

TERRITORIAL BALANCING OF POLES OF DEVELOPMENT

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ABSTRACT - The paper is part of the study "Specific problems of the development of the settlement network in south-eastern Romania. Regions of development 3 (South), 4 (South-West) and 8 (Bucharest-Ilfov)" elaborated during 2004 – 2006, within the AMTRANS programme funded by the Ministry of Education and Research, coordinated by INCD – URBANPROIECT in partnership with the Institute of Geography of the Romanian Academy and the Qualification in Statistics National Centre.

The general objective of the project was sustainable and balanced spatial development of the settlement network and promotion of new relationships between urban and rural. Concretely, the study has produced a model of a polycentric and balanced settlement network according to the European principles.

The case study testing and validating this model took place in southern Romania, territory exhibiting acutely the entire range of problems related to the state of the settlement network: profoundly large rural areas, accentuated dynamics of declaring new cities without sufficient evidence, excessive polarization exercised by Bucharest, etc.

The paper presents the intervention directions needed to balance in the territory urban poles within the studied area, focusing on the establishment of orientation policies to consolidate the role of each settlement based on the hierarchical level of importance: European, national, regional, and local. The paper also identifies possible functional urban areas: the metropolitan area of Bucharest, areas of potential strategic integration, areas of cooperation between the small and medium-sized cities and the rural regions. Within each of these areas, the paper proposes to establish new relationships between urban and rural based on partnership, involving cooperation and coordination in achieving common goals.

The study considers that the *poles of development are the key element of proposed model, and their identification, formation, and balanced distribution must represent the main direction of action, orienting policies for the sustainable development of the urban system.* The constant financial effort needed to implement integrated policies for a balanced development of the settlement network results into a long term improvement of living conditions in urbane and rural communities.

Keywords: settlement network, policentricity, urban poles of development, balance, urban-rural partnership

1. Defining and Ranking Poles of Development

The model proposed by this study considers that the poles of development are the central element for defining a balanced and polycentric network of settlements, in agreement with the sustainable spatial development principles promoted by the European Union.

Critical analyses of the current situation of polarizing urban centres from south-western Romania have underlined some challenges this territory confronts with:

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- Excessive polarization exercised by Bucharest;
- Lack of important polarizing centres in the southern and eastern parts of the region, in order to counterbalance the dominant role of the capital (except for Craiova);
- Debility of some polarizing centres with respect to its corresponding hierarchical level;
- Existence in the central-southern and southern parts of profoundly rural areas outside the direct influence of urban centres with a consolidated polarizing role.

The following aspects may favour a positive evolution of the network:

- Relatively balanced distribution of polarizing centres in the northern part of the area;
- Existence of strong, direct, various, and permanent relationships between Bucharest and the settlements outside its area of influence, that could lead to the formation of a metropolitan area;
- Trend to decrease the number of profoundly rural areas by declaring new cities that could become polarizing centres along with the consolidation of their urban status.

Polycentric and balanced sustainable development in order to join the European network of poles and corridors of sustainable development represent one of the specific objectives phrased by the Strategic Concept on the Spatial Development of Romanian (in process of elaboration, in correlation with the National Plan of Development for 2007 – 2013).

Polycentric development is one of the main directions to assure territorial cohesion.

Polycentricity will be applied on the European continent at all levels (European, national, regional) through specific policies on: strengthening the polycentric system of metropolitan settlements, agglomerations of cities and urban networks, development of dynamic and competitive cities and urbanized regions, consolidation of small and medium-sized cities as poles of development, functional diversification of the city as a support for territorial balance, etc.

According to the aforementioned objectives, this part of the study aims at identifying the intervention directions required for a polycentric development of the settlement network in southern Romania.

Identification of urban poles is based on the principles and criteria used in the project ESPON 1.1.1., adapted for specific conditions and current level of development of the Romanian urban settlements.

This paper proposes a hierarchy of the *poles of development* accounting for population size, as well as six criteria referring to the satisfaction of several functions considered obligatory: industrial, tourist, transport, education, administrative, and decisional.

The classification of *urban poles* based on population size includes the following categories:

- Poles of European importance – over 1,000,000 people;
- Poles of national importance – 250,000 – 999,999 people;
- Poles of regional importance – 50,000 – 249,000 people;
- Poles of local importance – 20,000 – 49,999 people.

European studies propose for each level of the hierarchy thresholds of indicators defining the 6 functions to be fulfilled by the respective pole.

Table 1 identifies and characterizes poles of local and regional importance based on indicators adapted to existing database.

Table 1. *Indicators and thresholds characterizing poles of local and regional importance*

No.	Functions	Indicators	Regional pole	Local pole
1	Industrial	No. employees	30,000 – 40,000	10,000 – 29,999
2	Tourist	Accommodation (no. seats)	5,000 – 14,999	300 – 4,999
3	Transport	Have a port or airport	Gate city	Gate city
4	Education	No. students in universities	5,000 – 9,999	500 – 4,999
5	Administrative	Administrative status	County capital	Local residence (city hall)
6	Decisional	No. top companies	2 – 9,99	1 – 2

Source: AMTRANS study no. 7A08 – “Integrated system of territorial indicators - instrument to evaluate and monitor spatial planning”

TERRITORIAL BALANCING OF POLES OF DEVELOPMENT

The study also took into consideration basic criteria for selecting the poles of development:

- Balanced spatial distribution, based on current urban centres, so that the extended territory could benefit from their functions;
- Placement on trans-national and national transport routes, so that increased accessibility provides relations to other poles, condition necessary, but not always sufficient for development;
- Current level of development, that could influence positively the use of facilities and attract investments for more dynamic poles;
- Historical experience as regional centre takes into account the fact that political and historical resonance of some cities could be used to create an identity, and has a positive role in attracting investments or specialize in certain sectors;
- Existence of relationships with neighbouring municipalities, urban or rural.

Taking into account all the aforementioned elements, and with respect to the ranking established by Law no. 351/2001, the following urban development poles are proposed in southern Romania, in order to assure a polycentric and balanced development of the settlement network and promote its flexible and dynamic structure:

- *European pole*

- Bucharest – rank 0 – capital of Romania, European metropolis, included in the continental network, development centre of very high attractiveness, with increased accessibility to the major European transport network, headquarters of political, judicial, and economic decision institutions of national and international importance, well related to important urban centres and settlements within its area of influence.

- *National poles* (over 250,000 people), proposed inclusively by ESPON studies:

- Craiova and Ploiești – rank I – centres of development and high attractiveness, situated on major transport routes (pan European corridors), headquarters of territorial institutions with a regional role, centres with high economic level, well- defined historical and cultural identity, and traditional relationships with urban and rural centres from the extended territory (especially Craiova).

- *Regional poles* (50,000 - 250,000 people), proposed inclusively by ESPON studies:

- 10 cities (rank of municipality) – rank II – county residences: Drobeta Turnu Severin, Pitești, Râmnicu Vâlcea, Târgoviște, Târgu Jiu, Slatina, Alexandria, Giurgiu, Călărași, and Slobozia. Each of these urban poles is an important economic and administrative centre with regional influence, well related in the territory, connected to the national transport network. It can be noticed that, despite of differences in socio-economic level of development, historical and cultural importance, or size of the area of influence, current administrative status offers comparable development opportunities, provided the existence of policies aiming at consolidating their regional role.

- *Local poles* (20,000 - 49,999 people):

- 18 urban settlements, municipalities (rank II), and cities (rank III), with a balancing role at the county level, belonging to the following counties within the area:

- Argeș: municipalities Câmpulung, Curtea de Argeș and the city Mioveni;
- Călărași: municipality Oltenița;
- Dâmbovița: municipality Moreni;
- Ialomița: municipality Fetești;
- Prahova: municipality Câmpina;
- Teleorman: municipalities Turnu Măgurele and Roșiorii de Vede;
- Dolj: municipalities Calafat and Băilești;
- Gorj: municipality Motru;
- Olt: municipality Caracal and cities Balș and Corabia;
- Vâlcea: municipality Drăgășani.

Only 4 of the local poles within this size class are proposed by ESPON studies, i.e. Cîmpulung, Mioveni, Balș, and Calafat (the latter has less than 20,000 people, but it is a gate city situated on pan European corridor IV).

The study has shown that a balanced development of the urban network requires the consolidation of the polarizing role of all medium-sized cities, even if, at the moment, there are significant differences in their economic development, endowment, and equipment.

No urban settlement in the counties Giurgiu, Mehedinți, and Ilfov fit in this size class. Excepting for the particular situation of Ilfov, poor development of the county urban network, polarized exclusively by the municipality - residence of county, without benefiting from the territorial support of medium-sized cities, is a problem requiring interventions adapted to each one's situation.

• *Local poles* (less than 20,000 people):

- 2 municipalities (rank II) and 58 cities (rank III), playing a role in serving the rural space, belonging to all counties, respectively:
- Argeș: cities Ștefănești, Topoloveni, Costești;
- Călărași: cities Budești, Fundulea, Lehliu Gară;
- Dâmbovița: cities Găești, Pucioasa, Titu, Fieni, Răcari;
- Giurgiu: cities Bolintin Vale, Mihăilești;
- Ialomița: municipality Urziceni and cities Țândărei, Fierbinți Târg, Căzănești;
- Prahova: cities Sinaia, Bușteni, Azuga, Comarnic, Breaza, Băicoi, Boldești-Scăeni, Plopeni, Vălenii de Munte, Urlați, Mizil, Slănic;
- Teleorman: cities Zimnicea, Videle;
- Dolj: cities Filiași, Dăbuleni, Segarcea, Bechet;
- Gorj: cities Bumbesti Jiu, Rovinari, Tismana, Novaci, Târgu Cărbunești, Țicleni, Turceni;
- Mehedinți: municipality Orșova and cities Strehăia and Vânjul Mare
- Olt: cities Drăgănești Olt, Scornicești, Piatra Olt, Potcoava;
- Vâlcea: cities Brezoi, Călimănești, Băile Olănești, Horezu, Băile Govora, Ocnele Mari, Berbești, Băbeni, Bălcești;
- Ilfov: cities Otopeni, Popești Leordeni.

Very different levels of economic development and endowment of urban settlements within this class requires a specific orientation of local territorial policies. 26 cities are small (5,000 – 9,999 people) and other 6, 2 of which have been recently founded, have less than 5,000 people. The consolidation of their urban status is the first step in exercising their territorial role.

In order to sustain a polycentric and balanced development of the settlement network of southern Romania, the project proposes to consolidate the southern side of the urban system by increasing the role of regional and local poles with the function of *port cities* on the riverbank of the Danube: Drobeta Turnu Severin, Giurgiu, Călărași, Calafat, Turnu Măgurele, Oltenița, and Corabia.

The proposal is to valorize development opportunities offered by the natural environment and geographic position by orienting economic activities to tourism, commerce, constructions, fixing and maintaining river ships. The cross-border cooperation with cities from the opposite bank of the Danube must also be stimulated.

The analysis of the manner in which the proposed poles of development correspond to functional criteria with respect to their hierarchical level (regional, local) has indicated the fact that none of them meets all criteria for the pre-established thresholds.

Out of the proposed regional poles, the closest to meet the criteria is the municipality Pitești (4 criteria out of 6 met), all the others meeting 3 criteria at most, while the municipalities Alexandria and Slobozia assure appropriately only the administrative function.

In the case of the proposed local poles (over 20,000 people), it is even more difficult, excepting for the municipality Câmpina and the city Mioveni (meeting 3 criteria out of 6), the majority satisfies only the administrative function.

TERRITORIAL BALANCING OF POLES OF DEVELOPMENT

Given this situation, reflecting current level of development of urban settlements in southern Romania, the study considers that meeting (given the thresholds) the European functional criteria is a desideratum that could only be achieved in a long term. Nevertheless, these criteria are a milestone that should orient policies in this sector.

Directions of intervention proposed for a balanced development of the settlement network aim at assuming and consolidating the specific role of each pole of development, by developing functions considered obligatory.

- *Orientation policies for regional poles:*

- Increase number of employees in industry by developing and diversifying industrial branches in all municipalities – regional poles (only Pitești meets this criterion);
- Extend accommodating structures in all regional poles;
- Start university centres (or campuses) in Alexandria, Giurgiu, Călărași, Slobozia and develop the existing ones in Drobeta Turnu Severin, Râmnicu Vâlcea;
- Create conditions to attract top companies in Alexandria, Giurgiu, Slobozia;
- Continue to develop administrative and cultural functions, increase equipment and endowment according to the regional importance of the poles.

- *Orientation policies for local poles* (over 20,000 people) are similar to those for regional poles, but thresholds of indicators differ (see *Table 1*).

The urban centres Motru, Băilești, Balș, Caracal, Drăgășani, Curtea de Argeș, Moreni, and Roșiori de Vede require actions to satisfy the following functions: industrial, tourist, educational, and decisional. In a similar situation, but benefiting from the geographic position as Danube ports, that confer their gate city status, there are Calafat, Corabia, Turnu Măgurele, and Oltenița.

The cities Mioveni, Buftea, Voluntari will develop their functions related to industry, tourism and education, and the municipality Câmpina, already benefiting from accommodation structures, should also develop higher education structures and its industrial branches.

The transport function is met (regionally and locally) if the settlement lies on major transport routes, as building an airport for each pole does not fit with reality in the territory.

For local poles (less than 20,000 people) interventions should make a priority out of diversifying economic functions by valorizing natural and human resources specific to each of them, increasing the endowment level, and extending the public utilities with a territorial role. The aim is to consolidate the role of small cities as providers of services for rural areas and centres for their economic revitalization.

In a balanced organization, poles must be analyzed in the context of their areas of influence.

Based on demographic size, large cities tend to "capture" in their areas of influence spaces from the neighbouring counties. Interest and investments oriented predominantly towards the residences of counties has considerably changed relationships with cities of comparable sizes, especially if these had the residential function before.

Influence areas cover some 2/3 of the national territory, meaning that 1/3 of it lies outside active urban polarization areas. These regions correspond generally to depopulated areas (mountain region, isolated areas) or are far from cities.

European studies define *functional urban areas* as urban centres and the surrounding area, integrated economically. The following categories were identified:

- European metropolitan areas;
- transnational functional urban areas;
- national functional urban areas;
- regional functional urban areas;
- local functional urban areas.

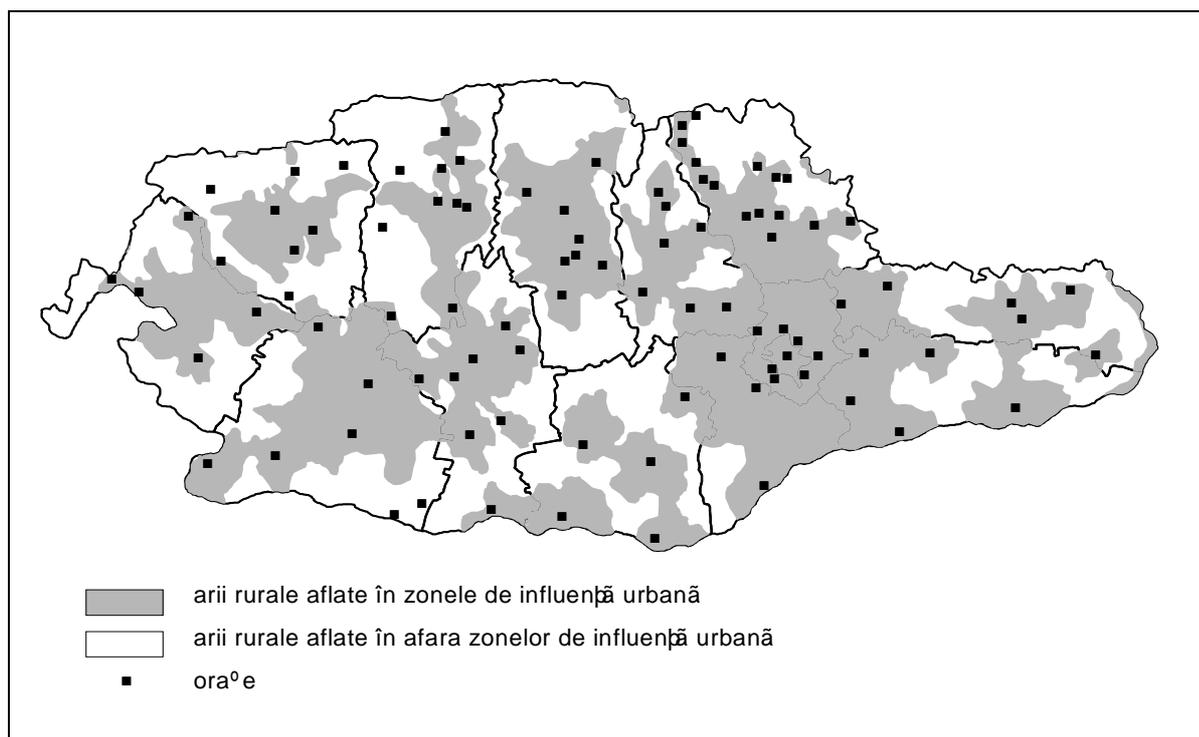


Figure 1. *Influence areas of cities.*

Moreover, one could identify “Strategic Potential Urban Horizon”, respectively areas neighbouring urban poles where people could pass to their workplaces through the isochrone of 45 minutes, using national highways.

Cities with overlapping transition areas could be included in “Areas of Potential Polycentric Integration”, as they can integrate functionally and benefit through cooperation.

In Romania, the organization of such functional areas is a desideratum; first attempts targeted the creation of periurban or metropolitan areas.

The study has identified in southern Romania, in relationship with the poles of development defined before, the following urban areas where strengthened cooperation is proposed:

- *the metropolitan area proposed for Bucharest*, including Ilfov county, most of Giurgiu county (including the three urban settlements), and western extremity of Călărași county (municipality Oltenița and cities Fundulea and Budești). Development of the relationships between the polarizing capital and the settlements within area of influence aims at forming and consolidating an integrate and functional area of socio-economic convergence;

- *potential areas of strategic intervention* – could form around groups of urban poles in morphological proximity, i.e.:

- * Drobeta Turnu Severin – Târgu Jiu – Motru, including lower rank urban poles (Orșova, Strehăia, Rovinari, Bumbești Jiu, etc.) and the adjacent rural area;

- * Craiova – Slatina – Balș – Drăgășani – Caracal – Corabia, including small cities (Filiași, Drăgănești – Olt, Scornicești, etc.) and a large rural area;

- * Pitești – Râmnicu Vâlcea – Curtea de Argeș – Câmpulung, including resorts in the proximity of municipality Râmnicu Vâlcea, urban centres around municipality Pitești (Mioveni, Ștefănești, Topoloveni, Costești) and the adjacent rural area;

- * Ploiești – Târgoviște – Moreni – Câmpina, plus the cities from the Prahova Valley, directly connected to the municipality Ploiești (Băicoi, Boldești – Scăeni, Urlați, Vălenii de Munte), cities from Dâmbovița county (Pucioasa, Fieni, Găești, Titu) and a large rural area around the

TERRITORIAL BALANCING OF POLES OF DEVELOPMENT

transport routes connecting these urban centres. This area continues the previous one, as relationships are possible at any time on the axis Pitești – Târgoviște – Ploiești;

* Călărași – Slobozia, with the small cities Țândărei, Amara, Căzănești, Lehliu – Gară and a large part of the communes within the counties Ialomița and Slobozia. In this area, the poor development of the urban network makes interrelating and mutually beneficial sustaining of urban poles difficult;

- *Areas of influence of small and medium-sized cities* within rural areas - constitute around the urban poles with insufficiently developed economic functions to target the workforce of an extended area, but exercising a polarizing role on the neighbouring territories, i.e.:

* municipalities Calafat and Băilești;

* municipality Urziceni;

* municipalities Alexandria, Turnu Măgurele, Roșiori de Vede, which polarize along with the city Zimnicea the rural area of Teleorman county;

* the cities Dăbuleni and Bechet, that could benefit from the position on the riverbank of the Danube;

* the cities Novaci and Turceni in Gorj county, as well as the city Berbești in Vâlcea county.

In addition to these possible functional urban areas polarized by urban settlements – poles of development, the study has also identified *profoundly rural areas*, lacking any city on a 25 – 30 km radius.

Priority actions proposed in these areas refer to developing *rural poles* – rural settlements, centres of inter-communal polarization.

Generally, due to the low density of urban centres and to the need for polarizing the space, the role of transmitting urban characteristics in the territory is assigned to rural settlements. There are villages which, during their historical evolution, have detached through economic and demographic power, but also as local polarizing forces. Their status, at the lower level of urban structure and high level of rural structure, provides for a rapid circulation of information and services of a certain interest.

New conditions, created after 1989, form the framework needed to return to a different level of the old territorial functions.

Based on economic profile and geographic position with respect to the national settlement network, Ianoș and Tălângă (1994) distinguish two categories and several subtypes:

I. Rural settlements with central functions situated in exclusively rural areas. They lie in non-polarized or poorly polarized areas, outside the active influence areas of cities or at their interference. They are the most viable in acquiring, amplifying and retransmitting some urban characteristics in the territory.

a) with dominant industrial functions, exercise a special attraction on areas exceeding workforce or prime matters. One could distinguish mono-industrial settlements specialized in extractive and manufacturing industries, and those with diversified activities.

b) with non-industrial functions. This subtype includes settlements specialized in agriculture or services. Often, their role is to deposit products in large warehouses or to locally valorize the agricultural products (e.g., Bechet, which has become a town). Those with servicing functions are old settlements with commercial or transport traditions (Răcari, that has become a town, and Drăgănești-Vlașca), and balneary resorts (Voineasa, Bala).

c) with mixed functions, rural settlements with diversified economic functions and better possibilities to exercise their polarizing role in the rural network (Independența).

II. Rural settlements with central functions situated nearby large/ medium-sized cities or integrated into intensely urbanized areas are characterized by both vicinity of large urban centres and differentiated functions, i.e.:

- a) industrial. Are characterized by the presence of national impact companies, workforce provided by the neighbouring city (Craiova-Işalnița). A special subtype is the mining centre integrated into large urban territorial assemblies (Filipeștii de Pădure);
- b) residential, provides workforce for the economic activities in neighbouring cities;
- c) balneary and recreational (Telega)

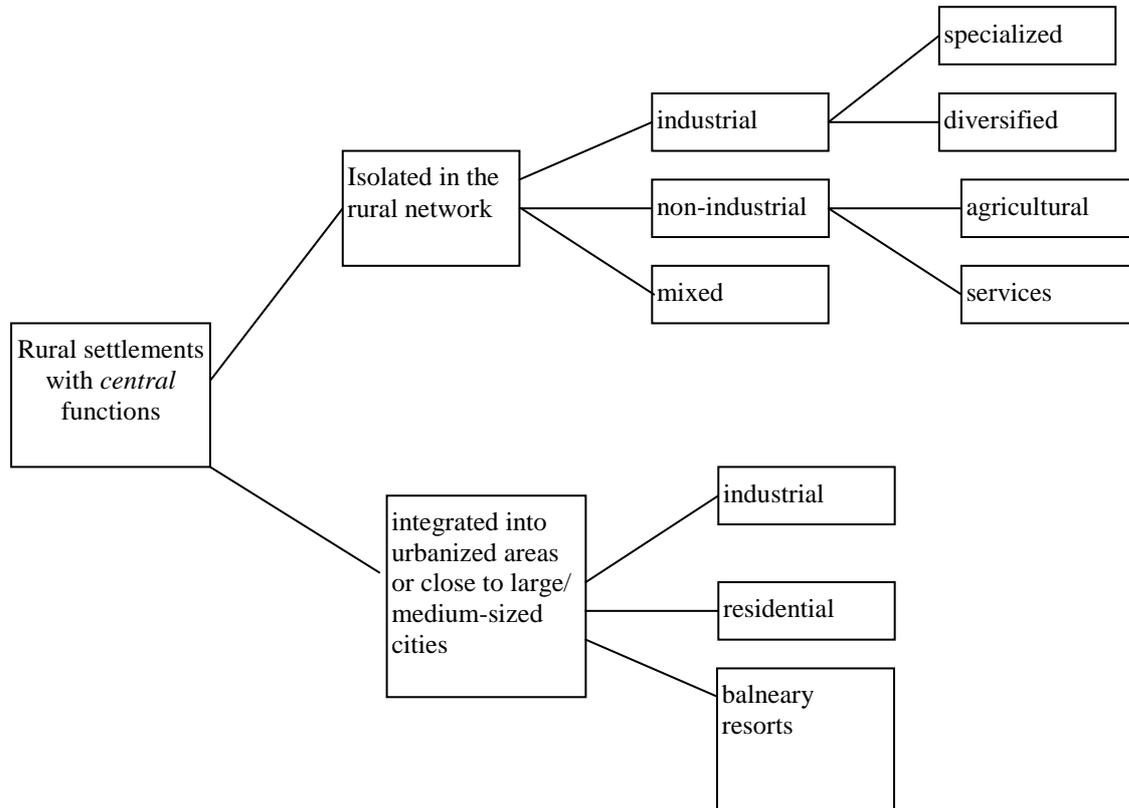


Figure 2. Types of rural settlements with central functions (Ianoș and Tălângă, 1994).

For the 4 profoundly rural areas within the studied territory, the following communal residences are proposed as polarizing centres:

- Valea Stanciului and Amărăștii de Jos (for the southern part of Dolj county);
- Plenița, Cetate, and Cujmir (for the area situated on both sides of the limit between the counties Dolj and Mehedinți);
- Ionești and Zătreni (for the southern part of Vâlcea county);
- Slobozia and Dobrotești (area in the southern part of Argeș county and northern part of Teleorman county).

Criteria used to identify these rural centres were: accessibility (position on national highways), population size, economic functions, and level of endowment.

In some cases, differences in economic functions or endowment were insignificant, as the areas were poor, agriculture was the only occupation, and endowments were present at a low level. In these cases, the main criterion was accessibility.

Proposals for the formation of a polarizing role of these centres refer to increasing endowments based on the size of the influence area and degree of centrality, development of agro-industrial functions, services and small industries based on local resources.

Development and diversification of relationships between settlements must be sustained by the formation of *development axes* of the settlement network, correlated with major transport axes.

TERRITORIAL BALANCING OF POLES OF DEVELOPMENT

The territorial role of settlements within the influence area of major transport corridors is consolidated by socio-economic opportunities of development resulted from the transport flow, amplified by increased accessibility.

Proposals to identify and establish a hierarchy of poles of development have analyzed the following major transport axes from southern Romania:

- pan European corridor IV - motorway and railroad;
- European IX corridor pan - motorway and railroad;
- pan European corridor VII - fluvial;
- proposals for auto-routes, express highways and railroads with speed up to 160 km/h.

Balanced spatial development based on formation and consolidation of poles of development must also be sustained by actions referring to:

- providing a high level and a balanced system of socio-economic services for population, meeting minimal values of defining indicators according to Law no. 351/2001;
- increase accessibility and improve connection of all poles, urban or rural, to the major transport network by extending, modernizing, and rehabilitating the existing networks;
- regulate urban development, including:
 - produce, finalize or update general urban plans;
 - avoid uncontrolled extensive urban development, especially along motorways;
 - introduce in the regulations afferent to these plans provisions referring to building typology and architectural and urban shape of built areas in order to preserve the valuable traditional character and the cultural identity of settlements;
 - introduce in the regulations afferent to these plans severe restrictions on urban developments within areas at risk (floods, land sliding);
 - sustain proposals for improving the legal framework by:
 - enlarge the competence and attributions sphere of county and commune counties in the process of decentralizing decisions;
 - monitor the application of provisions from regulations afferent to the approved urban plans.

Synthetically, formation and consolidation of poles of development as key elements for a polycentric and balanced network of settlements must be supported by long term integrated policies.

2. Establish New Relationships between Urban and Rural

• Territorial relationships

The city, the most complex geographic system, has most different types, directions, and intensities of relationships with its adjacent space; these relationships determine its influence area. The inner structure of the influence area reveals very tight links between all urban and rural settlements, forming their own hierarchical system, with the coordinating city at the top.

The rapport between the intra-urban and extra-urban space. Complex and synchronic analysis of catalyzing factors (natural environment, industrialization process, mechanization of agriculture, communication system) has determined the formation of a vast relational system between the city and its periurban space.

Economic relationships. Economic relationships between the city and its surrounding areas constitute the material support for its development. These relationships supply prime matters for some industrial branches, agro-alimentary products for the urban market and, at the same time, the city covers the need of the rural space for industrial products. In shaping the area of influence, economic relationships have become fundamental, as they connect both urban and rural space. They are characterized by an increasingly accentuated complexity and a stability exceeding demographic, socio-cultural, and political-administrative relationships. Stability results from the complementariness between the economic potentials of the city and its surrounding area.

Economic relationships are reciprocal, as the city has a double position, valorizing products of its surrounding area and influencing it through its functions. Merchandise flows are various and increasingly intense; the city attracts part of the products obtained in its influence area (in order to consume, transform, or send to other settlements) and spreads other products produced within or received to be redistributed.

The main types of economic relationships between the city and its territory form between:

- industry of the city and natural resources of the adjacent area; these are the starting base of the industrial development process. Numerous chemical industry centres use raw materials from their neighbourhood: Ploiești, Pitești (oil), Drobeta-Turnu Severin, Curtea de Argeș, Râmnicu Vâlcea (wood). Plants for processing fruits and vegetables, sugar beet or sunflower are usually surrounded by areas where these plants are cultivated. For instance, the sugar plant in Corabia is supplied by the extended area between Potelu and Izlaz, and to the North, by some part of the Caracal Plain, along the railroad;
- urban agro-alimentary consumption and rural agriculture, as the urban centre is a great consumer of agro-alimentary products. Large cities satisfy their most consumption needs from the periurban agricultural basins, and only a little portion from other communes in the county, or from other regions of the country;
- city industry and rural industry, as some rural settlements have industrial units or pre-processing centres for agricultural products, construction materials, or branches of large urban industrial companies.

Demographic relationships. Dynamics of demographic relationships between the city and the adjacent rural area underline an indubitable advantage for the city, as the ratio between the population born in the city and the one from other settlements is changed by the input of the migratory increase of urban population. Towns as Motru and Rovinari have their population increased by 75% based on migration. Spectacular migration-based growth is found in county residences such as Râmnicu Vâlcea, Slatina, Slobozia, etc. The phenomenon with most implications on demographic, economic, and cultural relationships between the city and the rural area is daily shift to the workplace. Its size is greatly influenced by the economic development of the city and its functional type. For instance, Motru and Rovinari recruit the workforce from a larger area than Găești, specialized in machinery construction industry.

"Plying cities" concentrate in a relatively narrow region, beyond the suburban one. The extension of the influence area is closely expressed by railroad isochrones, communication that constitutes a true "symmetry axis". Plying is demographically doubled by changes of professional status, generated mainly by new industrial branches (metallurgy, electronics) and, as a consequence, by professional "adaptation" of active population and social changes, as a numerous rural population becomes urban by moving to the city.

Depopulation of settlements in the area of influence is, in a first phase, the consequence of the need to exercise a non-agricultural profession by the specialized rural population.

Development of urbanization elements in villages, changes occurred in the socio-professional structure of population, organization of industrial and service (craft shops) activities are meant to contribute to a gradual resemblance of the conditions from rural settlements - especially those close to the city - to urban living conditions.

Massive population shifts remain an important factor of rural depopulation. One must not forget the other side of "downshifting" urban population to the village, in the post-revolutionary period, as a consequence of applying the provisions of the Law on the land fund.

Population transfer to the city allows inhabitants to benefit from certain advantages: health and education services, contact with sectors of modern economy, etc., allowing them to adopt new behavioural and consumption attitudes, and a new cultural model.

The phenomenon of rural-urban migration has a positive nature, but spontaneous mass shifts have determined important changes in the size and quality of work resources, and have also negatively influenced complete, complex, and rational use of agricultural workforce. Population changes between

the city and their areas of influence have at the same time a series of implications on rural communities. Numerous attributes of the urban enter villages. The need for comfort, for ascension through culture have become a new major coordinate of the "rural" behaviour. Numerous settlements in suburban areas of cities acquire more prerogatives allowing for their declaration in the future years "satellite cities".

Daily transfer of population to the city has indeed a positive nature, and mass shifts (of male population) produced a restructuring of agricultural workforce - increase of the percentage of women, ageing, with direct consequences on agricultural life. In some rural settlements from the area of the cities' influence, as a consequence of the massive transfer of young population to the city, the population structure by age groups has become imbalanced, and ageing population has become preponderant, while the reproductive potential has decreased.

The frequency and rhythm of rural population shifts have also moral implications on the entire collective of the village and, implicitly, on the familial group. The existence within families of one or more members working in the city determines substantial life shifts, as new challenges and aspirations appear. Parents change the views on children and their orientation in life; children themselves grow up in a new and different climate, with a new professional orientation.

All these changes generated by the relationship between the city and its influence area are a direct consequence of industrialization and transformation of agriculture.

Shifts to the cities, as a component of the urbanization process, do not constitute a unilateral manifestation. Contrarily, the evolution of urbanization during the last decade has determined the emergence of new forms and phases of the migratory phenomenon: a compensational trend – repeated migrations. This is mainly about qualified personnel integrating into the aforementioned intra-urban plying, and the one shifting to industrial production units situated in strong centres of convergence.

In the context of market economy, based on the principle of the dynamics between demand and offer, urban-rural relationships must comply with this principle in order to achieve a concordance between the city and its periurban space. The structures of the two spaces will be reciprocally influenced by their specific potential, providing the complementary character of economic, social, and cultural activities. In these conditions, creation of new self-regulating mechanisms will be the result of a new reciprocal structural adaptation of the city and periurban space, without a violent intervention from the outside.

Political-administrative relationships. Political-administrative attributions diversify relationships between the city and the other urban and rural settlements within its area of influence; in this case, relationships have a coordinating character.

Large cities within the studied region of development, due to the institutions owned at the county or even regional level, coordinate numerous judicial, political, and administrative activities, representing a starting point of socio-economic development in more extended areas, coordinating all sides of material and spiritual production. Parts of the functions of county residences are taken by municipalities and other important cities. Small cities also have a judicial function, given the presence of judges.

Commercial relationships. Commercial relationships represent a strong connection between the city and its adjacent area, favoured by transport possibilities, population incomes, and economic and administrative power of the urban centre, residing in the inability of rural endowments to meet the demand of alimentary, household, and general products of inhabitants. Commercial rapports between city and village have two sides: one referring to the rapports between rural stores (private or state-owned) and the commercial sector of merchandise distribution (including warehouses) from urban centres, and another resulted from the shifting of the village inhabitant to the city in order to purchase directly from the urban stores.

In the provision of sales volume of urban markets, an important role is played by the inhabitants of rural areas within the periurban region. Therefore, plying population does the shopping

daily from the urban market, with a decisive influence on shaping and expanding the area of commercial attraction.

Socio-cultural and recreational relationships. The level of socio-cultural endowments dictates the territorial influence of the city, manifested in coordinating education and health activities from villages, and also attracting rural inhabitants in their units. High school education is a factor exercising a strong attraction, given the specialization of urban high schools and their endowment with dormitories. Almost all Romanian cities have a high school constituting the main form of educational influence upon the neighbouring settlements.

In large cities, the most influent educational form is represented by universities, providing to the city a certain centrality in the student recruiting area. Among the large cities, noticeable universities are in Bucharest, Craiova, Târgoviște, Drobeta-Turnu Severin, with well shaped recruiting areas.

Influence area with respect to cultural and recreational activities is smaller, limited to immediately neighbouring settlements. The rural environment increasingly faces the diffusion of urban culture through media, but also through education, need for qualification, attendance of theatre events, and participation in sport events.

Rural-urban relationships depend in intensity and structure on the size of the urban centre, its economic profile, and also on the conditions of the surrounding area.

• **Urban – rural partnership**

Developing a polycentric and balanced urban system, sustaining and strengthening the urban-rural partnership represent one of the three objectives of spatial development in Europe, proposed by the ESDP. Therefore, maintaining a balanced relationship between urban and rural areas by constituting partnerships could support polycentric development of the studied area.

The future of many rural areas is increasingly connected to developing urban settlements within rural areas. It is essential that the city and its surrounding area phrase and implement regional development concepts in a partnership-based cooperation.

Urban-rural partnership involves ***cooperation*** and ***coordination***. In order for the cooperation process to take place in a long term partnership, few prerequisites must be met:

- equality and fulfilment of partnerships;
- voluntary participation in partnerships;
- accounting for diverse administrative conditions;
- common responsibility and benefices.

Urban-rural partnerships refer to the initiative to phrase, adapt, and implement integrated policies in economically-interdependent regions and are based on urban-rural relationships. Their aims are to:

- provide services and public transport to rural areas, particularly to declining ones, by small and medium-sized cities, by promoting cooperation between cities and villages;
- stimulate urban-rural cooperation in order to develop functional regions;
- integrate rural areas around large cities in the urban development strategies of cities in order to better plan efficient land use and improve life quality in rural areas.

The objectives of urban-rural partnership are:

- a. *develop a balanced structure of settlements and improve accessibility;*
- b. *diversify economy in an enlarged urban-rural context;*
- c. *preserve and protect natural resources and cultural heritage;*
- d. *promote culture and cultural heritage within economic development strategies.*

The legislative framework provides in Romania a possibility for the local public administration to establish partnerships in order to favour economic, social, cultural, spatial planning,

TERRITORIAL BALANCING OF POLES OF DEVELOPMENT

and environmental protection based development. Legislative acts regulating the possibility to establish partnerships in order to achieve common interest objectives are: Law no. 351/2001 – on spatial planning and urbanism, Law no. 215/2001 – on local public administration, Law no. 350/2001 – on approving the National Spatial Plan - Section IV "Settlement Network", Ordinance no. 45/2003 - on public finances.

In order to achieve a balanced development of the territory around the capital of Romania and around the rank I municipalities, the basic administrative-territorial units from these areas could *associate in a voluntary partnership* to found metropolitan areas afferent to the urban space. Metropolitan areas function as independent entities without juridical personality. The association of the metropolitan area, with the agreement of local councils and the consultation of population within, adopts a program of development (according to articles 7 and 8 of Law no. 350/2001 – on approving the National Spatial Plan - Section IV "Settlement Network").

Local public administration authorities have the right to co-operate and associate with other similar authorities in Romania or abroad, within the limits of their competences. They can also sign agreements and participate, inclusively by assigning funds, in the initiation and development of regional development programs.

Specific territories for forming urban-rural partnerships are:

- metropolitan areas
- areas of cooperation between the small and medium-sized cities and the surrounding rural areas
- profoundly rural areas

Metropolitan areas:

Institutional cooperation forms that could be adapted by metropolitan areas are: *association for zonal development* and *agency for zonal development*. The principles and objectives for the constitution of such associations or agencies are the following:

Principles:

- *Economic and social cohesion:* local councils within metropolitan areas could sustain through political decisions a general and harmonious development in order to create a competitive metropolitan territory.
- *Principle of specialization:* local councils within metropolitan areas, enabled to achieve certain competences within the metropolitan area, can act only within the competence limits allowed by member councils.
- *Principle of exclusiveness:* when a council transfers one or more competences to the metropolitan area, the council loses the transferred competence(s).
- *The subsidiary principle:* Local councils cannot transfer to the metropolitan council competences that they cannot provide for themselves.

Objectives:

- Remove disparities between settlements.
- Achieve objectives defined by Law no. 350/2001 – on approving the National Spatial Plan - Section IV "Settlement Network".
- Improve life quality.
- Increase economic competitiveness of settlements within the metropolitan area compared to the neighbouring regions.

The cooperation sectors within metropolitan areas are:

Territorial development – cooperation councils could decide on territorial development given coordination with spatial planning instruments. The proposals for the adopted spatial model are:

- Develop a metropolitan territory by developing the central nucleus and provide territorial contiguity of settlements, without changing their administrative form;
- Develop the metropolitan territory based on a common plan of investment approved by partner local councils and county councils;
- Propose a general director plan and/or sector director plans;
- Initiate and propose spatial or urban plans of common interest.

Housing - elaborate common housing programs, activities for improving current building stock, social housing policies.

Economic development - create and manage industrial, commercial, tertiary, art craft, tourist industries activities, common interest actions for economic development, develop small and medium-sized companies, stimulate investments, and develop economic activities based on valorizing the existing material resources and training of local workforce.

Infrastructure and transport - motorways, water supply, sewerage, thermal energy, electrical power, telephony, public transport, waste management, safety of citizens.

Services - education and culture, health, recreation and leisure, tourism;

- co-ordination of emergency, police, fire departments services within the metropolitan area.

Environment - promote prevention of environmental deterioration, elaborate common programs for environmental protection and conservation, evaluate the environmental impact assessment of investments, elaborate and implement air, water, and soil pollution control programs;

- elaborate a plan to protect the historical heritage;

- common action plan including intervention and funding for natural hazards and transmission of risk factors.

The metropolitan area of Bucharest is in the process of forming in southern Romania, by including a large surface, where proposals refer to cooperation relationships based on aforementioned sectors, principles and objectives.

Cooperation areas between small and medium-sized cities and surrounding rural areas

Formation of partnerships between small and medium-sized cities and surrounding rural areas plays an essential role in developing a balanced structure of settlements and develop public transport networks, in order to revitalize and diversify local economy.

Small and medium-sized cities must be promoted as ***service providing centres*** for urban inhabitants, but also for those in surrounding rural areas: health, education, social assistance, justice, culture, leisure and recreation, financial-banking, commercial, postal and communication, transport, and business developing services.

Cities within rural areas have an important function - economic growth engine. They must be areas where small and medium-sized companies are placed.

Moreover, cities from rural areas have a special role in preserving habitats and cultural landscape, requiring a tight cooperation through common policies between administrations of the two types of settlements.

Institutional forms of cooperation between small and medium-sized cities and surrounding rural areas are:

- Administration based on voluntary agreements between autonomous administrative entities;
- Administration focused on functional aspects, delegated to an agency;
- Administrative structures organized on two decisional levels;
- Administrative forms subjected to a single authority resulted from merging existing local authorities.

In the studied territory, five possible regions of cooperation between small and medium-sized cities and surrounding rural areas have been identified; within them, partnerships are recommended to solve local issues of common interest.

TERRITORIAL BALANCING OF POLES OF DEVELOPMENT

The areas, located preponderantly in the southern counties (Dolj, Teleorman, Ialomița), but also in Gorj and Vâlcea, include cities outside the direct influence of the larger urban centres, therefore increasing their role in economic revitalization and provision of a higher level for the territorially polarized rural areas.

Profoundly rural areas

Profoundly rural areas have been delineated in Romania by the National Spatial Plan - Section IV "Settlement Network" and defined as "rural areas lacking any city on a radius of approximately 25-30 km, requiring priority actions to develop settlements with an inter-communal serving role".

These areas need the development of *inter-communal polarizing centres*, endowed with urban functions in order to improve economic exchanges and provide services for a larger area. For these centres, it is important to consolidate and extend functions related to providing public services and develop town infrastructure. These centres can be defined by local public authorities.

The criteria for identifying inter-communal poles of development are:

- direct access to major communication and transport infrastructure (national highway, European motorway);
- level of economic development (tertiary and industrial economic activities, generating employment);
- existence of opening markets for the inhabitants of the neighbouring communes;
- historical criteria or traditional links between communes;
- potential for developing human capital;
- ability to provide services (administrative, financial, judicial - notary, health and social assistance - health centres, individual medical centres, pharmacy, centres for children and elder, education - gymnasium and high school, culture, sport and leisure, diversified employment).

In the studied region, a series of rural settlements have been proposed in the 4 profoundly rural areas as inter-communal polarizing centres, but they do not meet all the aforementioned criteria. Some of them need sustained interventions in endowment, equipment and economic diversification in order to properly exercise their assigned role.

Inter-communal cooperation represents an adequate form of cooperation between communes lacking any city on a radius of 25 km in order to solve common problems. Partnership is an essential principle for accessing European structural and socio-economic cohesion funds. The basic condition for accessing these funds is to consult local authorities and **associate** local and regional authorities, as well as other social and economic partners for achieving goals of common interest.

Inter-communal cooperation can be achieved by:

- a) *associating communes to manage public activities and services. Funds come from budget and/or tax contributions of member communes;*
- b) *grouping communes in a development project.*

Communes could create a council for development with representatives of: economic, social, cultural and business sectors, with competences in spatial planning and economic development.

Common actions of administrative-territorial units are related to: infrastructure (motorways, water and sewerage networks, thermal energy, electricity, telephony, natural gas, public transport, education and culture, health, waste management, safety of citizens), housing, land use (territorial zoning by activities, prevention of natural disasters, amelioration of environmental conditions, establishment of conditions for the conservation of zones with a heritage value), environment (assess environmental impact of investments, preserve environmental quality according to the existing natural characteristics).

Conclusions

The current paper concludes a case study developed on a very large area in southern Romania, by identifying the intervention directions on both elements of dynamics and structural ones for settlement networks, needed for its polycentric and balanced spatial development, according to the proposed model. The phase corresponds to a territorial testing of this model.

The paper has underlined the factors favouring the development of a settlement network in the studied area and has identified elements for phrasing policies in the sectors influencing the evolution of the settlement network and configuring its composing elements.

In summary, the following elements have been noticed:

- the factors favouring a positive evolution of the settlement network within southern Romania are:

- advantageous geographic position – the area includes the capital, the most important traffic node, a very attractive centre, able of cross-border cooperation, and benefits from a various nature, delimited in the southern part by the Danube;

- presence of major transport routes – pan European corridors IV, VII and IX, a significant network of national and European highways, three airports (two international and one local);

- existence of areas with special demographic potential (high density, young population, low dependence ratio, positive migration), situated preponderantly in the northern counties and around Bucharest;

- special natural and cultural tourist potential, partially valorized by appropriate infrastructure, preponderantly in the mountainous and sub-mountainous regions;

- important industrial potential represented by very large industrial centres (over 10,000 employees), large (5,000 – 9,999 employees) and a large number of smaller centres, valorizing mainly the resources from the mountainous and sub-mountainous regions; presence of the largest Romanian industrial centre – Bucharest;

- special agricultural potential based on important agricultural lands, valorized in areas with intense and diversified vegetal and/or animal agricultural activities;

- rich and diversified natural and cultural heritage, formed by many natural and cultural values classified as being of natural interest, but also values of local interest, most in the mountainous and sub-mountainous regions, but also in the municipalities of Bucharest and Craiova;

- interventions proposed for the evolution of the dynamic elements in order to sustain a balanced development of the settlement network include:

- improve demographic potential by specific economic and social policies (improve health services, social assistance, increase birth rate, diversify economic activities in rural areas, professional re-conversion) in areas affected by negative demographic phenomena (demographic ageing, negative natural and migratory increase) situated preponderantly in the counties of Mehedinți, Dolj, Teleorman, Giurgiu; develop human capital and increase labour competitiveness by education and professional training, promote active occupation actions;

- develop economic functions referring to:

- continue the restructuring and developing industry in order to consolidate industrial centres as poles of development in relationship with the hierarchical position of each of them; declare disfavoured areas sustained by tax facilities and special programs, build industrial parks to stimulate economic development and attract investments (15 parks already functional and 18 proposed, with a relatively uniform distribution within the studied area);

- efficient valorization of agricultural lands (67% of total area) by creating structures to re-launch vegetal and animal agricultural production; develop agricultural centres for processing agricultural products and specialized services situated in rural areas, with intense agricultural activity and diversified in the field region;

TERRITORIAL BALANCING OF POLES OF DEVELOPMENT

- develop tourist activities in areas with natural and cultural tourist potential by diversifying the forms of tourism, modernize and extend accommodation and leisure infrastructure, especially in less valorized areas (counties Mehedinți, Gorj, floodplain of the Danube), as an opportunity to promote areas non-integrated economically; consolidate the tourist function of the regional and local poles by increasing accommodation facilities;
- rehabilitate, modernize and develop motorway, railroad, naval, and air routes in southern Romania, to support formation and consolidation of development axes for the settlement network in relationship with major transport axes – pan European corridors IV, VII and IX, highways, express motorways, railroads with speed up to 160 km/h – and with circulation nodes, airport, combined transport terminals;
- protect and preserve the rich and diversified natural and cultural heritage of the studied area, in order to assure its integrate valorization, as a socio-economic development opportunity of settlements and areas benefiting from special cultural and natural values;
- develop structural elements of the settlement network through actions on:
 - meeting minimal indicators for defining urban settlements in southern Romania through interventions oriented to improving indicators referring to demography, housing, socio-cultural endowments, tourist infrastructure, technical and town equipment; urgent interventions are required in 10 cities that must meet criteria established by 12 – 13 indicators;
 - develop socio-cultural infrastructure in: education (re-organize gymnasium education, attract new instructors and extend education to areas in deficit, develop university education in regional poles), health (increase the number of physicians and found new polyclinics in inter-communal polarizing centres), culture (rehabilitate and develop spaces designed for cultural activities), finances-banking (found new bank branches in small cities from rural areas);
 - develop town equipment by: extending and modernizing centralized water supply and sewerage systems in the settlements lacking these facilities; modern and ecological urban waste management through zonal deposits and transfer stations, or the modernization of the already existing deposits;
 - territorially balancing poles of development by creating a hierarchy of settlements, according to European practices, by 4 levels of importance: European (Bucharest), national (Craiova and Ploiești), regional (10 municipalities - county residence), and local (18 urban settlements with 20,000 – 49,999 inhabitants); for each of them, orientation policies must be phrased to consolidate their specific role; possible functional urban areas must be identified in the studied territory (metropolitan area of Bucharest, potential strategic integration areas, influence areas of small and medium-sized cities, profoundly rural areas polarized by inter-communal centres);
 - establish new urban-rural relationships, by constituting cooperation-based partnerships in adopting and implementing policies on improving technical and town infrastructure, diversify economy, preserve natural and cultural resources; the identified potential areas of cooperation are the metropolitan area of Bucharest, potential strategic integration areas, areas of cooperation between the small and medium-sized cities and the surrounding rural area.

The elaboration of this phase of the case study allows noting that interventions proposed on the elements established through the model as determining the configuration and the evolution of a settlement network permit balancing and continuation of a polycentric development of the settlement network in southern Romania.

In order to achieve this goal, a long time interval is needed for implementing integrated policies at regional and local levels. Increased awareness of local public administration authorities on the benefits of a balanced spatial organization for socio-cultural development of settlements and their involvement in this process is very important.

This last phase of the case study is a fundament for spatial planning documents to be elaborated in southern Romania. It could also represent an instrument to orient policies of public authorities toward a sustainable and balanced development of the settlement network.

The next phase will bring eventual amendments to the model, based on the conclusions resulted from the experimentation of the model in southern Romania.

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