

The Perception and the Status of the Peripheral Regions in the Netherlands and Romania. A Comparative Geographic Study

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ABSTRACT

The perception on the status of the peripheral regions is a common subject in the Netherlands and Romania becoming a worldwide topic in the public discourse. The focus of our comparative study was triggered by the fact that regions from the countries as The Netherlands (e.g. Achterhoek region) and Romania (e.g. North Transylvania) already were facing a population decline and the perception on the status of peripheries has degraded since several decades. In the first place we will emphasize the meaning of a peripheral area regarding two case studies: a peripheral area as the Achterhoek region from the Netherlands and the peripheral area North Transylvania from Romania. Secondly we will emphasize the existence of two patterns of peripheral areas indicating the demographic evolution of population in rural areas of both regions. By inducing the linear regression analysis as a comparative tool we will synthesize the social and economic transformations of peripheral areas during the periods of 1998-2012, respectively 1992-2012. In this order we will accentuate the perception of differences in peripheral areas in these two regions which will eventually lead to a mutual policy framing between both countries. In this order, the linear regression analysis will measure the demographic changes in terms of demographic tendencies, social and economic transformations. This comparative study will encompass two regions from different EU countries; it will explore the possibilities for each country to learn from the other.

1. INTRODUCTION

The existence of regions is constructed through their relationship to “other” regions and naturally they come with a history in which they have already been “settled” to defend their status. This means that regions are part of a system in which they have a certain position, such as a core region, a peripheral region, a manufacturing region, high-tech region or another type of region [1].

The „peripheral” and „peripherality” must be understood within regional studies and related fields as fundamentally geographical terms, since attempts to expand their scope beyond the geographical field risks

to contribute to the ambiguity of the concept. The peripherality should be regarded as an inherently relational concept, in that „the periphery” must be defined in relation to something else (i.e. „the core” or „centre”) and in the sense that „peripherality” as a condition is characterized or constituted by relations (between the core and the periphery) [2].

Anderson, A. (2000) consider that “the periphery is best understood as a subordinate of the core” [3].

The peripherality can be defined in geographical terms resulting mainly from the lack of accessibility and/or economic and political importance when is compared to the core [4].

Peripheral regions are thus required to find ways to strengthen their economic competitiveness by providing the conditions that will attract new investment and labor force.

Peripherality is often associated with a number of disadvantages. Very often a relatively poor regional economic performance is viewed as the outcome of low accessibility to the main European worldwide markets [5]. Different approaches regarding peripherality could be investigated from “any country or region affected by structural weakness” to “areas with very poor accessibility and low population density” [6].

The peripherality of the regions is associated with poor accessibility and lower population density affected by socio-economic issues. In the Netherlands the peripherality status of the regions is defined by their accessibility, the GDP and unemployment. In Romania peripherality is defined by a less attractive area, a poor accessibility and infrastructure, lower population density and high unemployment.

The peripheral regions can be divided in urban periphery and rural peripheral areas. In general the terms urban and rural have been seen as opposites but are used with multiple meanings.

The concept of ‘rural’ is more complex and multidimensional. It is difficult to capture the diversity of types of rural areas that exist all over the world. These can, for example, range from small settlements outside the large towns and cities to remote villages and hamlets and from an agriculture area to areas of extensive arable farming. Another complication lies in the economic and social changes that have taken place in rural areas which create interrelationships with urban areas and cultures [7].

The urban periphery is viewed as a territory organized by forces governed by economic prosperity; the flows of energy accumulated in the city represent a territorial system in which the city itself is integrated [8].

Moreover, the periphery clearly takes shape as a result of the influx of urban into the immediate rural, by the exuberance of urban attributes towards the rural.

In this paper we will focus on the peripheral regions from two regions of interest in the Netherlands (Achterhoek region) and Romania (North Transylvania region). The aim is to identify the peripheral characteristics, in order to build a comparison between both countries that will explore the differences and possibilities to learn from each other on how to anticipate and deal with socio-economic issues in peripheral areas.

In this case, below we will present and describe the peripheral regions in the Netherlands and Romania.

The Netherlands is located in the densely populated, well accessible and economically strong core of Europe. The Netherlands is one of the most densely

populated countries in Europe. While the population density in 2006 in the European Union of 27 member states (EU-27) was on average around 115 inhabitants per each square kilometer, there are 484 people/km² in the Netherlands. Moreover, the Netherlands is located in the North-west of Europe, that is, the traditional European core region with high economic activity, high accessibility and high population density [9].

The Achterhoek region is a region situated in the eastern part of the Netherlands in province Gelderland including only 3 cities and 8 municipalities. According to CBS (Central Bureau of Statistics) the total population of the region in 2012 was 401,476 inhabitants. The Achterhoek is a region on eastern border of the Netherlands. It is a very old and natural region with no specific border and with its own dialect. According to CBS IN 2013 the region had 400,727 inhabitants. It is a rural region with a lot of farming, but also the (high-tech) manufacturing industry and building sector are important economic sectors for the region.

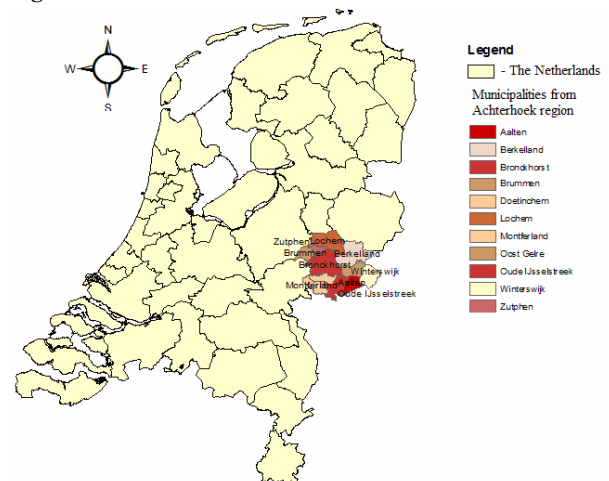


Fig. 1. Achterhoek region, the Netherlands.

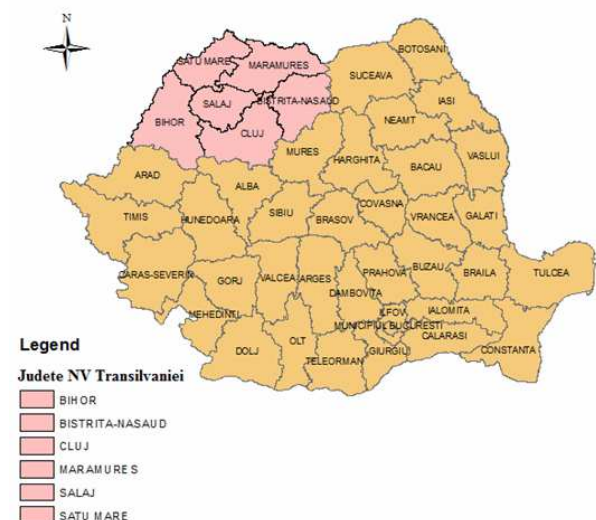


Fig. 2. North Transylvania region, Romania.

Romania is a country located at the crossroads of Southeastern and Central Europe, on the Lower

Danube, north of the Balkan Peninsula and the western shore of the Black Sea. The Northern Transylvania region known as North-West region from Romania is one of the 8 development regions in Romania including 6 counties: Bihor, Bistrița-Năsăud, Cluj, Maramureș, Satu Mare, Sălaj. The total population of the region is 2,744,914 inhabitants. The region includes 446 administrative-territorial units: 6 counties, with 28 towns, of which 15 municipalities, 403 communes and 1,800 villages [10].

The region has a strategic geographical position, being situated at the borders with Hungary and Ukraine, but also with the Center, West and North-East development regions in Romania.

In Section 2 we will emphasize the methodology using statistical data from 1992-2012 for the respective regions. In the third section we will gather the patterns of peripheral regions sustained by statistical data from both regions and we will concentrate on the demographic analysis of the regions using the simple regression equation. The demographic changes occurred in peripheral regions should induce relevant differences between both regions, respectively countries.

In the fourth section we will gather the results which eventually will lead to the existence of demographic social tendencies. In the fifth section we will present the conclusions of this study.

2. THEORY AND METHODOLOGY

The theory and the methodology underline a great societal relevance of the case studies involving not only demographic aspects but also social aspects of both regions.

The first phase in our research was to collect significant information about peripheral area, periphery. Then we purchase to explore the possibilities of a comparison between two countries (e.g. the Netherlands and Romania). The methodological approach was to identify and delimitate the analyzed regions. The methodological framework depends on available statistical information.

First of all, the comparative study is based on a comprehensive list of the existing literature regarding peripheral rural areas including the internet platforms and the existing studies.

This comparison investigates a large number of aspects or tendencies regarding the peripheral status of a region from the Netherlands and Romania. By using two case studies, such as Achterhoek region and North Transylvania region, the aim of this research is to show the usefulness of the linear regression analysis creating an overview about the peripheral areas from both regions. Regression analysis is a statistical tool for the investigation of relationships between variables. Regression analysis includes any techniques for

modeling and analyzing trends between a dependent variable and an independent variable.

The regression model takes a closer look at the impact of the changing population in both regions [11].

Regression is a method for studying the relationship of a dependent variable and one or more independent variables. The linear regression equation establishes a relevant correlation between the independent variable "X" and a dependent variable y using an equation which expresses "Y" as a linear function of "X":

$$Y = a + b \times x$$

In our comparison as an example by using STATGRAPHICS [12] we establish a relevant correlation between the independent variables school number, school density and dependent variable total rural population of the region.

Total rural population = school number + b × school density

The second phase of our research is the desk research consisting in consultation of the bibliographic sources and cartographic sources. To these source were added document-research and the field research materialized through the collection of quantitative information from CBS (i.e. Central Bureau of Statistics from the Netherlands) and INS (i.e. National Institute of Statistics). The statistical data collected show relevant aspects about demographic changes from 1992-2012. The cartographical sources are very suggestive and relevant establishing though years the demographic scenario in both regions. We analyze the collected information, interpreting the phenomenon and geographical process using the linear regression analysis. The results of this analysis are emphasized in charts and graphics. On the one hand, this comparison made it possible to explore the geographical meanings of peripheral regions and on the other hand reconstruct the demographic evolution including demographic changes of peripheral regions.

The information from the field research, bibliographic resources and cartographic sources but also the statistical data contributes essentially to illustrate the demographic characteristics of both regions.

3. THE DEMOGRAPHIC ANALYSIS

3.1. The population evolution of Achterhoek region and North Transylvania region

In present the demographic trend is diversified and distinct for each region identifying the regions that are still growing and ageing as Achterhoek region while

others are ageing and declining as North Transylvania region.

Both regions represent patterns for demographic decline, especially when demographic change influence the spatial, functional and morphologic structure of peripheral regions.

We identify two major patterns for peripheral areas as:

a). *Less attractive region* – loss of investments, less population density, high unemployment.

b). *Population decline* – peripheral areas affected by a decrease or decline of total rural population.

Many regions across the EU, including Romania (e.g. North Transylvania) and the Netherlands (e.g. Achterhoek region), face the challenge of population decline, which entails changing demographics and related social and economic implications [13].

In order to establish the impact of population change in total evolution of population in both regions and population decline in particular we will examined data on population change between 1992-2012, respectively 1998-2012, retrieved from the statistical database CBS and INS.

The total population in Achterhoek region in 1992 registered 363,179 inhabitants and until 2012 has reached 401,476 inhabitants. In the Achterhoek region between 1992-2012 the total population is growing with 10.54%. The statistical data shows that during the last years 2012, 2013 the total population started to decrease, initially with - 749 inhabitants.

The statistical data about rural population from Achterhoek region is available from 1998 being composed from 8 municipalities (i.e. Gelderland Provincie). From 1998-2012 the total rural population from Achterhoek region has a slightly increased evolution of 5%. The lowest value of total rural population is registered in Municipality Bronckhorst with -2% and the highest value of increase of total rural population is registered in Municipality OostGelrewirh 7.3% (Fig. 3) [14].

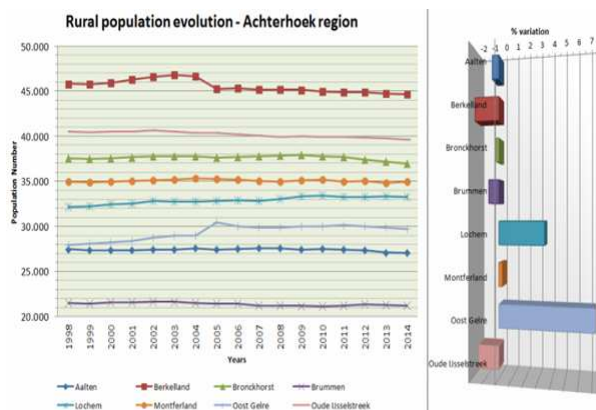


Fig. 3. Total Rural Population in Achterhoek region, the Netherlands.

The Achterhoek region is still growing until 2012 when the total population of the region started to decrease and the perspective for a total population of 362,301 inhabitants in 2020. Despite this fact in rural areas from Achterhoek region population decline become an issue with many social and economic implications; with mainly young people leaving, fewer children are born and the number of elderly is growing. The main reasons behind the “exodus” of young people are study and work related activities in central regions of the country.

The total population in North Transylvania region in 1992 registered 2,909,871 inhabitants and until 2012 the total population decreases to 2,712,188 inhabitants. From 1992-2012 the total population in North Transylvania region has changed with -6.8%. In the last years the rural population decreased due to low fertility rate, migration of young people and ageing of population.

The statistical data for North Transylvania region is gathered from census 1992 and statistical database Tempo Online from INS. The total rural population in North Transylvania region in 1992 registered 1,401,272 inhabitants and until 2012 has reached 1,270,353 inhabitants. From 1992-2012 the total rural population has changed with -9.3% (Fig. 4).

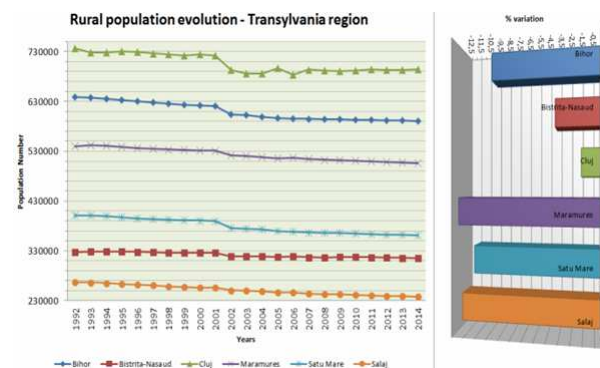


Fig. 4. Total Rural Population in North Transylvania region, Romania.

Figure 4 displays an overview regarding the total rural population from North Transylvania region. The lowest value of decrease in the total rural population is registered in Cluj County with -1.6% and the highest value is registered in Maramureș County with -17.7% [15].

The North Transylvania region is facing a demographic decline with a total decrease of population of 3.6% until 2013. During the years as a negative consequences of demographic decline the rural areas within the region are depopulated. In Sălaj County according to census from 2011 more than 30 rural settlements are characterized as depopulated rural areas. The main cause of this depopulation is the process of out-migration of young people and the increase of elderly people.

In general, the population change occurs in two directions – growth and decline – and differs in intensity for both regions. In both regions population change occurred in demographic decline which is more prominent in rural areas within the regions. The perception and status of both peripheral regions is shown by demographic, social and economic aspects characterized by population decline which will lead to depopulation in a few decades.

3.2. The regression model approach for social and economic aspects from both regions

In this study, the analysis of spatial concentrated location is based on social and economic effectiveness statistics while the statistical processing of economic and social aspects is based on simple linear regression analysis. The regression model represents a relevant approach for our case studies split between social and economic aspects.

According to Pedhazur (1992) [11], regression analysis is a method used in analyzing the variability of a dependent variable by resorting to information available on one or more independent variables. A question usually arises: what are the expected changes in the dependent variable as a result of changes observed or induced, in the independent variables? Simple regression is used when only one independent variable is involved. However, in order to see the correlations and interactions between the independent variables and to analyze the collective and separate effects of two or more independent variables on a dependent variable, multiple regression analysis is used.

The regression analysis is also a method used in economic - financial analysis regarding the components consumption, investments and incomes [16].

As Charles Ragin (1989) notes that in linear regression equations, the marginal effect of every independent variable is forever fixed and their joint impact is simplistically additive. There effects are "contextual" (nonlinear in each variable) and "holistic" (interactive): The marginal impact of a variable depends both on its own value and on that of other causal factors [16].

In many cases, models are used as tools to express and measure the relationship between various events and various characteristics of the individuals in the population (e.g. regression models). In other cases there are used as tools of estimation when we have limited and defective data.

In our case we will use regression analysis as a tool to express a demographic relationship and estimation for education level and employment in both regions. In this order we will build a probabilistic model to correlate demographic characteristics. In our comparative study we will use the regression analysis

based on a simple linear regression equation. The linear regression analysis will show a prognosis regarding correlations between two components which could change the functional, economic, social and spatial structure of peripheral areas.

We will build two case studies, one for the Achterhoek region and another for North Transylvania region. In both regions we will reveal the importance of regression analysis to survey the education level and the total active population in rural areas.

The social aspects in our case studies is represented by education level emphasizing the number of schools reported to school density in rural areas and the analyzed area.

The economic aspect in our case studies is represented by economic components regarding the total active population reported to the total population in rural areas.

The Achterhoek region case study surveys the education level in the rural areas of the region represented by 8 municipalities (e.g. Aalten, Berkelland, Brockhorst, Brummen, Lochem, Montferland, OostGelre, OudeIJsselstreek). The education level in Achterhoek region is well-developed despite the fact that is a peripheral region mostly composed in rural municipalities, several villages and hamlets. Each school has his own culture, educational program or in collaboration with didactical-pedagogical program of educational platform Achterhoek VO which represents a Council of 10 secondary schools and public schools. In Achterhoek region the education level is represented by primary, secondary schools, public schools and special schools.

The linear regression analysis the education level is indicating a moderately strong relationship between the variables (see Fig. 5).

According to linear regression model it is not a statistically significant relationship between school number and surface at the 90% or higher confidence level.

The regression model fitted explains a variability of 81.88% in school number. The correlation between dependent variable as surface and independent variables as school number in rural areas is significant estimating a strong positive relationship representing a correlation coefficient of 90% (see Fig. 5).

The Figure 3 shows the linear regression model regarding educational level, where independent variable is strongly dependent on independent variable surface of rural areas. The graphic representation of linear regression model of educational level represents a relatively strong demographic change in education level.

The highest number of schools/sq.km exist in municipality Oude IJsselstreek and Montferland with 0.18% and the lowest number of schools/sq.km exist in municipality Bronckhorst with 0.035%.

In Achterhoek region recently the number of pupils and schools will be reduced, nowadays the dropouts are from 1.3%-2% due to the fact that young people are chasing education opportunities in the central regions [17]. The low number of schools and the pupils is characteristic for peripheral region, rural areas which are depopulated by young people who relocate in regions with better opportunities for education and job. Over the years, the education level in North Transylvania registered a few reforms which hadn't expected outcomes. Due to the instability of educational system, the difference of number and school enrolment rate in urban and rural areas. In rural areas between 1992-2012 the number of schools decreased with -8%. In 1992 the total number of schools in rural areas was 7,626 school units and until 2012 the number reached 2,724 school units. In the region 77% of schools are situated in rural areas.

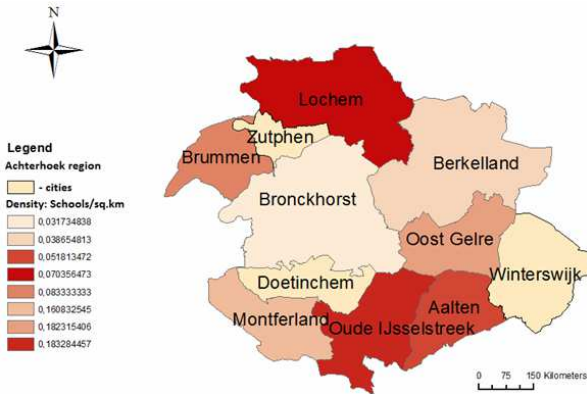


Fig. 5. Linear regression model of education level, Achterhoek region.

By using linear regression analysis we will show the possibilities of an estimated relationship between the number of schools and their density. In this case we will seek the causal effect of one variable upon another or the effect of school number in rural areas and the school density. In this order we could estimate the quantitative effect of the causal variables upon the variable that they influence. We will investigate how school density influences the existence and development of schools number in the rural areas.

According to linear regression analysis we have a statistically significant relationship between school number and the surface at the 99% confidence level.

The R-Squared statistic indicates that the model as fitted explains 79.42% of the variability in school numbers.

The linear regression analysis estimates a moderately strong relationship between school number and other independent variables as surface insignificant with 63.08% (see Fig. 6).

Figure 6 shows the linear regression model regarding educational level, where dependent variable is strongly correspondent on independent variable

school density. The graphic representation of linear regression model of educational level represents a linear interdependence between school number and school density in rural areas.

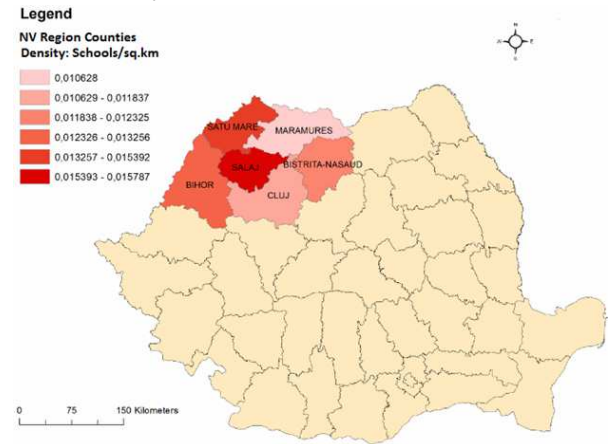


Fig. 6. Linear regression model of education level, North Transylvania region.

The highest number of schools/sq. exists in Sălaj County with 0.015% and the lowest number of schools/sq. exists in Maramureș County with 0.010%.

In North Transylvania region school dropouts are higher in rural areas than in urban areas. In 2011 the school dropouts in primary and secondary level represent 1.5% at the regional level due to the financial and social issues.

The school dropouts have economic and social consequences for young people which are seeking opportunities for a well-paid job. The demographic ageing of population visible in rural areas on local and regional scale is responsible on a short and long term on decreasing the number of pupils in rural areas of North Transylvania region.

The Achetrheok region has a variation-rich economic structure with factories and high-tech companies. The primary sector, agriculture is represented by lands for the settlements from enterprises to the order or for agricultural purpose. The secondary sector represented by industry with factories, construction companies. The economy trade, tourism and transport represented the third sector - services.

The labor market is characterized by high demographic pressures, high standards of labor demands, deeply rigidities leading to high young unemployment and migration rates. The education system is suspected to contribute to the actual situation by failing to equip young people with the skills demanded in the market.

In Achterhoek region in 2012 the labor force is represented by 54,025 inhabitants who until 2013 will decrease with -194 inhabitants. According to CBS the number of annual work units in 2012 is 6,302 and until 2013 will decrease with 118 units accounting 6,184 units. The unemployment rate at regional level is lower

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with 7.7% than in rural areas when unemployment rate reached 54.7%. Even when jobs in the high productivity activities are limited in number relative to the supply, and often they are not accessible, population still flows to the urban areas or central regions searching new opportunities. The unemployment in rural areas is partly caused by very selective process of migration from countryside to urban areas, especially those urban areas which offer educational services to younger people and opportunities for starting entrepreneurs. The higher unemployment is strongly emphasized by the current economic crisis.

The regression analysis regarding economic aspects will enforce a probabilistic report between the total active population and total rural population.

This regression analysis will show the probabilistic working potential of inhabitants depending on demands existing on labor market and the threat of unemployment.

In this case we will use this tool to express the labor force in accordance with total rural population and the number of working population (see Fig. 7).

The linear regression analysis show a relevant correlation between dependent variable total rural population and independent variable working population and unemployment rate in proportion of 99%.

According to linear regression analysis, we have a statistically significant relationship between total rural population and total active population at the 99% confidence level.

The linear model fitted explains a variability of 78.24% in total rural population (see Fig. 7).

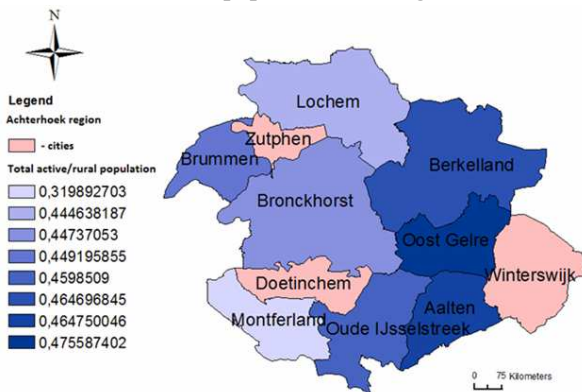


Fig. 7. Linear regression model of economic aspects, Achterhoek region.

Figure 7 shows the linear regression model regarding total active population in rural areas. The total rural population is a variable interconnected with total civil active population at regional level and unemployment rate.

The graphic representation of linear regression model of labor force represents a linear interdependence between total rural population and total active population from rural areas.

A higher proportion of working population exist in municipalities OostGelre with 0.47% and Aalten with 0.46% due to the existence of industrial parks and less active population exist in rural area Montferland with 0.31%.

The social and economic aspects are components on which depends the demographic evolution structure of population.

In order to reveal the economic aspects in North Transylvania region we will try to examine the associations between number of active population and other independent variables by regression model approach in the study area.

The economy of North Transylvania region is represented by primary sector: agriculture with 8.64%, secondary sector: industry with 26.75% and constructions with 10.8%. The third sector service has a higher proportion of 53.81%.

According to INS the North Transylvania region is a rural region, the proportion of rural population from the whole region is higher than 40%. The region has 3 major polarizing centers such as city Cluj-Napoca, Oradea, Baia-Mare which have a high potential of economic growth.

In North Transylvania region the civil labor force per regional level in 1992 is represented by 1,512 inhabitants and until 2012 decrease to 1,242 inhabitants.

The linear regression model shows a negative and not a statistically significant relationship between rural population and working population at the 90% or higher confidence level.

The statistic indicator shows that the model as fitted explains 51.28% of the variability in rural population. The correlation coefficient equals -71.61%, indicating a moderately strong relationship between the variables (see Fig. 8).

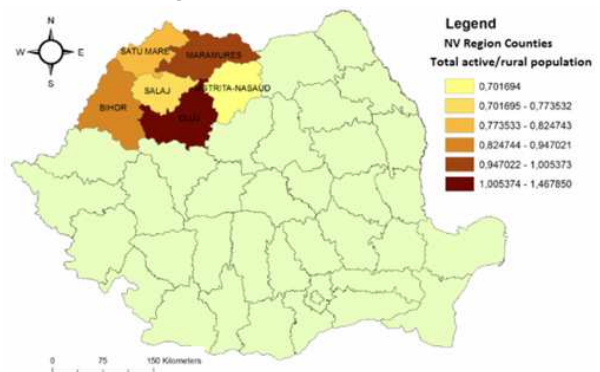


Fig. 8. Linear Regression Model of Economic Aspects, North Transylvania region.

The Figure 8 shows the linear regression model regarding total active population in rural areas. The regression model emphasizes a weak linear representation of total rural population and the active group of population.

The highest number of total active population is represented by polarizing center Cluj County with 1.48% and the lowest number of working population is present in Bistrița-Năsăud County with 0.70% considered a county with less young labor force.

The graphic representation of linear regression model of labor force represents not a significant relationship due to the fact that statistical data are not relevant and suitable for a regression model approach.

In the rural areas, sluggish agricultural growth and limited development of the rural non-farm sector raises the incidence of rural poverty, unemployment and underemployment. The fact that most of the high productivity activities are located in the urban areas, the rural-urban income differentials, particularly for the poor and unemployed, are enormous [10]. In this case many of them migrate to the urban areas in search for jobs.

4. RESULTS AND DISCUSSION

Peripherality has been long the subject of analysis for economists and geographers with an interest in regional disparities, developing countries or regions and the position of economic activity.

Nowadays debates about peripherality are focusing on the impact of economic integration on the geographical distribution of economic and social activities, as well as the accessible information and communication technologies to provide new opportunities in peripheral areas and also the institutional and political dimensions of peripherality [17]. By using a linear regression analysis we establish on the one hand correlation regarding educational level by school number and school density in rural areas. On the other hand, the weak correlation between total rural population and the proportion of active population express the existing labor force which is triggered by a high unemployment. According to regression analysis the difference in educational level between Achterhoek region and North Transylvania is changed with 3%. In Achterhoek region we have a significant relationship between the schools number and school density as in the North Transylvania region. In Achterhoek region the variability of a relevant relationship in education level between dependent and independent variables is higher with 81.88%. A medium proportion in education level of a relevant correlation between dependent variable rural population and independent variable schools number and surface from rural areas is 79.42% founded in North Transylvania region.

The educational level in Achterhoek region is low and decreased in coming decades because of spatial and peripheral perception of the region as a rural declining region with aged population. The number of young people is decreasing due to the fact that in coming decades the number of schools will also

decrease as a consequence of migration and relocation of young people and families in other regions more urbanized. The purpose of young people and young families to depart from countryside to urban areas has social and economic aspects, especially based on finding a high-valued educational institution and a well-paid job. Despite this, in Northern Transylvania region the education in rural areas declined due to the fact of poor teaching staff and financial issues of young families.

The school dropouts in Achterhoek region are low totalizing 1.57% than a high proportion of dropouts at regional level in North Transylvania region of 2.92% [18]. The school dropouts have negative effects on social development and economic growth because innovation and economic growth is based on skilled young employees.

According to linear regression analysis the difference of economic level between Achterhoek region and North Transylvania is changed with 34.45%. In Achterhoek region we have a positive, significant correlation of 78.24% between the dependent variable rural population and independent variables unemployment rate [18]. In North Transylvania region we have a moderately strong correlation relationship between the total rural population and the proportion of working population with 51.28%.

The proportion of variability regarding labor force is higher in Achterhoek region because since 2008 the unemployment rate doubled at regional level with 7.7% than in North Transylvania region is 6.15%.

The estimated correlation of economic aspects in North Transylvania is negative due to the fact that poverty is expanded on social, economic and spatial structure of rural areas. It is necessary to offer professional training and courses for young population in order to gain new job skills.

Both regions emphasize the same types of social and economic issue in peripheral regions as poor infrastructure and accessibility to large markets and service centers. There is often also a strong emphasis on low population density, decreasing young population and ageing increasing the elderly population.

The low population density means individuals often have to travel long distances to reach public services particularly higher level services such as higher education or special medical treatment which are provided in urban areas. It is primary that young people leave peripheral regions; not only searching employment but also better education and social opportunities and we have mid-age or elderly people seeking a better quality of life.

5. CONCLUSIONS

The perception and peripheral status of rural areas from a policy perspective are often seen as disadvantaged by poor accessibility to large markets

and by low population density which in turn constrain business development.

Local and regional authorities in these areas are facing difficulties in providing adequate local services due to the fact that their revenues are limited by weak business activity and because service provision is more costly in per capita terms in low population density areas. Furthermore policy-makers in some countries also emphasize the existing and potential strengths of peripheral regions not least in terms of natural resources and quality of life. In this order, policy-makers are focused solely on accessibility to large markets or others combine accessibility with low population density.

From development point of view, peripheral areas registers a significant gap compared to the urban areas and are characterized by persistent structural deficiencies: (the large number of the population occupied in agricultural activities, population ageing, demographic decline); low value added in agricultural products; weak spirit of entrepreneurship in development of economic activities a dysfunctional land markets and labor force; insufficient investment in economic growth and development; a high proportion of rural population exposed to poverty and social exclusion [19]. In the past, in the Netherlands, policy-makers were focused on regional economic policy but this has been diminished over the past decades. In present policy-makers need to reinvent their instruments and interventions based on cooperation, innovation, and good practice on spatial planning. One set of interventions concerns efforts to intensify key capacities or potential for development in peripheral areas, particularly natural resources and not in the end human and social capital. Another set of interventions relates to accessibility and openness, both in terms of human interactions and infrastructure network. A set of interventions focuses on the provision of local services of general economic interest which are often limited because of fiscal constraints affecting many local and regional authorities in peripheral regions.

In the Achterhoek region, policy involves local capacities of inhabitants which values a strong sense of community and a natural living environment (e.g. natural resources and human or social capital) accessibility and openness to create a concrete labor market initiatives which can support development and contribute to economic growth. The Achterhoek region is a rural, peripheral region considered also a transit region near the border with Germany witha touristic potential. The tourism is a notable start of development and support in finding employment in the region.

In Romania, policy-makers need to adjust their agenda and to reinvent new strategies and interventions to combat the poor accessibility and low population density in rural areas. In North Transylvania region policy-makers interventions concerns efforts to

enrich the economic competitiveness and diversification of agriculture sector. In order to be successful in these actions we could suggest a few possible interventions at regional and local level to improve the local development.

One of the interventions regards diversification of agricultural activities in order to increase the agricultural revenue. Also we mention about EU funding for agricultural activities such as family farm, plantation, etc. It is necessary to use rationally the natural resources for a durable development and a sustainable environment.

Another intervention regards education level by offering support for professional teaching skills for young people.

The education level in rural areas of North Transylvania region has a poor quality because of poor schools endowment and renovation, a low level of incomes for teaching staff [20].

In order to combat school dropouts is necessary to educate the rural population about the school implication in children education.

The economic intervention involves the entrepreneurial spirit of young people. The young people will follow training courses which will help them to enrich their professional skills and to develop their entrepreneurial spirit. The Romanian municipalities need to reorganize themselves and together with other rural organization, associations will redress the economic growth in rural areas involving young people in professional training programs.

Both peripheral and rural regions need to develop and implement good strategies and practices for integration of education and work in order to develop best-solutions for each other.

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