural amenity index which allows the classification of rural Serbia with respect to natural amenities. H2: If natural amenities are distributed unevenly across rural Serbia, then different natural amenities (climate and landscape) can be quantified by developing an appropriate composite index, the natural amenity index.

The approach accepted in the literature to gauge the non-commercial economic value of rural amenities is based on the analysis of an average housing value and income per capita in rural areas. Many authors have provided a theoretical explanation and an empirical confirmation of the fact that the presence of amenities is reflected in the greater housing value in rural areas [Wu and Gopinath 2008; Hand et al. 2008; McGranahan 2008]. Natural amenities of rural areas, such as a pleasant climate and the beauty of the natural landscape, are associated with relatively high gains in housing value.

In order to test the hypothesis that climate and landscape amenities have a significant influence on the total amenity value of rural areas, we will first gauge the relative amenity value of each rural area in Serbia. According to the empirical research of Gleaser et al. [2001], the relative amenity value of each rural area in Serbia (the demand for local amenities) is gauged by obtaining the residual of the regression of the 2008 average housing value on the 2008 average income per capita.

\[ Y_i = \beta_0 + \beta_1 X_i + \epsilon, \ i=1,2,...,N \]  
(1)

where \( Y_i \) is an average housing value (log\text{e}), \( X_i \) is an average income per capita (log\text{e}), \( \epsilon \) is a residual and \( \epsilon_i \) is an estimated residual.

\[ Y_i = \hat{Y}_i + \epsilon_i, \epsilon_i = Y_i - \hat{Y}_i, \ i=1,2,...,24 \]  
(2)

\[ Y_i = b_0 + b_1 X_i + \epsilon_i \]  
(3)

For the purpose of empirical research, natural amenities are defined as the attributes that make rural areas attractive as places of residence, work and active recreation. It is assumed that natural amenities of rural Serbia are reflected in a mild climate, varied topography and rich water and forest resources.
To reflect the natural amenities, we used six measures of natural amenities:

- Based on the research of Kusmin [1996] and McGranahan [1999], we used two measures of climate: the average January temperature and average July temperature;
- Based on the research of McGranahan [2008], we used four measures of landscape: topography measure (topography scale), water area and land in forest and its square.

Based on the available data of the Republic Hydrometeorological Service of Serbia, the average values for two climate measures are calculated for the period from 1991 to 2008. The correlation coefficient between the average January temperature and the average July temperature is 0.81. Since a high correlation coefficient can cause the problem of multicollinearity, we solved this problem according to prior studies [McGranahan 1999] by using the residual of a regression July temperature on January temperature. The residual shows how much the temperature in July is higher or lower in relation to what one would predict on the basis of the January temperature. A lower residual value indicates a more favourable climate, and a relatively small temperature gain between the January and July temperature.

To measure topography (i.e. to create a topography scale), we used the data created especially for this study by the Military Geographical Institute in Belgrade. The data show the representation of the basic types of relief in rural areas in Serbia. Four basic types (categories) of relief are the following [Markoski 2018: 7]:

1. Lowlands (plains, rolling relief up to 200 m and hilly relief from 200 to 500 m);
2. Low mountain relief 500–1000 m;
3. Mid mountain relief 1000–2000 m;
4. High mountain relief above 2000 m.

In cases where a rural area had more than one type of relief, we assigned the highest of the categories that applied, provided this higher category appeared to apply to at least 25 percent of the rural area [McGranahan 1999: 4].

Besides topography, water area, land of forest and its square were included as landscape measures. Water area is measured as the percent of each rural area. The model includes the percent of land in forest and its square because, according to empirical studies on landscape preferences, the expectation is that the relationship between the net migration and land in forest would have an inverted “U”-shape, with a positive coefficient for the first term and a negative coefficient for the squared term [McGranahan 2008: 230].

All used measures in the empirical research and data sources are presented in Appendix A. The empirical research was conducted on the sample of 24 rural areas in Serbia according to the OECD definition which classifies “local units” as rural if their population is below 150 inhabitants per km² (Table 1). Six of the 24 rural areas in Serbia can be classified as “significant rural or intermediate”\(^2\). These areas include South Bačka, Podunavlje, Šumadija, Moravica, Rasina and Jablanica. Other observed rural areas can be classified as

\(^2\)“Significant rural or intermediate” are those areas in which the share of population living in rural local units is between 15% and 50%.
“predominantly rural”, since their share of population living in the rural local units is higher than 50%.

Table 1. Rural areas in Serbia

| Rural area       | The share of rural in the total population (%) | Type of rural area       |
|------------------|------------------------------------------------|--------------------------|
| North Bačka      | 100.00                                        | predominantly rural       |
| Central Banat    | 100.00                                        | predominantly rural       |
| North Banat      | 100.00                                        | predominantly rural       |
| South Banat      | 59.49                                         | predominantly rural       |
| West Bačka       | 100.00                                        | predominantly rural       |
| South Bačka      | 45.20                                         | intermediate             |
| Srem             | 79.88                                         | predominantly rural       |
| Mačva            | 62.72                                         | predominantly rural       |
| Kolubara         | 100.00                                        | predominantly rural       |
| Podunavlje       | 47.78                                         | intermediate             |
| Braničevo        | 62.64                                         | predominantly rural       |
| Šumadija         | 41.16                                         | intermediate             |
| Pomoravlje       | 68.83                                         | predominantly rural       |
| Bor              | 100.00                                        | predominantly rural       |
| Zaječar          | 100.00                                        | predominantly rural       |
| Zlatibor         | 100.00                                        | predominantly rural       |
| Moravica         | 47.92                                         | intermediate             |
| Raška            | 100.00                                        | predominantly rural       |
| Rasina           | 49.36                                         | intermediate             |
| Nišava           | 94.88                                         | predominantly rural       |
| Toplica          | 100.00                                        | predominantly rural       |
| Pirot            | 100.00                                        | predominantly rural       |
| Jablanica        | 35.14                                         | intermediate             |
| Pčinja           | 100.00                                        | predominantly rural       |

Source: [Bogdanov i Stojanović 2006: 61]

EMPIRICAL RESULTS

In order to test the hypothesis that climate and landscape amenities have a significant influence on the total amenity value of rural areas, we regressed the estimated residual of the regression of the 2008 average housing value on the 2008 average income per capita on six measures of natural amenities (January temperature, July temperature, topography, water area, land in forest and its square) and density as a control measure.
\[ e_i = b_0 + \sum b_i X_i + b_7 D + \mu \]  \hspace{1cm} (4)

where \( X_i \) represents amenity measures and \( D \) represents population density.

Table 2 presents descriptive statistics for the natural amenity measures and density for 24 rural areas in Serbia. Table 3 presents the results of testing the validation of the regression model assumptions.

**Table 2. Natural amenities and density statistics for rural areas in Serbia**

| Measure            | Units               | Mean | Median | Maximum | Minimum |
|--------------------|---------------------|------|--------|---------|---------|
| January temperature| Degrees             | 0.21 | 0.37   | 1.31    | -2.11   |
| July temperature   | Degrees             | 21.49| 21.86  | 22.93   | 18.38   |
| Topography         | Scale 1-4           | 2.17 | 2.00   | 4.00    | 1.00    |
| Water area         | Percent             | 1.07 | 0.45   | 3.56    | 0.01    |
| Land in forest     | Percent             | 24.71| 28.00  | 49.00   | 0.10    |
| Density            | Population/land area| 81.04| 74.82  | 163.55  | 34.83   |

*Source*: Authors’ calculation

**Table 3. Validation of the regression model assumptions**

| Measure                                                                 | Test statistic (p-value) |
|------------------------------------------------------------------------|--------------------------|
| Autocorrelation / Breuch-Godfrey test                                   | 1.72 (0.42)              |
| Heteroscedasticity / Breusch-Pagan-Godfrey test                         | 11.81 (0.11)             |
| Normality of residuals / Jarque-Bera                                     | 0.16 (0.93)              |
| Regression specification error / Ramsey RESET test                       | 1.58 (0.24)              |

*Source*: Authors’ calculation

Using the Breusch-Godfrey test, it was concluded that there was no autocorrelation in the model (Obs*R-squared=1.72, which is less than critical \( \chi^2 \) (5%) and the p-value of 0.42 is greater than 0.05). According to the results of the Breusch-Pagan-Godfrey test, the assumption of homoscedasticity in regression is not violated (the p-value is greater than 0.05). According to the results of the Jarque-Bera test, the sample data set is not significantly different than a normal distribution (p-value=0.24). To test the omitted variables, we used the Ramsey’s RESET test and concluded that there were no omitted variables in the model (the p-value is higher than the threshold of 0.05).

Table 4 presents the regression results of the housing value residual on two climate measures and four landscape measures and density as a control measure. In the regression equation, population density was included as a control measure which reflects the characteristics of the local market economy, such as access to services and jobs.
Table 4. Residual housing value regression

| Variable                  | Regression model with all natural amenity measures | Final model |
|---------------------------|---------------------------------------------------|-------------|
|                           | Coefficient | p – value | Coefficient | p – value |
| January temperature       | -0.020      | 0.6499    |             |           |
| Temperature gap           | -0.205      | 0.0054    | -0.209      | 0.0035    |
| Topography                | 0.170       | 0.0098    | 0.178       | 0.0041    |
| Water area                | 0.171       | 0.0062    | 0.182       | 0.0014    |
| Land in forest            | 0.028       | 0.0035    | 0.028       | 0.0028    |
| Land in forest squared    | -0.001      | 0.0028    | -0.001      | 0.0023    |
| Density                   | 0.004       | 0.0027    | 0.004       | 0.0014    |
| Constant                  | -1.065      | 0.0000    | -1.083      | 0.0000    |
| $R^2$ ($R^2$ adj.)        | 0.82 (0.74) |           | 0.82 (0.75) |           |
| F statistic               | 10.47 (0.00)|           | 12.77 (0.00)|           |

*Source: Authors’ calculation*

In the ordinary least squares (OLS) regression, the presented natural amenity measures explained about 82% of the variation in the housing value residual (Table 4). Except the temperature in January, all the presented measures of natural amenities (temperature gap, topography, water area, land in forest and its square) have a significant influence on the total amenity value of rural areas in Serbia. These results are consistent with the research on rural natural amenities, according to which the amenity value of rural areas is significantly shaped by climate conditions, topographical variation and available forest and water resources.

**THE NATURAL AMENITY INDEX AND THE CLASSIFICATION OF RURAL AREAS IN SERBIA**

In order to classify the rural areas in Serbia, we developed the natural amenity index by grouping the natural amenity measures which, according to empirical results presented in section four, have a significant influence on the total amenity value of rural areas in Serbia. The natural amenity index was created as a sum of four amenity measures (temperature gap, topography scale, forest land and water resources), using their standardized measures as in the empirical research of McGranahan [1999].

The advantage of the developed natural amenity index is reflected in the possibility to summarize all four measures of natural amenities in a composite index which allows the classification of rural areas in Serbia with respect to their natural amenities (Table 5). We have found a positive correlation between the index of natural amenities and the residual of the regression of the 2008 average housing value on the 2008 average income per capita which is used as
an approximation for the relative amenity value of each rural area in Serbia (correlation coefficient is 0.46; p-value=0.02).

Table 5. Natural amenity index of the 24 rural areas in Serbia

| Rural area      | Temperature gap | Topography | Water area | Land in forest | Natural amenity index |
|-----------------|-----------------|------------|------------|----------------|-----------------------|
| Raška           | 1.97            | 1.75       | -0.84      | 1.32           | 4.20                  |
| Zlatibor        | 1.06            | 1.75       | -0.64      | 0.89           | 3.06                  |
| Moravica        | 2.06            | 0.79       | -0.98      | 0.83           | 2.70                  |
| Pećinja         | 0.49            | 1.75       | -0.66      | 0.89           | 2.46                  |
| Bor             | -0.75           | -0.16      | 1.48       | 1.51           | 2.08                  |
| Toplica         | 0.68            | 0.79       | -1.02      | 1.38           | 1.84                  |
| Rasina          | 1.23            | -0.16      | -0.62      | 0.58           | 1.03                  |
| Mačva           | 0.64            | -0.16      | 0.06       | 0.02           | 0.56                  |
| Pirot           | -0.06           | 0.79       | -0.82      | 0.51           | 0.43                  |
| Jablanica       | -0.43           | 0.79       | -0.90      | 0.76           | 0.23                  |
| Braničevo       | -0.75           | -0.16      | 0.77       | 0.27           | 0.13                  |
| Kolubara        | 1.05            | -0.16      | -0.95      | 0.02           | -0.04                 |
| Šumadija        | 0.55            | -0.16      | -0.59      | -0.11          | -0.31                 |
| Nišava          | -0.70           | 0.79       | -0.62      | 0.14           | -0.39                 |
| Zaječar         | -1.15           | 0.79       | -0.97      | 0.70           | -0.62                 |
| Pomoravlje      | -0.23           | -0.16      | -0.60      | 0.27           | -0.72                 |
| Srem            | 0.04            | -1.11      | 0.50       | -0.60          | -1.18                 |
| South Bačka     | -0.48           | -1.11      | 1.61       | -1.22          | -1.20                 |
| South Banat     | -0.31           | -1.11      | 0.94       | -1.29          | -1.76                 |
| North Bačka     | -1.65           | -1.11      | 2.38       | -1.41          | -1.79                 |
| Central Banat   | -0.71           | -1.11      | 1.30       | -1.41          | -1.93                 |
| Podunavlje      | -0.19           | -1.11      | -0.02      | -1.22          | -2.54                 |
| West Bačka      | -0.98           | -1.11      | 0.75       | -1.35          | -2.70                 |
| North Banat     | -1.40           | -1.11      | 0.44       | -1.47          | -3.54                 |

Source: Authors’ calculation

Based on the value of the natural amenity index, we have classified rural areas into three groups: the top quarter, the middle half and the bottom quarter (Map 1). The rural areas which belong to the top quarter group are identified as the areas with high natural amenities. According to empirical results, these areas include Raška, Zlatibor, Moravica, Pećinja, Bor and Toplica. The rural areas which belong to the bottom quarter are identified as the rural areas with low
natural amenities. According to empirical results, these areas include North Banat, West Bačka, Podunavlje, Central Banat, North Bačka and South Banat.

During the last ten years, the identified rural areas with high natural amenities have been facing structural problems, such as the ageing of the population, poor educational structure of the population, insufficiently developed secondary and tertiary sector, as well as a large number of unemployed people per thousand inhabitants [Рикаловић и др. 2012]. Between the last two censuses (2002 and 2011), only the Raška area had an increase in population.

*Map 1. Map of rural Serbia according to the natural amenity index*

Development of rural Serbia must be based on locally specific development factors, such as natural, built and cultural amenities, as well as other
factors that determine the quality of life in rural areas. It is necessary to develop the local strategies in accordance with the specifics of rural areas and use natural amenities as instruments for the retention of the existing residents and the attraction of in-migrants of working age (especially the people between the age of 30 and 50 who are willing to exchange their higher urban income for a better quality of life for themselves and their families in the rural areas with high natural amenities), tourists and retirees. For the increase of the rural population and the recovery of rural economy in Serbia, in addition to the physical supply of natural amenities, it is also necessary to provide a high quality of social and human-built environment such as quality schools and other public services and the necessary public and commercial infrastructure.

**CONCLUSION**

In the developed economies, the rural area migration pattern is shaped by economic factors and site-specific qualities defined in the literature as rural amenities. The amenities are recognized as a new source of a comparative advantage of rural areas, which is strategically used for the popularization of the reverse migration flow from urban to rural areas, as well as for enforcing a new development approach defined as the “rural industrialization”. Rural areas with high amenities experience a substantial population and employment growth and a growth of entrepreneurship activities. The main characteristics of a specific rural environment in these rural areas include a mild climate, varied topography with hills and mountains, and significant forest and water resources.

This paper was aimed at explaining and applying the concept of natural amenities on the example of rural Serbia. Using the econometric methods for cross-sectional data, we gauged the relative amenity value of each rural area in Serbia and tested the hypothesis that natural (climate and landscape) amenities have a significant influence on the total amenity value of rural areas in Serbia. The amenity value is measured as the residual from the OLS regression of the average housing value on the average income per capita. Except temperature in January, all the presented measures of natural amenities (temperature gap, topography, water area and land in forest) have a significant influence on the total amenity value of rural areas in Serbia.

The advantage of the presented natural amenity index of rural Serbia is reflected in the ability to summarize the measures of the natural amenities that shape the total amenity value of rural areas in Serbia in a composite index which allows the classification of rural Serbia with respect to natural amenities. Six rural areas in Serbia have been identified as the rural areas with high natural amenities: Raška, Zlatibor, Moravica, Pčinja, Bor and Toplica.

Bearing in mind all the obtained results, the new concept of rural development in Serbia should be based on the strengthening of the process of rural industrialization that is based on the locally specific development factors. The rural areas with high natural amenities must use their comparative advantage as an instrument for the retention of the existing residents and the attraction of in-migrants of working age, tourists and retirees.
## Appendix A. Measures used in the empirical research and their sources

| Variables | Source |
|-----------|--------|
| **Climate** | |
| January temperature (average 1991–2008) | The Republic Hydrometeorological Service of Serbia, Climatological yearbooks [http://www.hidmet.gov.rs/ciril/meteorologija/klimatologija_godisnjaci.php](http://www.hidmet.gov.rs/ciril/meteorologija/klimatologija_godisnjaci.php) |
| July temperature (average 1991–2008) | |
| **Landscape** | |
| Topography scale 1–4 (types of relief in rural areas) | The Military Geographical Institute in Belgrade, The Jaroslav Černi Institute for the Development of Water Resources in Serbia (JCI), Belgrade |
| Water area (% of rural area) | Statistical Office of the Republic of Serbia |
| Forest (% of rural area) | |
| **Others** | |
| Average housing value | National Mortgage Insurance Corporation, Belgrade, [http://www.nkosk.rs/content/indeks-cena-nepokretnosti-nacionalne-korporacije-za-osiguranje-stambenih-kredita](http://www.nkosk.rs/content/indeks-cena-nepokretnosti-nacionalne-korporacije-za-osiguranje-stambenih-kredita) |
| Average income per capita | Statistical Office of the Republic of Serbia |

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ОРИГИНАЛНИ НАУЧНИ РАД

МАПИРАЊЕ РУРАЛНЕ СРБИЈЕ ПРЕМА ИНДЕКСУ ПРИРОДНИХ ПОГОДНОСТИ*

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РЕЗИМЕ: Погођности су препознате као нов, кључан извор компаративних предности руралних области који се стратешки користи за популаризацију обрнутог миграционог тока и форсирање новог приступа развоју дефинисаном као „рурална индустрисијализација“. Климатски услови, топографија, шумски и водни ресурси представљају главне покретаче миграционог тока становништва из урбаних ка руралним областима и имају значајан утицај на економски раст руралних области високих погођности.

Рад има два циља. Први циљ се односи на објашњење значаја концепта руралних погођности за економски развој, с посебним фокусом на природне руралне погођности. Други циљ се односи на примену концепта природних погођности на примеру руралних области у Србији и представљање мера квантитације различитих природних погођности и збирног индекса природних погођности помоћу кога је извршена класификација руралних области у Србији.

Природне погођности имају значајан утицај на обликовање укупне вредности погођности руралних области у Србији и постоје значајне разлике у погледу климатских услова и лепота природног пејзажа између руралних области. Мапирање руралне Србије према развијеном индексу природних погођности представља први неопходан корак ка креирању ефикасне руралне политике која треба да буде у функцији обезбеђења одрживог руралног развоја у будућности. Као руралне области високих природних погођности у Србији идентификоване су: Рашка, Златиборска, Моравичка, Пчинска, Борска и Топличка област.

КЉУЧНЕ РЕЧИ: руралне погођности, природне погођности, композитни индекс, мапирање руралних области, Србија

JEL: O13, Q56

* Због недостатка података, истраживање није обухватило руралну подручја на територији Косова и Метохије.