Babeş-Bolyai University
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Thesis Summary

Suburbanization Process of the Economical Functions in the Cluj-Napoca Metropolitan Area

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I. Introduction

I.1. Reasearch Motivation

The analyze of the suburbanization process is part of the human geography and shows interdisciplinary characters, including geography, economy, sociology and other disciplines in its research area.

In the western countries the suburbanization process is the research area of scientists from a long time, but in Romania, as in other post-socialist countries, only after the revolution we can speak about the process. In the communist period the characteristic processes were the intensive urbanization and industrialization, which determined the development and structure of the cities. The collapse of the political system in 1989 caused radical changes in the evolution of the urban systems. In a short period of time radical socio-economical changes appeared, thus the evolution of the cities was determined by processes such are: political democratization, economical globalization, privatization of enterprises and the market, European integration, dezindustrialization, structural changes of the industry and major decrease of the labour force. Cluj-Napoca is part of the cities which managed to restructure relatively easy from economical point of view.

Most of the times the process of suburbanization is analyzed from the perspective of the population, analyzed by the changes of the migration rate and the structure of the population. However, the development and the evolution of the process is more complex. It includes geomorphological, economical, sociological and other disciplines. My objective in this thesis is to realize a comprehensive research, including all the processes and phenomena, which determines the suburbanization process. I am trying to analyze more indicators important from the point of view of the process, putting accent in the suburbanization of the economical functions, a process less analyzed in the scientific literarure.

I.2. Hypotheses

In the case of our research the analyzed area is the Cluj-Napoca Metropolitan Area. The delimitation of the area was realized by the County Council and the local councils. In the establishment of the area economical, political and social criterias were taken into consideration. Thus, the Cluj-Napoca Metropolitan Area includes the city of Cluj-Napoca and

17 villages: Aiton, Apahida, Baciu, Bonţida, Borşa, Căianu, Chinteni, Ciurila, Cojocna, Feleacu, Floreşti, Gârbău, Gilău, Jucu, Petreştii de Jos şi Vultureni.

In this thesis we analyze the suburbanization of the economical functions, identifying the development factors and the localization factors, which determine the suburbanization of the economical activities.

The formulated hypotheses are the following:
> The suburbanization processes in the Cluj-Napoca Metropolitan Area develop near the most important transport infrastructure
> The suburbanization of the economical functions appear only in the case of the close suburban villages
> The economical development factors show high values in the villages near the city and low, radical values in the case of the peripheral villages
> Economical disparities are outlined between the close suburban villages and the peripheral villages

I.3. Presentation of the Cluj-Napoca Metropolitan Area

In our case the delimitation area is more extended, the analyzed villages being included in the Cluj-Napoca Metropolitan Area. The delimitation of the area was realized by the County Council and the local councils. In the establishment of the area economical, political and social criterias were taken into consideration. Thus, the Cluj-Napoca Metropolitan Area includes the city of Cluj-Napoca and 17 villages: Aiton, Apahida, Baciu, Bonţida, Borşa, Căianu, Chinteni, Ciurila, Cojocna, Feleacu, Floreşti, Gârbău, Gilău, Jucu, Petreştii de Jos şi Vultureni. At the end of the year 2009 Feleacu village has withdrawn from the association, and Sânpaul village joined the metropolitan area. These villages are framed in a radius of 30 km around the city, forming an optimal distance for the development of the suburban area. The surface of the metropolitan area represents 23% of the county's surface and includes 55% of the county's population.

I.4. Definition of the suburbanization process

The Dictionary of Human Geography, edited by Godall B. in 1987, defines the suburban aria as the exterior residential zone of a city in continuous extension. From a social

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point of view suburbia is a homogeneous district inside the territory. The notion signifies low density of the population and a specific way of life.

The dictionary also makes difference between the close influential area (Umland) and the distant influential are (Hinterland). Thus the Umland signifies the influence of the city over the surrounding areas. This notion defines the area surrounding the city, were the dependencies are bilateral.

Other notions in close correlations with the notion of the suburban are: periurban, banlieue, periphery, umland, hinterland, attraction area, influential area, convergent area.

II. Theoretical Background

II.1. Suburbanization Theories

II.1.1. Development of the Cities

The suburbanization process in the simplified way means the migration of the population and the economical factors towards the periphery of the city and the close villages surrounding the city. The majority of the scientists in this domain agree with the fact that these processes can develop only after a certain level of development of the economy, the settlement system and other socio-economical factors. Thus the cities and the society undergo a development road, through what at an advanced level they reach the suburbanization phase. Analyzing these development stages are important, because they prove the development and causes of the suburbanization process.

The city and its structural organization is a complex research area, studied by important scientists such are: Chabot, Beanjeau-Garnier, L. Mumford.

The city can be described as an open system, which has complex and reciprocal relations with the surrounding area. During its evolution the city undergoes specific territorial and structural developments. There are two important theories, presenting the evolution of the cities: evolution theories and historical theories.

II.1.2. Transition theories

The transition theories represent a theoretical background of this research, because from economic point of view and also considering the settlement system, the transition from

socialist politics into a capitalist politics was determining. Analyzing the settlement system, intensive urbanization was characteristic in the socialist period, this is the reason why we can speak about the process of suburbanization only after 1990. From economical point of view, the post-communist transition contributed to the development of phenomena like globalization, European integration, market economy, privatization, dezindustrialization and restructuring of the industry.

II.1.3. Localization Theories

The localization theories determine the most favorable spatial organization methods of different economical activities. Amongst the localization theories we can mention the classical localization theories, behavioral theories, new economical geography and the cluster theory.

Regardless of the theoretical background of which the spatial analyze starts, there are a series of general localization factors of the economical activities, which evaluation is most determining in every development plan. We distinguish different localization factors, which determine the optimal localization of the economical activities: special localization factors (connected with certain economical branches) and general localization factors, valid for all economic units (transport and communicational infrastructure, labour force offer, space offer, agglomeration effects).

The transport and communicational infrastructure refers to the accessibility of a location and its supply markets. It must be underlined that the intensity of the economical activities decreases with the growth of the distance from the most accessible localization. If a location dispose of multiple and good transport connections, its comparative advantages are considerable than locations which are deficient from this point of view.

Labour force supplies are basic component of the economical space through their capability to reduce transport costs. Two important aspects are important regarding the labour force: quantity and quality. Low technological branches do not necessitate highly qualified labour force, putting accent on the labour force costs and orientating towards locations, where the labour force is cheap. More fierce competition appears in the case of attracting or forming a highly qualified labour force and in the case of workplaces offering higher level of salaries, in the so-called high-tech branches.

Space offer are important from the point of view of the available terrains for variable economical use. Mostly industrial branches and commercial centres need large available area,

this is the reason why they are determined by the price of the terrain. Local administrations try to by area for developing different industrial parks, commercial or multifunctional centres in order to help the economical development of a region.

Agglomeration effects are also called external effects or externalities. These secondary effects of the agglomeration appear outside the market or unintentionally in the same space. Parallel with the establishment of a spatial agglomeration, a series of other advantages starts to develop, to which the growth process is based. These advantages manifests in local or regional level, depending on the size of the agglomeration. Among these advantages must be mentioned the advantages of the branches and urbanization advantages.

II.1.4. Migration Theories

In the simplified way the suburbanization process represents the migration of the population and the economical factors from the city centre towards the periphery of the city or towards the close rural areas. The migration theories study the migrations, underlining the motives and phenomenon which lead to the development of the process. Thus these theories can be used for analyzing the suburbanization process, especially for studying the reasons why these processes appear.

These theories explain the specific migrations with the development stages in which a certain city is situated. These migrations are caused by the economical functions of the settlement systems, by the geographical position of the settlements and a series of social, demographical, cultural and political factors. The more favourable geographical position of some territories causes the concentration of the population and the economical activities, which causes a sort of inequality between the regions.

III. Research Methodology

II. 1. Statistical analyzes of the suburbanization process

The statistical analyzes of the suburbanization is based on two elements: the changes in number of the population's inhabitants (birth rate) and especially on the migration rate.

The evolution of the inhabitants' number is important from the point of view of suburbanization, because all the definitions of the processes start from the idea of the migration from the centre of the city towards the surrounding areas. There are specialists who determine the process of the suburbanization only by the changes occurred in the number of

the population (ex. Van den Berg). Nevertheless, it must be mentioned that the changes occurred in the number of the population could determine the suburbanization process only if the birth rate would be zero.

Also, a characteristically phenomena of the suburbanization is that the migration from the city centre doesn't always target the separate settlements from administrative point of view, but rather the periphery of the city (Kovács, Z., 1999; Timár, J, 1999), which causes difficulties in its analyze because of the insufficient statistical data.

The process can be analyzed with several indicators, which proves higher or lower values in the settlements surrounding the urban areas. These indicators are important if we try to determine the intensity and the scale of the suburbanization.

An indicator similar with the migration rate is the growth of the houses, because in most of the cases the migrations from the cities are headed towards newly built residences. Thus, one of the most noticeable phenomena of the suburbanization becomes the newly built houses and residential parks in the rural areas.

In the case of other indicators, such as the incomes, the number of automobiles in a family, the number of enterprises the relation with the suburbanization process can be questioned. It can be proved the fact that these indicators are present in a higher number in the case of the suburban areas, but they are not necessary in the formation of the process.

An other indicator can also be the number of the population with higher education (Izsák, É., 1999).

At last, but not the least, one of the basic conditions of the process is the adequate level of the infrastructure. On one hand without the adequate level of the infrastructure the migration from the city center can't take place, on the other hand the development of the infrastructure largely determines these migrations. However, the development level of the infrastructure in its own isn't enough for the formation of the process.

The personal and public transport system must be analyzed in the surroundings of the city. Individual movement is extremely important, because while in the 90' only 50-60% of the whole road transport was made by personal cars, today this rises to 60-70%. Thus, it can be mentioned that one or two cars in a family becomes a basic condition in the case of the migration towards the suburban villages, mostly because the close relation with the city is maintained even after the movement. Besides this, with public transport only a few points in the city can be directly reached, and the transfer-connections increase costs and time. However the population which moves from the city towards the surrounding areas, but do not dispose of personal cars, also are part of the process.

III.2. The role of the infrastructure in the process of the suburbanization

In analyzing the relation between the suburbanization process and the infrastructure two important issues appear. First it must be determined that the qualitative and quantitative characteristics influences the suburbanization process (its extension, size, its direction). Secondary must be determined how the suburbanization process influences the road infrastructure (traffic, circulation methods, the circulation time, environmental and circulation problems) (Keserű, I.,2004).

In determining the relation between the suburbanization process and the infrastructure, the author uses 4 indicators:

> ➢ Personal cars in a family
> ➢ Road transport
> ➢ Distance/ Accessibility
> ➢ Public transport

The infrastructure accessibility is the research area of the specialists for a long time ago. Different models and theories were born to calculate and measure the infrastructure accessibility. Amongst these the most general is the following:

$$VA = \sum Ar + \sum Af + \sum An + \sum Aq$$

Where, VA – accessibility index

Ar – road accessibility

Af – railway accessibility

An – waterways accessibility

Aq – aerial accessibility

Scientists determine infrastructure accessibility after different criteria. Garrison (1960) mentions that in the calculation of the infrastructure accessibility minimal distances and the typology of the infrastructure must be analyzed. Forbes (1964) underlines that in the infrastructure accessibility analyses the travel time must be the determinant factor. Breheny (1974) enunciates that in the calculation of the infrastructure accessibility certain functions' accessibility must be analyzed (workplace, shopping place, schools, hospitals etc.). Savigear (1967) and Dalvi, Martin (1976) sustains that determining the traffic intensity is one of the most important factors in the calculation of accessibility.

II.4. Methods of localization economical functions

There is a waste methodological and theoretical literature of the economical localization, based on different factors which determine the optimal localization of the economical activities. We used the economical factor analyses, the cartographical representation and the questionnaire method.

II.4.1. Analyses of the factors which determine the economical functions' localization

The developers of the localization theories determined different economical factors, which determine the localization of a certain economical activity in a certain area. Amongst these we can mention the transport infrastructure, social infrastructure, environmental infrastructure, qualified and/or cheap labour force, land fund, services, general economical environment etc.

These factors must be analyzed separated, determining if they play role in the migration of the economical activities and if they do, in what manner they determine the suburbanization of the economical functions. It must be analyzed which are the most important factors in the case of Cluj-Napoca city, which determines the migration of the services and the industry towards the suburban areas.

II.4.2. Cartographic reprezentation

After analyzing the localization factors, maps and representations must be edited regarding the Cluj-Napoca metropolitan area. These representations show us the intensity and spreading of different localization factors.

These representations were realized with ArcView and ArcGis programs, thus not only the localization factors were analyzes, but the differences between the villages composing the metropolitan area and the disparities between the close suburban areas and the peripheral villages.

II. 4.3. The method of the questionnaries

Using the questionnaries we tried to determine the importance of the localization factors in case of economical activities operating in different branches of the economy.

We analyzed 21 localization factors, which were classified after their importance for the analyzed firms. It must be mentioned that different firms from different branches of the economy consider various localization factors as being determinant in choosing the optimal

place for their activities. Also the analyzed firms have different sizes, different number of employees, different profiles, which determines the classification of the localization factors.

IV. Geodemographical processes and the suburbanization of the population

Amongst the geodemographical processes occurring in the metropolitan area we must mention the changes in the number of inhabitants, birth rate, migration rate, population density and different structures of the population.

From the point of view of the suburbanization process the population dynamic, especially the changes in the number of the settlement and the migration rate is extremely important. Also the population density and the age structure of the population can become indicators of development, which influences the forming of the process.

V. The Economy of the Cluj-Napoca Metropolitan Area
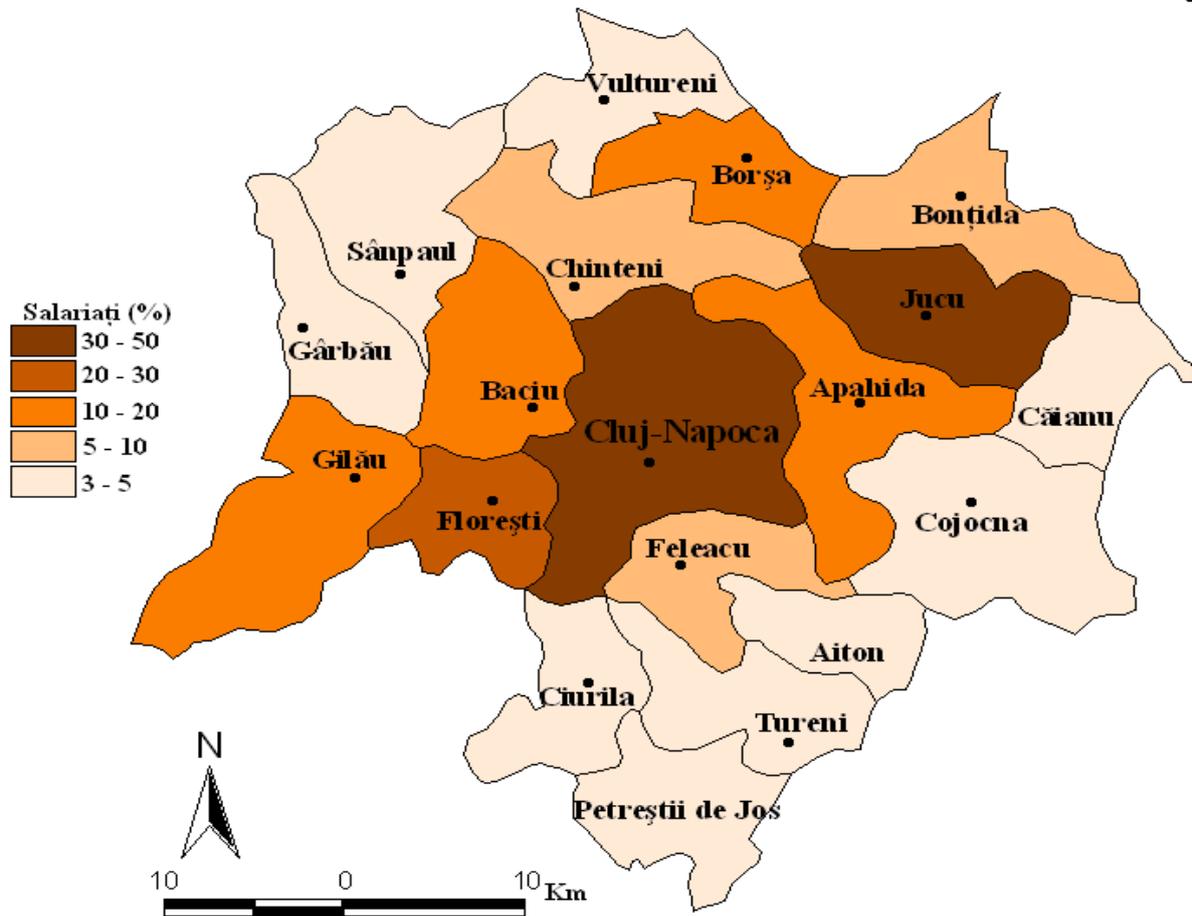
V.1. Labour Force

Fig. 1. Proportion of employees in CNMA in 2009

The proportion of the employees in 2009 (Fig. 1.) proves the east-west extension of the development, a phenomena observed after more factors. We can observe that the city of Cluj-Napoca and Jucu village holds the higher percentage of employees. Its interesting the way how the number of employees developed, registering 14,32% in 2008 and growing to 49,40 % in one year. The lowest values are registered in the case of the peripheral villages (Ciurila, Petreştii de Jos, Tureni, Aiton, Cojocna, Căianu, Gârbău, Sânpaul şi Vultureni), where it doesn't exceeds 5%.
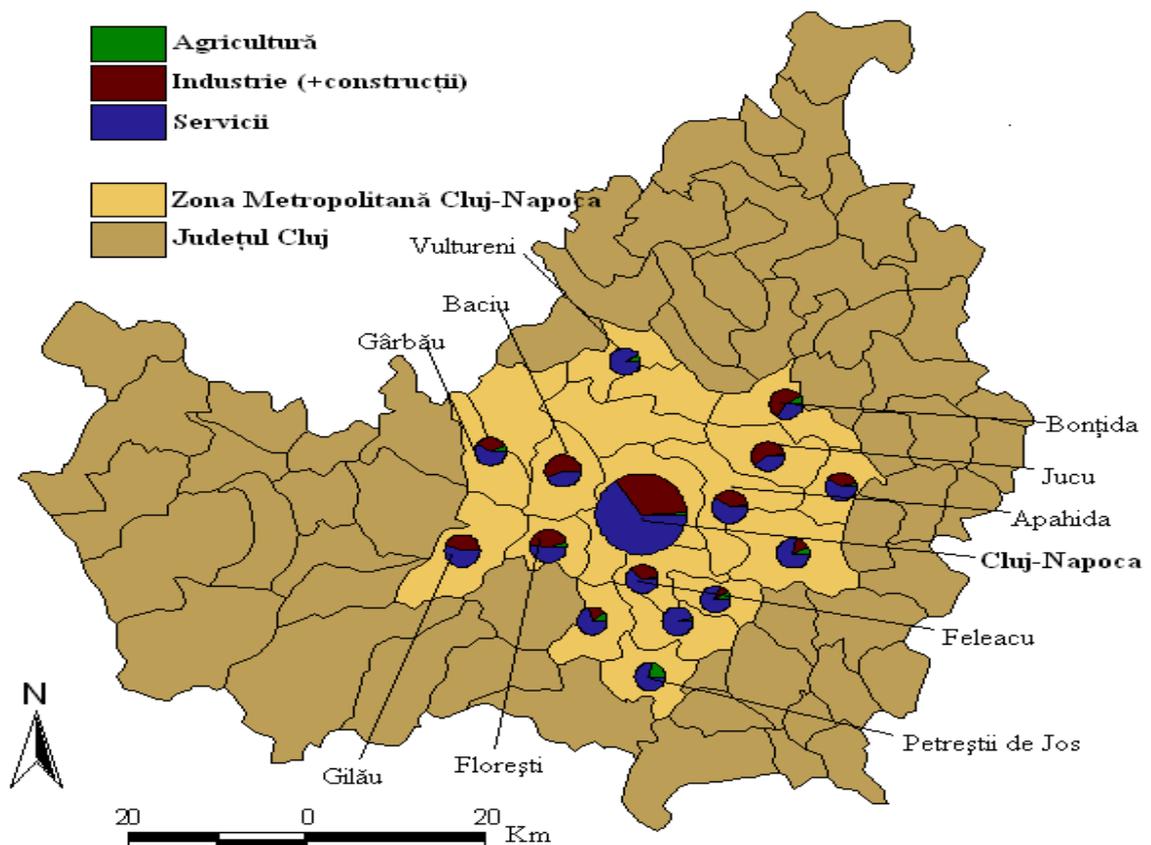
Fig. 2. Populaţia activă repartizată pe sectoare ale economiei în anul 2009

Analyzing the distribution of the county's active population on sectors of economy can be observed that the agriculture (22,18%) and industry (22,09%) disposes of the highest values of active population. The high values in this branches prove the maintain and the development of these sectors in Cluj County. The situation is very different in the Cluj-Napoca Metropolitan Area, where the urban population represents 81% from the total population.

If we analyze the Metropolitan Area as a whole we can observe that 56% of the total employees work in the services, while 31% works in the industry. It has to be mentioned that the highest percentage is hold by the micro-enterprises, activating in the domain of the services, while the large enterprises activate in the industry. Among the rural areas of the

metropolitan area two villages have to be mentioned with an intense activity in the domain of industry. These are Floreşti and Apahida. In these villages the attraction of investors proved to be a success.

VI. The suburbanization of the economical functions

VI.1. Determinant factors from the point of view of the suburbanization

VI.1.1. Infrastructure as the main determinant in the process of suburbanization

IV.1.1.1. Transport infrastructure

The infrastructure proves to be an important element in the sustainability and competitiveness of the settlements. The Cluj-Napoca Metropolitan Area is traversed by important road and railway infrastructure. At the same time the city of Cluj-Napoca holds a major percentage of air transport on national level.

IV.1.1.1. Road infrastructure

The density of roads in Cluj-Napoca Metropolitan Area is 0,36 km/sqkm, higher then the national density (0,36 km/sqkm) but lower then the county's density (0,39 km/sqkm). The metropolitan area is crossed by the E60, E81 and E58 European road. Among these the most important is the E60 European road, which makes connection between the following cities: Bucureşti – Braşov – Cluj-Napoca – Oradea – Budapest. The length of the road across the metropolitan area is 41, 5 km.

The development of the area will be affected by the Transylvanian highway, which will cross the southern part of the Cluj-Napoca Metropolitan Area. The length of the highway in Cluj-Napoca Metropolitan Area will be 33 km. The total length of the county road in the metropolitan area is 380,207 km, while the total length of the local roads is 239,403 km.

In the 2nd figure can be observed that all the villages from the Cluj Napoca Metropolitan Area are easy to access but the level of the road and its quality causes disparities between the settlements. From economical point of view villages which have access to the highway or a national road are in favorable position in contrast with the villages which have only a lower category infrastructure. According to these villages like Floreşti, Gilău, Baciu, Sânpaul, Apahida, Jucu, Bonţida, Feleacu and Tureni have a more favorable position, while villages like Chinteni, Borşa, Vultureni, Căianu, Cojocna, Aiton and Petreştii de Jos are in a

disadvantageous position from the point of infrastructure. With the completion of the highway villages like Gilău, Ciurila and Tureni can experiment a higher advantage.

IV.1.1.2. Infrastructura feroviară

The railway node in Cluj-Napoca has regional importance, the regional direction of the railways being situated in the city. The North-West Region is crossed by the following railways:

- Magistrala 3 (Călăraşi – Câmpia Turzii – Cluj-Napoca – Huedin – Oradea – Episcopia Bihor), with two lines, electrified until Cluj-Napoca, from Cluj-Napoca until Episcopia Bihor with two lines only in certain sectors;

- Magistrala 4 (Monor – Sărăţel – Beclean – Dej – Baia Mare – Satu Mare), with two lines on the Beclean – Dej – Gâlgău sector, but electrified only from Monor to Dej.

These register the most intense passenger and merchandise traffic. As the rural infrastructure so the railway system needs improvement and modernization. The primary problems are the difficult linkage in the territory and the several sectors with speed restrictions. From the point of view of the electrified lines the North-West Region is situated on the last place in the country, having a 4% from the national railway system.

In spite of that the railway infrastructure doesn't signifies a factor in attracting the economical activities, it remains an important mean for the population's mobility. Villages having advantageous position from the point of view of the railway system are Baciu, Gârbău, Apahida, Jucu, Bonţida and Cojocna. As in the case of the road infrastructure so in this case the peripheral villages are in disadvantageous position.

IV.1.1.3. Infrastructura aeriană

The air transport is effectuated by the Cluj-Napoca International Airport. The airport has a favorable position on the E576 road, 10 km from the city centre and 12 km from the railway station. The airport has a privileged position through its geographical position and through the city's and the county's demographical potential, added to which an important influence area, which made possible the accentuated growth of the airport circulation.

IV.1.1.4. Transport infrastructure accessibility
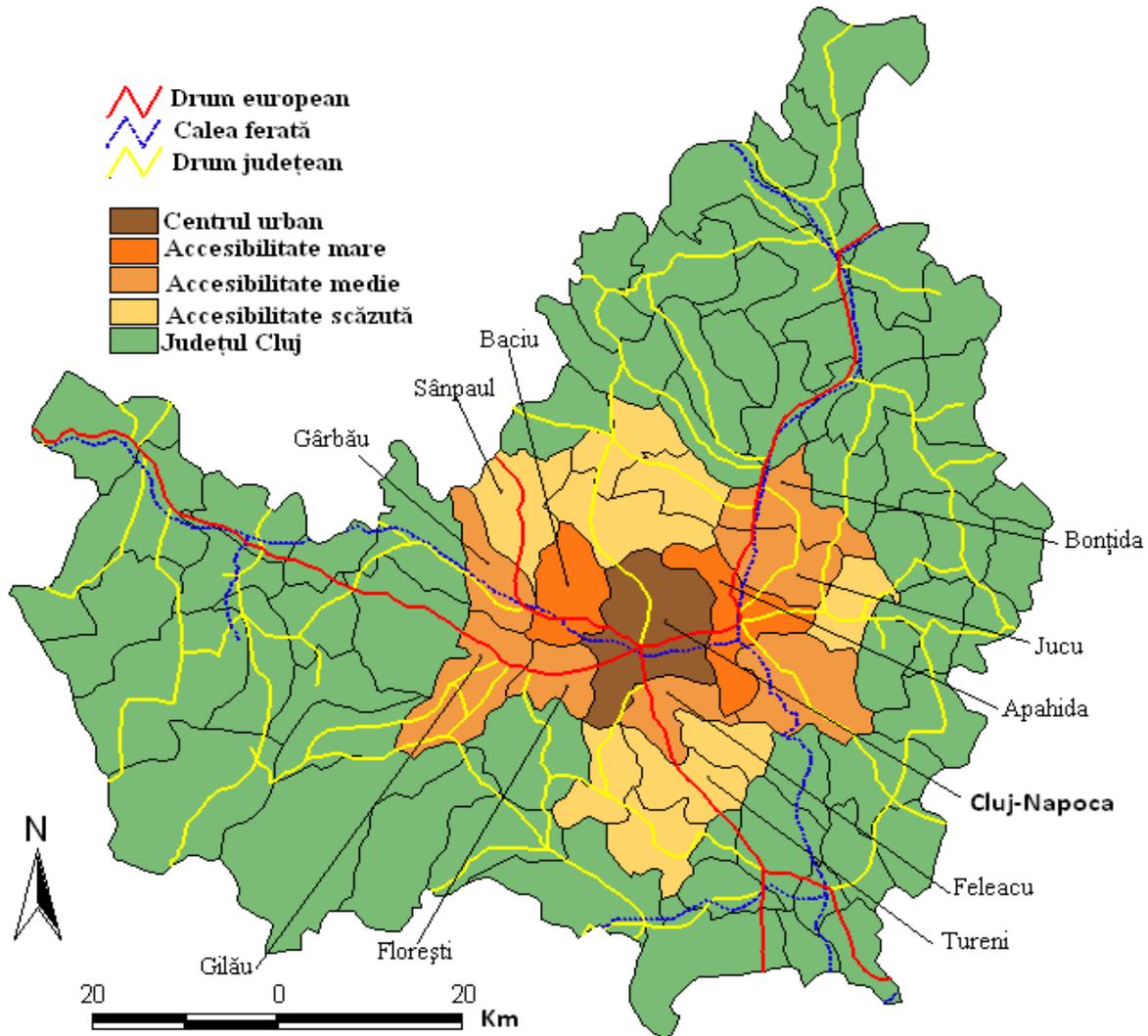
Fig.4. Transport Infrastructure Accessibility in 2008

In the quantification of infrastructure accessibility we considered two important factors: the distance between the rural areas and the urban centre and the different types of transport infrastructure. In analyzing the data we used the Bennett method. The basic of the method is that we consider that territory the point of departure, where the indicator presents the highest value. Bennett considered the result of the calculation the sum of the relative values in each territory.

In the 4. Figure the infrastructure accessibility presents not so surprising values. The highest value is characteristic to the urban centre, where we find the most important road, railway and air infrastructure. It can be observed that the accessibility level presents higher values in West and East direction, while in the Northern and Southern rural areas the accessibility is evidently lower. High accessibility can be found in the case of Baciu and

Apahida, where both road and railway infrastructure. Medium accessibility can be found in villages like Floreşti, Gilău, Gârbău, Jucu, Bonţida, Cojocna and Feleacu. In this case Gilău presents these values because in its case the highway obtains important values. Low accessibility levels can be found in the case of Sânpaul, Vultureni, Chinteni, Borşa, Ciurila, Tureni, Petreştii de Jos, Aiton and Căianu. Among these villages Aiton has the lowest accessibility because disposes only of local roads. It also has to be mentioned that the position of Ciurila and Petreştii de Jos might develop with the formation of the Transylvania Highway.

In conclusion has to be underlined the fact that there wasn't involved in the research qualitative differentiation which would definitely modulate the situation. We didn't take into account a compensation value between the road infrastructure and the railway infrastructure. We also didn't take into consideration some quantitative and qualitative characteristic of the road infrastructure, such are: the saturation, the road quality, congestion of the vehicles etc, which are important factors of the infrastructure accessibility.

IV.1.1.2. Utility Infrastructure

IV.1.2.1. Water Distribution Network.
It can be observed that all the component villages of the Cluj-Napoca Metropolitan Area dispose of water distribution network. Still villages around the city present higher level of development, spreading (Apahida, Jucu, Floreşti, Bonţida and Baciu), while the peripheral villages present stagnation, their water network haven't been developed since the communist period (Vultureni, Aiton, Ciurila, Căianu, Tureni etc.). The most significant development was registered in the case of Jucu, which was among the latests in 1990 from the point of the water network, then registered a moderate growth in the 1996's followed by a mere intense growth after 2004 so in present it has the longest water network in the metropolitan area.

IV. 1.2.2. Sewage Disposal Network

The sewage disposal network appears only in the case of the close suburban areas, whereby this service can become an indicator of development. The most significant development of the sewage network appears in the case of Gilău, followed by Floreşti and Apahida. Probably the most surprising values appear in the case of Cojocna, a relatively peripheral village, which disposes of sewage disposal system, even if only in a reduced way.

IV.1.2.3. Gas Distribution Network

Similarly with the sewage network the gas distribution network also appears as an indicator of development being present only in the close suburban villages. In this case the most significant development can be observed in the case of Floreşti.

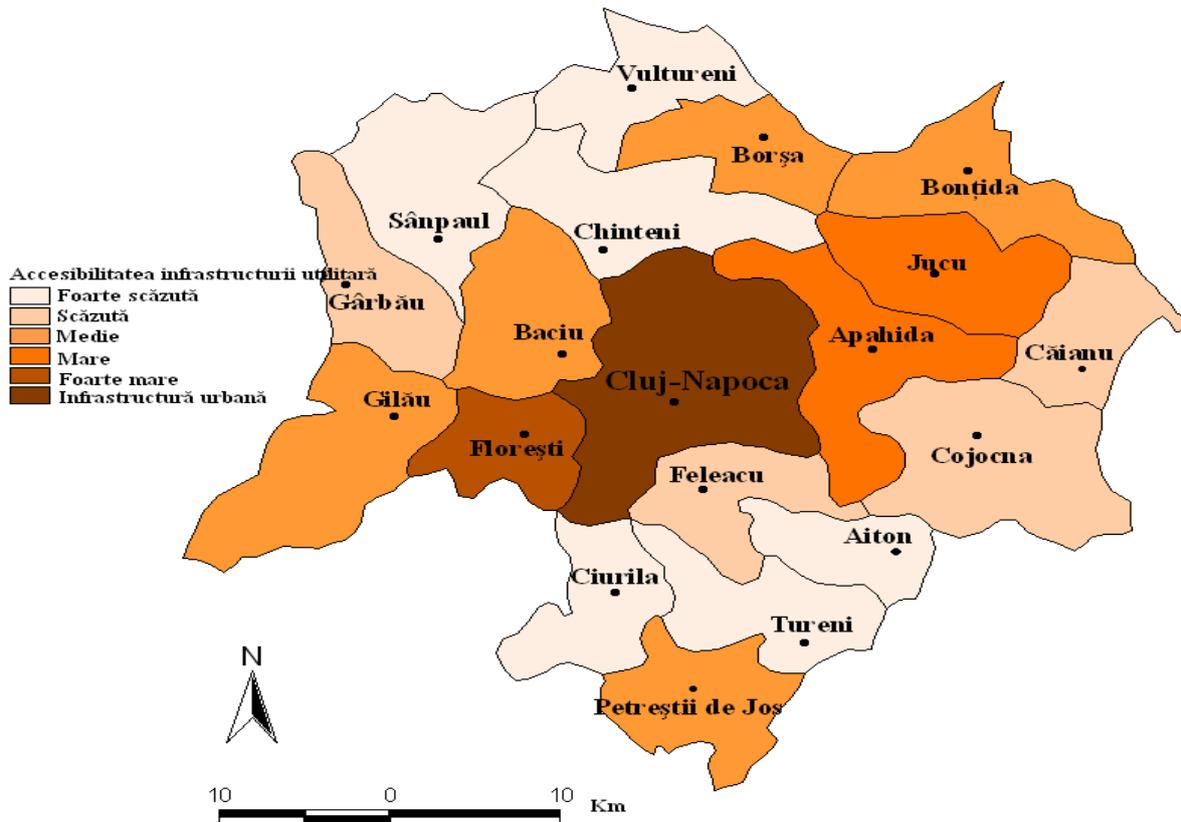## IV.1.2.4. Quantification of Utility Infrastructure Accessibility

Fig.5. Utility Infrastructure Accessibility in Cluj-Napoca Metropolitan Area in 2008

Among the utility infrastructures we analyzed the water and gas distribution network, respectively the sewage disposal network. We utilized data from 2008, where we calculated the network length for one unit of surface of the area. The received data was ranked with the Bennett method, where the maximum values appear in the case of Cluj-Napoca. The values of the rural areas were expressed as a proportion of the urban centre.

The final result presents the dominant tendency of the urban area. Other high values of the utility infrastructure can be found in the case of Floreşti, followed by Apahida and Jucu. Medium utility infrastructure can be found in the case of the villages: Gilău, Baciu, Petreştii de Jos, Borşa and Bonţida. Low utility infrastructure appears in the case of Gârbău, Feleacu, Cojocna and Căianu. The lowest values can be observed in the peripherical rural areas like Sânpaul, Chinteni, Vultureni, Aiton, Tureni and Vultureni.

Majority of the villages only disposes of water distribution network, but in the case of the peripheral villages the they are in a rudimentary form. All the three services can be found in four villages: Floreşti, Baciu, Gilău and Apahida. They are the close suburban areas, which

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prove the process of suburbanization. The utility infrastructure is an important development factor of the suburbanization.

IV.1.1.3. Social infrastructure

Social infrastructure is an important factor of the suburbanization, which directly proves the development level of the villages in the metropolitan area and indirectly deepens the disparities between the villages. Amongst the social infrastructure we analyzed the educational units and the health units.

VI.1.2. House building

The housing factor is extremely important from the point of the view of the process. We find intensive growth in the case of Floresti village, followed by Baciu and Apahida village

VI.1.3. Gross Domestic Product (GDP)

The GDP is a macro economical indicator, which reflects the costs of all the goods and services meant for final consumption. It is calculated for one person and for one year

VI. 2. Economical suburbanization forms

The legal background of creating and functioning of the industrial parks is based on the 65/2001 Edict and the 490/2002 Law. According to these legal documents the industrial park is a well defined area, where economical, scientific research and/or technological development take place in favor of marketing the region's human and material potential. The formation and functioning of the industrial parks are determined by the merge and/or the collaboration of the local and central institutions, the economical protagonists, high-level educational and R&D institutions and other partners (65/2001 Edict, 1st clause). The conditions which the industrial parks have to accomplish are the following: they have to have exit to a national or international road, they have to dispose of minimum 10 acre area and they have to be in the ownership of the association demanding the area for minimum 30 years. These industrial parks are realized and equipped by the local and central authorities with PHARE financial programs and local budgets.

VI.3.1.Industrial Parks in the Cluj-Napoca Metropolitan Area

The importance of the industrial parks was conceived in the early years of the new millennium. In order to achieve the objectives conceived in their strategy (increasing the

living standards and promoting the economical growth), The County Council of Cluj-Napoca, proposed a project to the Northwest Development Region, called: the Development of the West Economical Zone – Industrial Park for the Developed Technologies. In order to execute the project, the city Council applied for PHARE sponsorship, the remaining cost being guaranteed by governmental and local resources (The Development Strategy of Cluj-Napoca Growth Pole – Metropolitan Area of Cluj-Napoca 2009-2015). The prove that Romania and in our case Cluj-Napoca needs industrial parks is the fact that the parcels of the park were inhabited almost immediately, even before the finalization of the infrastructure.

In the interest of developing and administrating the industrial parks in 2001 was established the TETAROM organization, which is in the ownership of the local communities. TETAROM counted 44 employees in 2009, and is being lead by an Administrative Board.

TETAROM had the following target from the moment of its establishment (according to the strategy of the County Council):

➢ Creating and developing industry that uses modern technology and requires highly qualified labor force like the informatics, electronics, telecommunication, automation and robotics.

➢ Inspiring the R&D activities within the branches of the modern technologies

➢ Creating new workplaces for the graduate university students

➢ Promoting new, non-pollutant technologies in concordance with the environmental laws

➢ Creating the infrastructure required by the industrial parks, which determines the local and regional development

VII. Conclusions

In conclusion we can express that the rural areas of the Cluj-Napoca Metropolitan Area present significant geodemographical and economical differentiation. The villages surrounding the urban centre dispose of a more developed and diversified economy. At the same time these villages are the settlements, where the process of suburbanization can be visually observed and proved.

The economical development of the rural areas is significantly influenced by the infrastructure, especially by the road infrastructure. With this fact can be explained the rapid development registered in the villages Floreşti, Gilău, Baciu. Apahida and Jucu. The railway

infrastructure appears more like an instrument in the migration of the population, then as a factor in attracting economical activities. In this way the infrastructure becomes an important factor of disparities, facilitating the economical development in the villages with favourable infrastructure and negatively influencing the areas with imperfect infrastructure.

The utility infrastructure also appears as an important factor in the development and competitiveness of the rural areas. We can underline that these services appear only in the case of close suburban areas, presenting the level of development of the villages.

As the infrastructure, so the migration causes disparities among the rural areas, through the fact that the villages in favourable position generate economical and population growth, while the villages with disadvantageous position, peripheral depopulate. These population migrations in most of the cases are in linear proportion with the economical development.

The economy appears as the determinant factor of the disparities. In close suburban areas of the city the infrastructure and the high percentage of the labour force generates the economical development, creating thus new enterprises and working places. On the other hand the peripheral villages don't dispose of economical attracting factors, causing thus a more massive migration of the labour force towards the close suburban areas.

VIII. Literature Review

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