

<https://doi.org/10.61308/WHYY2614>

Opportunities to improve the typology and regional development of rural settlements in Bulgaria

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Citation: Petrov, K., Borisov, P. (2024). Opportunities to improve the typology and regional development of rural settlements in Bulgaria. *Bulgarian Journal of Agricultural Economics and Management*, 69(1) 72-88.

Abstract: Within the European space, there is more and more talk about the differences between the center and the periphery, regional development at different speeds, depressed states of the settlements and other problems with a focus on the condition and functioning of the settlements. Our focus is on rural areas and their particularities of settlement and functioning of the settlements in them. In this direction. We set ourselves the goal of deriving the regularities caused by the historically developed network that rural settlements form in the EU and to propose an up-to-date methodology for the typology of villages. This is possible only by systematizing the facts and establishing the main types of approaches and criteria for typology.

Key words: rural settlements; typology; regional development; regional policy

Възможности за подобряване на типологизирането и регионалното развитие на селата в България

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Резюме: В рамките на европейското пространство все по-често се говори за разликите между центъра и периферията, регионално развитие на различни скорости, депресивни състояния на населените места и други проблеми с фокус състоянието и функционирането на селищата. Нашият фокус е насочен върху селските райони, техните особености на заселване и функциониране на селищата в тях. В тази посока си поставяме за цел да изведем закономерностите, породени от исторически развилата се мрежа, която селските селища формират. Това е възможно само чрез систематизиране на фактите и установяване на основните видове явления и възможности за регионално развитие.

Ключови думи: селски селища; типология; регионално развитие; регионална политика

INTRODUCTION

Connecting local culture (folk art, traditions, customs, specific gastronomy, urban heritage,

traditional crafts) with the economic, commercial and territorial marketing phenomenon is not a practice at the level of rural communities, although there are communities with important

potential. The weak valorization of culture in the context of an integrated local product causes a lack of interest in investing in culture and a gradual loss of identity, of local specificity. This phenomenon is more prevalent in places with increased connectivity (except for some places that have long practiced the preservation and expression of local traditions) and more diffuse in intermediate and peripheral rural areas where, due to relative isolation, a specific local culture has crystallized and strengthening local identity can still be a source of competitive advantage. Within the European space, there is more and more talk about the differences between the center and the periphery, regional development at different speeds, depressed states of the settlements and other problems with a focus on the condition and functioning of the settlements. Our focus is on rural areas and their particularities of settlement and functioning of the settlements in them.

In this direction, we set ourselves the goal of deriving the regularities caused by the historically developed network that rural settlements form in the EU and to propose an up-to-date methodology for the typology of villages. This is possible only by systematizing the facts and establishing the main types of approaches and criteria for typology.

MATERIAL AND METHODS

Compared to the typology of cities, the typology of rural settlements and their territorial groups (rural migration) is less studied in modern science according to (Espon, 2003; Ferrao, 2004; Mitchell, 2011; Mulligan, 2014). Bearing in mind these statements, modern requirements, as well as the experience of geographical studies of rural settlements, we will try to consistently consider the whole set of typological questions of theoretical and practical importance. It is necessary to emphasize: 1) the typology of rural settlements; 2) the typology of their territorial combinations and groups of settlements. A special place is occupied by the relationship between the typology of urban and rural settlements. Given the charac-

teristics of the countries of the European Union, which includes 240 regions, 90,000 municipalities and over 1.2 million politicians in elected positions at the local and regional level, representing 650 million people, we will limit ourselves to only some theoretical and practical examples of the form, structure and the features of rural settlements. In addition, we will limit our tasks to considering only modern, currently existing examples and characteristics of the development of settlements in the territory of our country. This is the place to say that, despite our relatively small territory, rural settlements differ in many ways. This predetermines our attempt to try to create a single, universal typological scheme, sufficient for various scientific and practical needs, sufficiently diverse characteristics of rural settlements to present us with the necessary qualitative picture of their condition. The task of building a single integrated typology seems very tempting, but little success has been achieved in this area, and this is not accidental. Settlements and especially their territorial groups are a rather complex and multifaceted object of study (Psaltopoulos, Balamou and Thomson, 2006); at the same time, each typological scheme can use only a limited number of characteristics, characterizing objects of the typology. Therefore, two ways are possible: (1) either to create a “one-sided” typology with a clear bias towards one or another group of characteristics, or (2) to select one characteristic from different groups, resulting in a “universal”, but a being without a basic and rather eclectic scheme. The first way is by no means evil, it is the right way. But it follows that a single “universal” typological scheme cannot be rejected when characterizing settlements. Undoubtedly, for example, the most urgent task is to identify the system of functional types of rural settlements, standing out as leading signs related to the resettlement to certain socio-economic, technical, and economic conditions. This typological scheme is fundamental in its theoretical and practical value. But one cannot enter it without affecting the others, which are also significant enough for the geographical characteristics of the particularities of the settlements. Therefore, we must think not of

the universal, for all cases, a typology of settlements, and for several “typological lines” that complement each other. On the other hand, it would be wrong to compare them; each type of typology has its tasks, purpose and possibilities.

Formation of the general structure of settlements (villages). Populated place is historically and functionally distinct territory, determined by the presence of a permanent resident *population*. According to Bulgarian legislation, it is defined simultaneously with the presence of building boundaries or land and building boundaries and the necessary social and engineering infrastructure. Thus, different settlements are formed in different points of the national space. **The grouping of settlements according to their size (population)** it can be considered the simplest type of typology, using only one indicator, although it is very important for the characterization of settlements (Roberts, 1998). In addition, the functional typology of settlements reflects the very foundations of their modern life. It takes into account such signs as the production activity of the population, the role of the given settlement in the territorial organization of production, its place in the system of inter-settlement relations. Understood quite broadly, it should also include the distribution of rural areas to a certain socio-economic group (for example, collective and state agricultural villages) and reflect their economic and geographical situation, with which their functions are closely related. Another “typological line” should show the characteristic differences in the material forms and appearance of the settlements, highlight the main existing types of planning and construction of them (or “typical forms of planning”). It is appropriate to raise the issue of different types of utility equipment and the improvement of rural settlements (underlining the characteristic “types of engineering equipment” of rural settlements, similar to how it is done for cities. The position of villages in relation to the economically used territory, other populated places and main roads, that is, the economic and geographical situation should be reflected in the functional typology (OECD, 1996). But this is characterized only by one side of the relationship “settlement –

territory”. The other side is the location of settlements on the terrain (the use of characteristics on the terrain, microclimatic conditions, the position relative to the river network, etc.), which is sometimes called “topographical position” (Schrader, 1994). The creation of certain conditions for the existence and development of settlements, their types of land location or types of topographical position form a special type of typology. It cannot be ignored or merged with others, studying all three elements of the settlement (the territorial collective of people, buildings and structures, the territory with its natural environment). Finally, the differences in the historical conditions of the origin and development of settlements, leaving a more or less noticeable imprint on their modern appearance, create a need for a historical or genetic typology of rural settlements. Differences in the national composition of their inhabitants (in turn, reflected in the appearance of the settlement) are also related to history. It is impossible to combine the four typological lines described above into a single comprehensive typological scheme for rural settlements throughout the country without its ultimate generalization. But at the same time, geographers are required to solve the following problem: to show in works of a “regional geographical” nature, often in a few words, for a wide range of readers, the most characteristic types of rural settlements for a certain republic, region, agricultural area, etc. In addition, each regional type should be characterized by the functional, the morphological and genetic side. Thus, another type of typology arose – the identification of “local” regional types of settlements. Of necessity, such work at the same time has limited scientific value, as it simplifies reality. Several of these regional agricultural settlement systems, in turn, are united by their external relations in territorial ties into administrative units gravitating to regional centers – on the scale of a rural area or its sub-district, forming different types of intra-regional settlement (Kolaj, Borisov, Osmani and Skunka, 2018). Some of the inter-village connections are closed, they create an internal system (Kolaj, Kolaj, Borisov, Osmani, and Skunka, 2018) already on the territory of the

collective farm or the state farm, the other part within the rural areas and only a third represent “remote” connections of different composition and intensity (connections with the nearest city outside the district, with the district center, the capital).

In the following table, we have summarized the opinion of a number of publications on the

most common criteria for the typology of settlements in the EU.

RESULTS AND DISCUSSION

Methodology of the typology of settlements.

The characteristic of the rural settlement in its

Table 1. Criteria for the typology of settlements in the EU

Criteria	Sub criteria	Target	Indicators	Data mining method
Geographically	Location relative to cities or centers (Thomson and Psaltopoulos, 2000); (Nikolov, Borisov, Radev and Boevsky, 2020)	to create a spatial typology which is not restricted to administrative boundaries and which allows to give a more realistic picture of settlement patterns driven by geographical patterns	Localization index	GIS, Multi-criteria analysis; Deductive thresholds
	Climatic and natural characteristics (Psaltopoulos, and Thomson, 1993); (Nikolov, Borisov, Radev and Boevsky, 2020)		% of area that is forest % of land area that is agricultural	GIS, Multi-criteria analysis; Deductive thresholds
	Geographical area (Vervloet, Lauwers and Vervaet, 2004); (Kolaj, Osmani, Borisov and Skunca, 2019)		Absolute value or relative share	GIS, Multi-criteria analysis; Deductive thresholds
Economically	Type of industry and structure of agriculture (Nikolov, Borisov and Radev, 2014)	to create a spatial typology which is not restricted to administrative boundaries and which allows to give a more realistic picture of settlement patterns driven by economic factors	Unemployment, total average population, GDP, share of employment in services and manufacturing GDP per capita, share of employment in agriculture, population density, innovation, share of households in densely populated areas,	Weighted average of values of variables; cluster analysis; Statistical analysis and cartographic renderings
	Development of agriculture (RERC, 2004)		Unemployment, total average population, GDP, share of employment in services and manufacturing GDP per capita, share of employment in agriculture, population density, innovation, share of households in densely populated areas,	Weighted average of values of variables
	Income level and standard of living (Schrader, 1995); (Roberts, 2003); (Roberts, D., 2005)		Agricultural income per capita	Weighted average of values of variables

Criteria	Sub criteria	Target	Indicators	Data mining method
Demographically	Population size (Trapp and Baum, 2005)	to create a spatial typology which is not restricted to administrative boundaries and which allows to give a more realistic picture of settlement patterns driven by demographic patterns	population dynamics	Deductive by applying thresholds to population size and driving time; Deductive method for distinguishing types
	Population structure (Saez, 2001)		Percentage distribution of the population by location	Weighted average of values of variables
	Migration flows (Vias and Mulligan, 1997)		incoming and outgoing migration	Weighted average of values of variables, trends
Sociocultural	Ethnic composition of the population (Ocana-Riola and Sanchez, 2005)	to create a spatial typology which is not restricted to administrative boundaries and which allows to give a more realistic picture of settlement patterns driven by social patterns	% of total population	population density in local communities
	Cultural customs and traditions (Vollet, 1998); (Nikolov Borisov and Radev, 2014)		Availability	Choice experiment
	Educational and cultural institutions (European Commission (EC), 1988)		Absolute value or relative share	Weighted average of values of variables, trends
Infrastructural	Availability of roads, communications, water supply, electricity (European Commission (EC), 1997); (OECD, 2001); (ESPON, 2004)	to create a spatial typology which is not restricted to administrative boundaries and which allows to give a more realistic picture of settlement patterns driven by infrastructural patterns	Absolute value or relative share	Multi-stage method of classification; PCA analysis; Model of transport networks of roads and railways to calculate the travel time, managed in ARC/Info. Deductive method for distinguishing four types
	Availability of public services (Psaltopoulos, Thomson, Efstratoglou, Kola and Daouli, 2004)		Absolute value or relative share	Weighted average of values of variables
Technological	Level of technological development (Veum, 1995); (Roberts, 1995)	to create a spatial typology which is not restricted to administrative boundaries and which allows to give a more realistic picture of settlement patterns driven by technological patterns	Localization index	Cluster analysis
	Use of agricultural technologies and equipment (Roberts, 1998); (Vidal, Eiden and Hay, 2005)		Balasa's index	Cluster analysis, Porter's diamond

Source: Own.

relations with the territorial organization of production requires additional identification of different types of internal settlement, i.e. typical systems of interconnected settlements in which the labor resources and economic centers (brigade yards, garages, workshops, farms, etc.) of a collective farm or state farm are located. When we move from the types of individual settlements to the typology of the rural settlement, i.e. territorial groupings of settlements in rural areas, then we are faced with the following tasks: 1) the characteristics of resettlement in an economic and geographical aspect, in its relations with production, with the modern territorial organization of the economy; 2) the characteristic of the external forms (“drawing”) of settlement, mutual arrangement of the settlements; 3) the historical or genetic characteristics of the existing settlement; 4) the distribution of the most characteristic combinations of territorial systems and external forms of settlement (“local types” of settlement) for each region. In this case, first of all, the concept of production (or economic) types of resettlement arises – for those characteristics that are determined by its economic basis and different types of economic use of the territory (agriculture on large tracts of arable land; agriculture in the conditions of selective, focal plowing; irrigated oasis agriculture; remote animal husbandry, etc.). For the typology of external forms of settlement, the spread of such forms as scattered, swarm settlement or compact settlements, as well as the spread of additional inhabited seasonal settlements (“second home” for residents of permanent settlements) is of primary importance; secondly, the uniformity or unevenness of the population of the territory, the forms of condensation of settlements (most often observed in the form of strips, stripes along rivers and roads or patches, “nests” during focal development of the territory), the phenomenon of agglomeration of the settlement is significant (OECD, 1994). The external forms of resettlement are changing, being restored under the influence of the emerging demands of the economy and culture. But one cannot fail to see their relative stability, adaptability in a whole series of cases to new conditions without radical disruption. There-

fore, in most areas the forms of settlement cannot be explained only by historical reasons or only by the conditions of the modern organization and technology of agriculture. Therefore, it is impossible to “remove” the typology of external forms by combining it with either the production or the historical-genetic typology of settlement. The genetic typology of resettlement shows the diversity of its formation, historical heritage in the existing “structure of the settlement”, in the location and size of the settlements (underlining and emphasizing new, modern phenomena and their distribution) (Terluin, Slangen van Leeuwen, Oskam and Gaaff, 2005). Finally, the identification of regional or local settlement types is essential to create a highly generalized, but as complete and comprehensive as possible representation of the existing geographical differences in the modern rural settlement. Another major issue is the relationship between the typology of rural and urban settlements (Thomson and Psaltopoulos, 2000). This question is very relevant in the presence of many transient, intermediate types of settlements and in the light of the tasks of overcoming the significant differences between town and village. Each type of typology of rural settlements has a direct “intersection” with a corresponding line in the typology of cities, often organically passing into the latter. Thus, from the point of view of functional types, non-agricultural settlements in rural areas and especially local centers in rural areas are on the edge of the “urban” and “rural” typologies (European Commission (EC), 2006). Planning forms and building types represent essentially a series – from the simplest linear forms to the complex plan of large cities, from the estate of buildings to modern urban housing complexes. The concepts of economic-geographical and topographical location exist for both urban and rural settlements (ESPON, 2004). Genetically, many cities have evolved from rural settlements.

We can talk about regional types of urban settlements in the same way as we do about rural ones. With the emergence of new types of settlements in rural areas, with the development of “urban” characteristics in large rural settlements, the spread of agro-industrial settlements, the ty-

pology of cities and the typology of settlements for rural areas will increasingly merge. However, even in this case, obviously in each “typological line” there are types that are more characteristic of cities and more characteristic of settlements, mainly associated with agricultural production, forestry, etc. Along with a separate examination of the types of urban and rural settlement, with their specific characteristics, there is a need to consider the settlement as a whole – as a “settlement on the territory” with all types of settlements. Such review is particularly necessary when reviewing large territorial units. It is also important for industrial areas and suburban areas of large cities, where urban and rural settlements are particularly closely intertwined and interconnected. This type of typology – types of population on the territory - has not only great cognitive value as an important element of the geographical characteristics of the individual republics and large regions of the country, but also has practical importance, mainly in connection with the work on the layout of the district. Genetically, many cities have evolved from rural settlements.

Typology and size of rural settlements and their functionality. The population of settlements (i.e. their size in terms of the number of inhabitants) is associated with the production functions of the settlement, with the shape of the settlement, with the history of the settlement (MEANS, 1993). This indicator objectively reflects the general effect of a number of factors on the development of the settlement, but does not reveal these factors by itself. At the same time, the size of the settlements creates certain conditions for their life, for the organization of cultural and public services for their residents, therefore, the identification of a number of characteristic types of rural settlements on this basis is of scientific and practical importance. “Typology of settlements” can be considered as one of the types of typology. When classifying settlements according to their population in statistical accounting, they are all divided into more or less groups, from the smallest (1 – 5 inhabitants) to the largest (6 – 10 thousand inhabitants), following the general principles of statistical groups. From a typologi-

cal point of view, it is important to separate such quantities from humanity, with which the main qualitative characteristics of the settlements are associated. Thus, a special type – single yards, single detached dwelling - represents the majority of points with a population of less than 10 people. Small settlements with up to 100 inhabitants, as well as isolated residential areas, in terms of serving their population, are to the greatest extent dependent on the nearest larger settlements. Only selectively (in a small village for a whole territorial group of them) some elements of public service can be created (primary school, medical center, red corner, reading room or club, village shop – all of the smallest sizes). With a population of 200 – 500, each settlement may have a similar minimum set of service institutions, but of the same small size, providing the population with relatively limited opportunities for cultural and public services. An organizational settlement of this scale can be the basis of a specific production unit (a collective agricultural brigade, a branch or a large holding of a state economy). In settlements with a population of 1 – 2 thousand people, which are already large for rural areas, opportunities are created for a noticeable expansion of the range of service institutions, an increase in their size and technical equipment. According to the standards used in the design of new rural settlements of a modern type, a kindergarten, 50 – 70 places (with expansion in the summer season to 80 – 110 places), an incomplete secondary school for 150 – 160 places, a club were created for 1 thousand inhabitants with a cinema hall with 200 seats and a library, a paramedic-midwifery station with a small hospital, shops for 6 jobs, a cafe with 40 jobs, a consumer service plant for 3 – 4 jobs, a bathroom with 10 jobs. By simultaneously serving the population of the nearest villages, it is possible to build a secondary school, a district hospital and further increase the size of most institutions. In terms of production, rural villages with 1 – 2 thousand inhabitants are considered optimal in regional planning as a base for complex plots or branches of extended collective farms and state farms, and sometimes for central farm towns. With the size of a rural settlement

of 3 – 5 thousand inhabitants, the most favorable opportunities are created to provide level 1 urban improvement and cultural services with the construction of large standard schools, culture houses, medical facilities, a specialized retail network, etc. In terms of production, such villages are considered optimal as centers of large farms in conditions that allow significant concentration of labor and production capacity.

People participate in different activities, and settlements play different roles in the territorial organization of social production. These differences are mainly taken into account in the functional typology. The common function for all settlements is to be a residential place – at the same time it is, as it were, “taken out of the brackets”. For determining the functional type of the rural settlement, an important criterion is the structure of the “village” group of the amateur population – the ratio of the number of workers employed in various sectors of the national economy, to workers whose activity represents a direct contribution to the residents of this settlement in the national economy of the country. The size and composition of the “settlement” population (just as in the cities of the “settlement cities”) reflects the economic basis of life in the given settlement. In the population of the villages, several groups can be distinguished: 1) employed in agriculture; 2) employed in forestry; 3) employed in foreign transport; 4) employed in industry; 5) combining occupations in agriculture and industry in the same settlement (during different seasons of the year); 6) employed in institutions (economic, administrative, cultural, medical, commercial), largely serving other villages of the district; 7) employed in various institutions serving mainly the “temporary” population arriving at this place for rest, treatment. The predominance of the first group creates a type of agricultural settlement in its two socio-economic forms of collective and private holdings. The predominance of the second, third and fourth groups creates different types of non-agricultural villages in rural areas. A significant share of the seventh group is characteristic of special types of non-agricultural settlements – resort settlements, hospital settlements, tourist camps,

etc. The combination of the first, fourth and fifth groups creates different types of agro-industrial settlements in rural areas; the fifth group is characteristic of a special type of agro-industrial villages, which should receive great development in the future. A significant proportion of the sixth group indicates that the settlement performed the functions of a local center in a rural area. But these functions, as a rule, are combined with production ones: various types of agricultural, agro-industrial, non-agricultural (for example, substations) villages are formed with the developed functions of local centers.

The combination of many groups of the village population as a whole is a common phenomenon, creating a number of transitional and mixed functional settlement types in rural areas. Unfortunately, our statistics, dividing the entire population into amateurs by industry and type of activity, do not distinguish between “urban planning” and “city-serving” groups in cities and similar groups in rural settlements. In addition, in the statistics, the employed population is distributed among the sectors of the economy as a whole by rural administrative regions, and not by each rural settlement separately. Therefore, in the identification of the existing functional types of villages and the assessment of their distribution, one must rely on the materials of special field surveys or use indirect data. This or that structure of the self-employed population is the main feature of a certain functional type of settlement. But some additional features are essential. Thus, the functional types of agricultural settlements with the general predominance among their inhabitants engaged in agriculture differ depending on the place of this settlement in the system of territorial organization of production (and, accordingly, on the place in the general system of collective farm settlements or state economy). The same applies to “forest villages”, which are part of the system of settlements of a specific logging industry or forestry, railway settlements, formation of their territorial systems, etc. A characteristic feature of the villages performing the functions of local centers is the significant development of various connections between them and a

certain group of settlements gravitating towards them. Small industrial villages in rural areas differ in their production specialization. These are the non-agricultural villages in rural areas, which are represented by many different types related to the performance of various national economic functions. A certain idea of their distribution is provided by the grouping of all rural settlements by their specific names. The following functional types or groups of types are distinguished among non-agricultural rural settlements.

In terms of their links with agriculture, the different types of small working villages in rural areas represent a certain “typological series” - from completely “autonomous” (for example, mining enterprises, individual textile and other factories with their villages) to closely connected (starch villages, vegetable dryers, wineries, dairy and other factories; country villages, local enterprises for the production of building materials).

Settlements along the communication routes. Most of these are rail-related, from single-family liner “residential units” scattered along the line to patrols and small stations. A smaller number of them serve waterways (becher estates, carriers, lock villages, ports, etc.), small airports, highways (villages on road sections, gas stations, etc.). In recent years, there are settlements serving gas pipelines, their pumping stations, as well as long-distance transmission lines.

Villages of builders in new buildings. Most of them belong to “rural” settlements for a limited period of their existence, making up a special, specific type of populated areas (more precisely, a group of types, since along with populated working villages there are also single “barracks” – dormitories on construction lines, gates etc. sleeping quarters in warehouses and bases etc.). When performing their functions, they either disappear or are absorbed by the urban settlement that appears at the new industrial point, and sometimes they turn into a rural non-agricultural settlement of a different type (industrial, transport settlement – see above).

Logging industry and forest protection villages. Similar settlements are hardly found in Bulgaria, but are typical of other countries in Eastern

Europe. As a rule, industrial timber settlements are located along forest transport routes that have approaches to main roads, they are characterized as a) the villages of the forest territories where the logging crews live; b) villages of forest centers uniting several sites; c) the center of the timber industry – the central village for a specific local system of forest settlements; d) intermediate villages on forest export routes (rafting, transshipment); e) settlements at the exit of the forest to the main routes (usually these are settlements of a mixed type combined with a port or station); f) villages along the main routes - raid, near the sand, etc. Villages of type “a” (often others) usually have a limited life (until the forest resources of a place are exhausted); in logging design, it is determined after 10 – 15 years. But the same villages quickly appeared elsewhere. Villages of forestry and forest protection services (cordons, forest gates) are smaller in size but more permanent.

Fishing and hunting villages are also available over a long period of time (McGregor and McNicoll, 1989). A large state-owned fishing industry usually creates large urban-type settlements with ports, fish factories, refrigerators, etc. But there are many fishing collective farms and fishing teams in agricultural collective farms with their villages on the banks of rivers and river channels, etc. Along with permanent settlements, seasonal settlements of a special type almost always arise; fishing tons, in places convenient for the docking of ships and the export of the catch. In size, they are more similar to field camps than to pastoral centers on pastures (see above); it is the temporary accommodation of an entire brigade and a place to store bulky fishing gear.

Settlements of scientific stations, permanent (in observatories, meteorological stations, etc.) or temporary (base of research parties, expeditions).

The villages of health and educational institutions are of different types: a) villages with staff in rural schools and hospitals located at some distance from the villages; b) suburban hospitals, homes for the disabled, sanatoriums, which form entire villages with their households; c) orphanages, forest boarding schools located in nature

in rural areas; d) settlements of holiday homes, suburban sports and tourist camps. Most of these functional types are characterized by the predominance (or significant part) of the temporary, “fluctuating” population.

Along with the permanent ones, there are also seasonally populated villages of this type - on tourist bases for winter or summer use, climbing camps and summer pioneer camps.

Summer cottages – the second residential part of the urban population in the summer. In fact, this is a special type of seasonally populated settlements that differ from the previous group (tourist camps, vacation homes, etc.) in that they consist, like most modern agricultural settlements, of separate cells - single-family houses, mansions. Villages on collective farms, used both as summer houses (renting rooms for the summer) and as resort villages, do not belong to this type, such as “bedroom villages”, whose population works in the city (see below).

Suburban residential settlements of workers and employees (villages – “bedrooms” in the countryside). This specific type of settlement is common in the near suburban area of major cities, forming a kind of “residential branches” of the city. They have historically arisen in the process of urbanization in all countries of the world that have large cities, with convenient and fast transport links to the city as a place of work for their inhabitants. They are often large, constitute a special kind of companions of a large city and greatly increase the daily passenger traffic between it and its suburban area. This type of settlement is distinguished by the fact that the common function of the “place of accommodation” for all settlements is the only one here.

Agricultural and industrial settlements in rural areas, it must be divided into two radically different groups: in some cases, the work in industry and agriculture is carried out by different people living in a given settlement, in other cases, the work of the same people is used at different times (mainly seasonal) in various industries. The existing types of agro-industrial settlements belong to the first group. The second form of combining different branches of production in rural settle-

ments is just beginning to develop (being very progressive and promising) and exists so far in the initial stages in the settlements of individual large collective farms and state farms that have their own production enterprises. Among the agro-industrial settlements of the first group, which are a combination of an agricultural settlement and an industrial village, several types are distinguished depending on the nature of industrial production and its connections with agriculture.

One of the types is characterized by the development in an agricultural village of industrial processing of local agricultural products (sugar, olive oil, butter, canned vegetables, starch and other plants). Another type is formed by a combination of agricultural and forestry enterprises (the former often become an auxiliary “food store” of the logging enterprise). The third type was created with the development in the agricultural village of industries serving local needs, working wholly or partly on local raw materials. The fourth type consists of settlements where, alongside agriculture, small enterprises of non-local importance have arisen. The fifth type includes the combination of an agricultural village and a village of a small industrial enterprise that is not related to the use of local raw materials and the local market (for example, many metalworking and textile industries that historically developed in rural settlements that were previously centers of the respective craft industries).

Development of the urbanized way of life in rural areas and settlements. The word “settlement” does not exist in the current Bulgarian legislation legal definition, and is not present in the definition of populated place. However, it is used through its derivatives, as well as directly, in a number of legal expressions such as “settlement territory”, “settlement environment”, “settlement formations”, “holiday settlements”, “resort settlements”, “golf settlements”, “settlement structure” and others similar – in The territorial planning law, The Law on the Administrative-Territorial Organization of the Republic of Bulgaria[4], The Law on Regional Development and in other normative acts. It is a village geographically definable place (locality), where

people live together in permanent or temporary buildings. In terms of size, it can have both a few residential buildings in small settlements, and hundreds and thousands - in larger ones settlements. The types of agro-industrial settlements are formed on the basis of both collective and agricultural settlements. A special place is occupied by the type of settlement, characteristic of many suburban areas, where part of the inhabitants are employed on the spot, in a collective farm or a state farm, and another significant part works in the nearest city or non-agricultural rural settlement (factory or garage settlement, etc.). Many rural settlements, especially large ones, have a mixed character, combining the features of different functional types. Such settlements form a series of transitional and mixed forms with predominance of agricultural, or agro-industrial, or non-agricultural functions.

The typology does not pursue the task of showing all existing combinations of characteristics, all options: only the main, most common mixed forms should be noted. Thus, complex types of agricultural settlements are formed when a collective agricultural and state agricultural population are united in one settlement, a settlement in a collective farm, when scientific agricultural institutions or special educational institutions are located in existing agricultural settlements (which is becoming more and more common). In collective rural villages, workers often live in nurseries, government nurseries, hatcheries, etc. A special type is formed during the development of “resort” functions in an agricultural settlement.

The types of agrarian-industrial villages are very often complicated by the development of the functions of the transport center (when it is located near the station, pier), the presence of special educational institutions, etc. Among non-agricultural rural settlements, along with their specialization, single-functional, more complex forms are common (most often - a combination of service industry and transport functions). In many rural settlements, the functions of the local center are added to one degree or another to their production functions – in relation to other, nearest settlements.

These functions can consist of different elements: management in organizational and economic terms, by organizing political and educational work, public education, health care, work of the distribution network; organization of procurement, purchase and processing of agricultural products; implementation of the production supply of collective farms and state farms: implementation of administrative functions, etc. All this creates a system of permanent connections between the settlement – the local center – and a certain group of settlements gravitating towards it. “Village center” sometimes has some meaning even in the ordinary village center of the collective agricultural brigade, if other, less “independent” settlements in which some members of the same brigade live, or villages connected with separate holdings of this brigade, gravitate towards it and are closely related to it. The settlement – the center of the collective farm or the state farm – always represents the local center for all the villages of this agricultural enterprise.

In almost every rural area, along with the regional center, there are other settlements that play the role of additional local centers due to the peculiarities of their economic and geographical location. Sometimes these are former regional centers that have lost part of their functions due to the expansion of regions, or the central villages of individual large collective farms and state farms, serving in many ways the entire group of settlements closest to them. Often in the role of local centers are substation settlements located far from the district center, on the periphery of the district, or workers’ settlements in rather large industrial enterprises. Between the regional center and similar additional local centers (or centers of the second order) a peculiar division of labor is formed. The organs of state administration, planning, party leadership and political work - at their district level – are located in the district center with its productive collective farm and management of state farms. All other functions related to serving the economy of the region and the various cultural and household needs of the population are partially concentrated in the regional center, partially decentralized. Among the addition-

al centers, two main types are distinguished: a) specialized local centers – most often settlements of substations in the region, such as the location of public procurement points and storage bases, sometimes individual industrial enterprises related to the agriculture of the region; b) small local centers with an integrated character, similar to the regional center in many ways, but without its administrative and organizational functions; are usually formed on the basis of individual large villages in the interior of the region, far from the regional center, but at the junctions of local roads, with a favorable economic and geographical position. Their formation is stimulated by the large territory of the region, the fragmentation of the settlement in it into separate areas or “spots”, divided into forest, marshy and other uninhabited territories. In mountainous regions, where the settlement is concentrated in a number of mountain valleys, in each of them one of the villages usually acquires the role of such an additional local focal point. Additional local centers always have certain production functions, representing mixed settlements (the substation settlement is a specialized local center; the central agricultural settlement is a small integrated local center, etc.).

The functions of the local center arise as additional ones, especially often in villages along communication lines and crossroads. Along with regional centers and additional local centers, there are centers of inter-district importance. In most cases, their role is played by cities, but sometimes rural settlements are also conveniently located on the main routes, the functions of which in this case are expanded accordingly. Often in the role of local centers are substation settlements located far from the district center, on the periphery of the district, or workers' settlements in rather large industrial enterprises. Between the regional center and similar additional local centers (or centers of the second order) a peculiar division of labor is formed. The organs of state administration, planning, party leadership and political work – at their district level – are located in the district center with its productive collective farm and management of state farms. All other functions related to serving the economy of the region

and the various cultural and household needs of the population are partially concentrated in the regional center, partially decentralized.

Internal migrations in the direction of famine villages and opportunities for regional development. In order to understand the existing pattern of settlement in most areas, it is necessary to establish the difference in the time of settlement, the historical layers left imprinted in the modern settlement due to the usually great stability of the settlements that once arose, with all the changes in their functions, the composition of the inhabitants and appearance. With such a genetic analysis of the modern settlement pattern comes the need for a genetic typology. In this case, the differences in the age of the settlements and the socio-economic conditions of their emergence (determining the number of villages that arose, their location and external forms) have a typological significance. The genetic typology of settlement is, of course, related to a similar typology of individual settlements, which we have already discussed. Let's explain the above examples. So, in the modern settlement of many regions of the Black Earth Center, the belt of very large ancient villages with a complex layout and location of the valley, which developed in the XV – XVII centuries on the former defensive borders of the Muscovite state, still stands out quite clearly. The second historical layer is the numerous, smaller, former landowner villages of the 17th – 18th centuries, the third is the mass of post-reform settlements of them, the smallest, mostly carried out on the watershed, with a simple linear arrangement, etc.

In the northern regions of the territory of Bulgaria, for example, similar old historical layers are incomparably weaker, but they also exist. They are represented by a rare network of former fortified and trading posts along the former steppe borders, resettlement settlements from the end of the XIX – the beginning of the XX century. More noticeable are the new settlement agricultural settlements and the agricultural settlements during the first and second Bulgarian states. Together with the numerous farmsteads established during the development of the virgin lands and

continuing to be built, they now form the main basis of settlement in these areas.

Integrated geographic typology (“local types” of settlement). The combination of certain characteristics of the settlement can be repeated on a more or less significant territory due to similar historical conditions of its settlement and subsequent economic development, the same characteristics of its modern economy (assuming a certain uniformity of the geographical environment). This leads to the concept of local settlement types with their special combination of characteristics that have developed under certain natural, historical and economic conditions (see Table 2).

In this case, for relatively limited and homogeneous territories, it is possible to combine the elements of functional, genetic, morphological

characteristics to give a synthesizing view of the settlement. Let us explain what has been said with an example (limiting ourselves to the briefest description of two local types of rural settlements to save space). Such a dry list of basic data is, of course, only the basis for the textual, literary characteristics of each local settlement type; in this characteristic, it is appropriate to show the appearance of the most typical rural settlements for a given region.

Types of settlements. In order to characterize the type of settlement of the territory, we obviously need to limit ourselves to only a few most important signs (introducing too many signs into the characterization of the types of settlements in the region would not only greatly complicate the typology, but also take it away from the main tasks)

Table 2. Types of settlements

Kind	Central and satellite local type of populated dish	Lowland local type settlement
a) economic basis	Agricultural settlement with considerable plowing of the territory, but fragmentation of the massifs of arable land by numerous deep ravines and ravines. Grain production with a medium spread of labor-intensive crops (potatoes, hemp, beets). Livestock stand with minor grazing.	Agricultural settlement with considerable plowing and large tracts of arable land. Cereal production with medium prevalence of labor-intensive crops (beetroot, etc.), horticulture. Lay livestock but using scattered lands of natural forage.
b) conditions for resettlement, with modern technical equipment of the economy	The concentration of population within a limited range determined by the size of individual land masses and transport conditions. Placement of farms near populated areas, little need for field camps. Existing resettlement is much more dispersed than required by production conditions.	A high degree of possible population concentration in large settlements, supplemented by field camps and a small number of remote rural areas. Existing resettlement approaches production requirements.
c) relocation to the farm	Medium-sized collective farms prevail, their central villages are not very large, their “branches” are numerous together with brigade villages. Rural holdings are sporadic, as a rule they do not have branches.	Large collective farms with the concentration of the majority of the population in one large village; a small number of brigade and specialized villages on remote plots. As a rule, there are many state farms that have a central village of medium size and several (3 – 8) branches.
d) existing forms of settlement	Relatively even distribution of settlements with individual thickenings in the form of rare chains in wider river valleys. The predominance of compact linear forms of planning, the majority of the population lives in villages with a population of 100 to 500 inhabitants; large villages are single. The density of the network is 20 – 25 villages per 100 square meters. km. There are almost no seasonally inhabited objects.	A sparse network of large and very large settlements with predominantly quarterly and mixed planning, supplemented by a small number of small non-condensing villages and field camps. The river location of the large villages. The total density of the network is 5 – 6 per 100 square meters. km, up to 70% of the population lives in settlements with a population of over 1,000 people, 35 – 40% in settlements with over 5,000 inhabitants.

Source: Own.

see Table 2. The most important indicators for the formation of the type in this case can be considered: 1) the general density or the density of the population in the area; 2) relative uniformity or foci of settlement; 3) the ratio between urban and rural settlements and their combination; to a certain extent, this characteristic also characterizes the ratio of industrial and agricultural settlement, giving the typology of the settlement an economic content. Density or population density in this case should not be understood as the density of the network of settlements (this indicator, which is significant when characterizing rural and urban settlements separately, loses its value when the characteristics are combined), but as a general indicator for the total population density per 1 sq. km.

This criterion should be supplemented with an indication of a more or less uniform population: for the same population density, a sharply different picture, different conditions and problems for the development of the economy and cultural construction are created when the population is concentrated in several “spots” – condensations or, conversely, the location of settlements in all places of the area under consideration. In order to determine the relationship between urban and rural settlement, in the first place, of course, a quantitative indicator of the ratio of urban to rural population should be used. But this requires additions, as it does not reveal the qualitative side; the

same indicator of the share of the urban population can be observed when it is concentrated in several large cities in the study area or when it is dispersed in the form of the mass of workers’ settlements; with the spread of cities with a clear industrial profile and cities - organizational centers without clear industrial specialization. The characterization of the combination of urban and rural settlement seems to be a central issue in the general typology of the settlement.

Four main, sharply contrasting types of settlement of the territory can be distinguished, uniting into two extreme, polar groups in their appearance. All other observed combinations of urban and rural settlement generally fall between the four variants noted above, representing, in essence, the main framework, a general framework in the typology. So, between the third and fourth options there are a number of transitions depending on the greater or lesser “intersection” of industrial cities and towns in the dense fabric of rural settlements and on how much of the functions of the centers of agricultural areas are taken over by those towns and cities replacing or pushing back other kinds of local centers. The transitional options between the first and the third are transitions from a commercial to an intensive agricultural settlement, combined with corresponding differences in population density and in the development of a network of cities. The transition

Table 3. Division of settlements

	The rural settlement predominates	The urban settlement predominates
Sparsely populated areas	<p>Option I A network of fishing or farming settlements with single small urban settlements that act as local organizational, cultural and political centers for a vast area</p>	<p>Option II An industrial settlement associated with the development of natural resources, represented mainly by scattered groups of small industrial settlements, some of which serve as local administrative and cultural-political centers for a scattered fishing or agricultural population</p>
Densely populated areas	<p>Option III A well-developed network of rural settlements with numerous, but mostly small towns, mainly performing the functions of organizational, economic, cultural and political centers of rural areas, with industry grown on the basis of agriculture and local needs</p>	<p>Option IV A developed network of highly industrialized cities and working-class villages (sometimes merging into continuous agglomerations), supplemented by rural settlements that are only partly agricultural for the occupations of their inhabitants</p>

Source: Own.

from the second to the fourth option. In the suburban areas of large cities, several special options for settlement are formed, which are adjacent to the main typological scheme. A common feature of these options is the presence of a powerful core and a peripheral, clearly gravitating zone to it, as if separating it from the surrounding areas. The different types of settlements observed on the modern map, which coexist at the moment, simultaneously reflect the different stages in the settlement and development of the regions of the country. They are historical and can succeed in the course of the historical development of the same territory (within certain limits, of course, depending on many factors, including the nature of the natural environment - its potential resources, soil and climatic conditions for agriculture, etc.). We propose that the typology is based on the characteristics characterizing the current state of settlement. Another thing is the explanation of how this or that type developed. The necessary historicism in considering different types of settlement can be provided not by introducing additional genetic traits into the typology, but by a corresponding construction of the characteristic itself.

As examples, we will mention several types of settlements in the sense indicated above. So it is possible to distinguish the type of rare trading settlement with single urban points - centers. In the northern forest regions, the type of focal forest and agricultural settlement with separate urban centers is widespread, which is also characterized by a low overall population density and its uneven distribution over the territory. In a number of regions, we see a sparse agricultural settlement with a developed network of settlements of urban centers and scattered industrial villages, more uniform, with a large number of towns than settlements of workers, mainly in the northern areas of an ancient agricultural settlement. In Germany, along with large focal dense industrial settlements and individual growing agglomerations in the main industrial parts of the region, a "pioneer focal" settlement can be seen in the northern and middle populated agricultural areas, with a sparse network of urban centers in the Czech Republic. Tim is a dense agricultural settlement with a de-

veloped network of urban centers (which in this case can be considered the majority of urban-type settlements, since they play the role of agricultural regional centers) is widely represented in the western and right-bank regions of Ukraine. Transylvania in Romania is characterized by a continuous industrial settlement interspersed with agricultural settlements, etc. The examples given are, of course, far from exhaustive of all observed settlement types, and a fairly complete settlement typology remains to be developed.

CONCLUSION

Rural development is currently the subject of extensive programs at European and national level that attempt to integrate diversified socio-economic development and sustainable development with local realities. It can be seen that over time these programs have moved from an approach focused on agricultural development to a more comprehensive approach to rural development. The implementation of these programs can determine well-formulated national policies for rural areas, capable of developing the countryside in a balanced way, or less adequate policies, in which case the countryside will face a differentiated evolution, with areas of decline, small villages on the brink of extinction and with others well developed. The strategic issues presented are interrelated, which increases the difficulty of development. For example, infrastructural problems have a strong impact on the ability to diversify activities in rural areas through the development of manufacturing industry and the non-agricultural sector in general, and hence on employment. The low level of income causes a low demand for services at the local level, which affects the quality of life and further increases depopulation. The phenomenon of population decline due to constant negative natural growth and migration to urban centers from the country or abroad is reinforced by indicators of migration of the young population and accelerated aging of the local population. The demographic decline must be considered in close connection with the quality of life

and the economic situation of the municipalities. There is also a phenomenon of remigration, but it mainly characterizes the suburban area, which offers land for residential areas, or the intermediate rural area, where the retired population usually migrates. Intention to leave the settlement is variable, higher in peripheral and intermediate rural areas. The declared reasons are: finding a job, quality public services (health care, care, education) or because the settlement does not offer prospects for the future. The bottom-up development, through the conscious and planned action of the community envisaged by the financing programs, however, remains at the desired stage, in the absence of firm state policy, massive investment and progressive decentralization. Other deficits of rural areas are the weak capacity to write and implement grant projects at the local level by the administration and the weak consolidation of specific associative structures (NGOs, associations, companies) for training such skills, have a negative impact on local development, but also on the level of social empowerment (empowerment) and social capital. The relatively low intra-group social capital and the few and unused cross-links in development condition a simplification of the social fabric, the reconstruction of which is necessary today. The consequences are the difficulty in uniting producers from areas of the entire agrarian sector in rural areas and especially in the area of animal husbandry. A change in agriculture is needed, changes to change the way of life to make activities more efficient, and the limited prospects for cooperation to define an integrated local product necessary for the development of agritourism.

REFERENCES

- Borisov, P., Nikolov, D., Radev, T., & Boevski, I.** (2020). Analysis of mechanisms to support the agricultural sector in the creation of public goods. *Journal of Bio-based Marketing*, 1(1), 65-72.
- Dirk, V., & Lauwers, L.** (2004). Geographical delimitation criteria enabling a rural-urban differentiation of statistic. *Execution report. Brussels: Centre for Agricultural Economics, TAPAS.*
- Dorjana, K., Rezear, K., Petar, B., Adela, O., & Dubravka, S.** (2018). Beyond the metropolis; farmers' empowering as a challenge of peri-urban areas. *European Journal of Economics and Management Sciences*, (3), 75-79.
- João, F., & Lopes, R.** (2003). Rural areas and entrepreneurship in Portugal: practices, social representations and policies. *Geographie, Economie, Societe*, 5, 139-160.
- Kolaj, D., R. Kolaj, P. Borisov, A. Osmani, D. Skunka** (2018). Beyond the Metropolis: Farmers' empowering as a challenge of Peri-urban areas. *European Journal of Economics and Management Sciences*. Vol 3/2018.
- Kolaj, R., Osmani, A., Borisov, P., & Skunca, D.** (2018). Development of agriculture in peri-urban areas? Challenges and perspectives. *Knowledge-International Journal*, 26(5), 1417-1425.
- Kolaj, R., Osmani, M., Borisov, P., Skunca, D.** (2019). Empowering partnering links as opportunities for development of the regions: can PPPs work in agriculture? *Bulgarian Journal of Agricultural Science*, vol. 25 (3), 468-473.
- McGregor, P. G., & McNicoll, I. H.** 1989. The impact of forestry on output in the UK and its member countries. Report to the Scottish Forestry Trust. Edinburgh.
- Mitchell, M.** (1996). Measuring the regional economic impact of pluriactivity on Scottish farms. *Rural economic modelling: an input-output approach*. Wallingford, UK, CAB International, 35-44.
- Mulligan, G. F.** (1994). Multiplier Effects and Structural Change: Applying Economic Base Analysis to Small Economies. *Review of Urban & Regional Development Studies*, 6(1), 3-21.
- Nikolov, D., Borisov, P., & Radev, T.** (2014). Integrated Landscape Analysis: Consumers' Preferences Approach for Defining the Competitive Landscape Composition. A Case of Wine Tourism in Pazardjik District, Bulgaria. *Bulgarian Journal of Agricultural Science*, 20 (No 4), pp. 761-766.
- Nikolov, D., Borisov, P., Radev, T., & Boevski, I.** (2020). Formation of public goods by agriculture in Smolyan district, Bulgaria. *Journal of Bio-Based Marketing*, 1, 4-12.
- Nikolov, D., Radev, T., & Borisov, P.** (2014). Challenges and perspectives of Bulgarian small farms. "Achievements and challenges in the food sector and rural areas during the 10 years after EU enlargement", Warsaw, Poland, №123.1, pp. 69-84. ISBN 978-83-7658-507-9
- Ocana-Riola, R. & Sanchez-Cantalejo, C.**, 2005. Rurality Index for Small Areas in Spain. *Social Indicators Research*, Vol. 73, pp. 247-266.
- Psaltopoulos, D., & Thomson, K. J.** (1993). Input-output evaluation of rural development: a forestry-centred application. *Journal of Rural Studies*, 9(4), 351-358.

- Psaltopoulos, D., Balamou, E., & Thomson, K. J.** (2006). Rural–Urban Impacts of CAP Measures in Greece: An Inter-regional SAM Approach. *Journal of agricultural economics*, 57(3), 441-458.
- Psaltopoulos, D., Thomson, K. J., Efstratoglou, S., Kola, J. & Daouli, A.** (2004). Regional SAMs for Structural Policy Analysis in Lagging EU Rural Regions. *European Review of Agricultural Economics* 31: 149-178.
- Roberts, D.** (1995). UK agriculture in the wider economy: The importance of net SAM linkage effects. *European Review of Agricultural Economics*, 22(4), 495-511.
- Roberts, D.** (1998). Rural-urban interdependencies: Analysis using an inter-regional SAM model. *European Review of Agricultural Economics*, 25(4), 506-527.
- Roberts, D.** (2003). The economic base of rural areas: a SAM-based analysis of the Western Isles, 1997. *Environment and Planning A*, 35(1), 95-111.
- Roberts, D.** (2005). The role of households in sustaining rural economies: a structural path analysis. *European Review of Agricultural Economics*, 32(3), 393-420.
- Sáez, L. A.** (2001). Las actividades económicas rurales: Tendencias. In *Actas del XIV Simposio de Cooperativismo y Desarrollo Rural (Navarro & Navarro, Zaragoza)*.
- Schrader, H.** (1994). Impact assessment of the EU structural funds to support regional economic development in rural areas of Germany. *Journal of Rural Studies*, 10(4), 357-365.
- Terluin, I. J., Slangen, L. H., van Leeuwen, E., Oskam, A. J., & Gaaff, A.** (2005). *De plattelandseconomie in Nederland; Een verkenning van definities, indicatoren, instituties en beleid*. LEI.
- Thomson, K. J. & Psaltopoulos, D.** (2000). Incorporating output projections into a regional input-output model: The case of forestry in Rural Scotland. *Journal of Applied Input-Output Analysis*, 6:1-16.
- Trapp, C., & Baum, S.** (2005). Analyse der raumwirtschaftlichen Differenzen ländlicher Räume in Bulgarien als Folge der Systemtransformation. *Europa Regional*, 13(2), 58-66.
- Vervloet, D., Lauwers L., and Vervaeet M.,** 2004. Geographical delimitation criteria enabling a rural-urban differentiation of statistcs. Brussels, Centre for Agricultural Economics, TAPAS 20202 Execution report.
- Veum, J. R.** (1995). *Training, wages, and the human capital model*. National Longitudinal Surveys, US Department of Labor, Bureau of Labor Statistics.
- Vias, A. C., & Mulligan, G. F.** (1997). Disaggregate economic base multipliers in small communities. *Environment and Planning A*, 29(6), 955-974.
- Vidal, C., Eiden, G., & Hay, K.** (2005). Agriculture as a Key Issue for Rural Development in the European Union. UN Economic Commission for Europe. Working Paper No. 3.
- Vollet, D.** (1998). Estimating the direct and indirect impact of residential and recreational functions on rural areas: an application to five small areas of France. *European Review of Agricultural Economics*, 25(4), 528-549.
- Commission of the European Communities. (1988). *The future of rural society* (Vol. 4). Office for Official Publications of the European Communities.
- ESPON. (2003). Urban-rural relations in Europe (ESPON project 1.1.2). Second Interim report. http://www.espon.eu/mmp/online/website/content/projects/259/649/file_1188/1.ir_1.1.2.pdf
- ESPON. (2004a). Diversity within the European territory; a selection of new European maps. ESPON Briefing 1. November 2004.
- ESPON. (2004b). Matera Guidance Paper, http://www.espon.eu/mmp/online/website/content/projects/161/file_1847/matera_guidance_paper-full.pdf.
- ESPON. (2004c). Transport services and networks: territorial trends and basic supply of infrastructure for territorial cohesion, final report for ESPON project 1.2.1: http://www.espon.eu/mmp/online/website/content/projects/259/652/file_2202/fr-1.2.1-full.pdf.
- European Commission (EC). (1997). Rural developments: situation and outlook, Brussels, CAP 2000 Working Document.
- European Commission (EC). (2006). Handbook on Common Monitoring and Evaluation Framework (CMEF), Brussels, DG AGRI (http://ec.europa.eu/agriculture/rurdev/eval/guidance/document_en.pdf). *European Review of Agricultural Economics* 25: 506-527.
- MEANS. (1993). Applying the Multicriteria Method to the Evaluation of Structural Programmes. Handbook no. 4. Lyon: European Commission/C3E.
- Milan Polytechnic, Department of Economics and Production. (1999). A Typology of Rural Areas in Europe. Strategic Study “Towards a New Urban Rural Partnership in Europe”. Study Programme on European Spatial Planning of the European Commission. Milan. <http://www.nordregio.se/spespn/Files/2.3.ruralareas.pdf>.
- OCDE. Organización de Cooperación y Desarrollo Económico. (1996). *Territorial indicators of employment: Focusing on rural development*. OCDE. Publications Service.
- OECD. (2001). Measures of regional accessibility, Paris. Working Party on Territorial Indicators DT/ TDPC/TI (2001)1.
- Organisation for Economic Co-operation and Development. (1994). *Creating rural indicators for shaping territorial policy*. OECD.
- Rural Evidence Research centre (RERC). (2004). Developing a New Classification of Urban and Rural Areas for Policy Purposes – the Methodology. <http://www.rerc.ac.uk/findings/rural.html>, accessed 09.05.2007.