

PROJECTION OF THE ROMA POPULATION IN BULGARIA (2020-2050)

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Nadezhda Ilieva

Boris Kazakov

National Institute of Geophysics, Geodesy and Geography,
Bulgarian Academy of Sciences, **Bulgaria**

ABSTRACT

The paper presents the results of a demographic projection of the population and the age structure of the Roma ethnic group in Bulgaria, as well as the main factors for the specific demographic and socio-economic development of the Roma. The authors discuss the reasons for that discrepancy and attempt to estimate the number of Roma people in Bulgaria as of 2015 and make a projection of the population number of the country as a whole (2020-2050) and of the Roma share and number in particular, including its basic age structure – the 0-14; 15-64 and the 65+ age groups – by using the method of cohort components. Migration mobility and demographic transition phases have also been considered and some key conclusions have been made regarding the future trends concerning the number and share of the Roma ethnic group in Bulgaria.

Keywords: Roma ethnic group, demographic projection, cohort components method, age structure

INTRODUCTION

The Roma are a specific ethnic community with no analogue in Europe. It is divided into many different, and sometimes contradicting groups, subgroups and meta units, each with their own ethnic and cultural characteristics. Historical, political and economic factors have created great differences among the Roma across Europe but also within Bulgaria itself. It wouldn't be incorrect to say that the unifying element of the Roma ethnic group is the attitude of the macrosociety towards it, thus creating a separate social category with common problems. Those problems are related to poverty, marginalization, exclusion from the labor market, segregation within the educational system, poor access to social services, extreme forms of spatial segregation, exclusion from the practice of active citizenship, intolerance, discrimination, prejudice, negative stereotypes, etc. The term "European or trans-national minority" corresponds largely to the essence of the Roma ethnic group.

The main objective and the expected results of the study are to estimate the number, the relative share of the Roma population, as well as its age structure, for the 2020 – 2050 period.

SCIENTIFIC APPROACH AND THE METHODOLOGY OF THE RESEARCH

In the elaboration of the demographic projection, *the method of cohort components* has been used. There are conceptual advantages to this method since it groups the population by age cohorts (five-year age groups) and calculates the characteristics (coefficients) of



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MEASURING SPATIAL SEGREGATION OF ROMA NEIGHBORHOODS IN URBAN SETTLEMENTS: CASE STUDY OF RUSE, BULGARIA

Nadezhda Ilieva¹ , Boris Kazakov¹ , Kamelia Petkova² , Dimitar Enikiev³,
Dessislava Poleganova^{1*}

¹National Institute of Geophysics, Geodesy and Geography - Bulgarian Academy of Sciences, Department of Geography, Sofia, Bulgaria; e-mails: nadeto.ilieva@abv.bg; boriskazakov1@gmail.com; dpoleganova@yahoo.com

²Institute of Philosophy and Sociology - Bulgarian Academy of Sciences, Department of Stratification, Inequalities and Mobility, Sofia, Bulgaria; e-mail: kamelia.petkova@gmail.com

³University of Library Studies and Information Technologies, Sofia, Bulgaria; e-mail: denikiev@gmail.com

Abstract: Post-socialist European cities face many challenges, such as growing socioeconomic inequality, spatial polarization, and a lack of sustainability. The rise of Roma ghettoized quarters in the cities imperatively imposes comprehensive research on the origin, evolution, and significance of these areas in the urban fabric. These ghettoized neighborhoods deepen the social, economic, and spatial divisions between citizens and significantly influence urban development and policy. Adapting the model developed by Divyani Kohli and coauthors in 2012, this study proposes a modified conceptual framework and index for assessing the spatial segregation of Roma neighborhoods in Bulgaria, using the four Roma settlements in the city of Ruse as a case. It aims to facilitate the elaboration of effective policies for integrated and sustainable urban development. The research utilizes quantitative and qualitative methods, including participant observation, in-depth interviews, and the analysis of normative documents, remote sensing, and geographic information systems (GIS), to collect detailed spatiotemporal data on Roma neighborhoods and calculate an index reflecting their urban design. Applying the index to the case of Ruse, the Selemetya neighborhood emerges as the most distinct and segregated Roma neighborhood, while the other three neighborhoods exhibit features of partial segregation. Despite the fact that the level of spatial segregation of Roma neighborhoods can be measured based on various approaches and criteria, the suggested index, despite its shortcomings, can be considered appropriate, although not universal, and therefore, the local specifics of deprived areas should be taken into consideration.

Keywords: ghettoization; segregation assessment; Roma population; urban development; Bulgaria

1. Introduction

Rapid urbanization confronts contemporary European cities with many challenges and opportunities, resulting in controversial changes in urban space. The most evident trends are the increasing social polarization and economic inequalities, resulting in growing spatial

*Corresponding author, e-mail: dpoleganova@yahoo.com

Suburbanization Processes in Sofia: Demographic, Socio-Economic and Spatial Transformation of the Agglomeration Area

Suburbanizációs folyamatok Szófiában: demográfiai, szocio-ökonómiai és térbeli átalakulás az agglomeráció térségében

BORIS KAZAKOV, TAMÁS HARDI, NADEZHDA ILIEVA, ALEKSANDRA RAVNACHKA, DESSISLAVA POLEGANOVA, SZILÁRD RÁCZ, MELINDA SMAHÓ

Boris KAZAKOV: PhD, assistant professor, National Institute of Geophysics, Geodesy, and Geography, Bulgarian Academy of Sciences; Acad. Georgi Bonchev Str., Bl. 3., BG-1113 Sofia, Bulgaria; boriskazakov1@gmail.com; <https://orcid.org/0000-0001-7935-1409>

Tamás HARDI: PhD, senior research fellow, West-Hungarian Research Department, Institute for Regional Studies, HUN-REN Centre for Economic and Regional Studies; Liszt Ferenc u. 10., H-9022 Győr, Hungary; hardi.tamas@rktk.hun-ren.hu; <https://orcid.org/0000-0002-9778-2840>

Nadezhda ILIEVA: PhD, associate professor, National Institute of Geophysics, Geodesy, and Geography, Bulgarian Academy of Sciences; Acad. Georgi Bonchev Str., Bl. 3., BG-1113 Sofia, Bulgaria; nadeto.ilieva@abv.bg; <https://orcid.org/0000-0001-9553-2509>

Aleksandra RAVNACHKA: PhD, associate professor, National Institute of Geophysics, Geodesy, and Geography, Bulgarian Academy of Sciences; Acad. Georgi Bonchev Str., Bl. 3., BG-1113 Sofia, Bulgaria; a_ravnachka@abv.bg; <https://orcid.org/0000-0002-3502-7815>

Dessislava POLEGANOVA: PhD student, National Institute of Geophysics, Geodesy, and Geography, Bulgarian Academy of Sciences; Acad. Georgi Bonchev Str., Bl. 3., BG-1113 Sofia, Bulgaria; dpoleganova@yahoo.com; <https://orcid.org/0000-0001-8214-8700>

Szilárd RÁCZ: PhD, senior research fellow, Transdanubian Research Department, Institute for Regional Studies, HUN-REN Centre for Economic and Regional Studies; Papnövelde u. 22., H-7621 Pécs, Hungary; szracz@rktk.hu; <https://orcid.org/0000-0002-9397-2620>

Melinda SMAHÓ: PhD, research fellow, West-Hungarian Research Department, Institute for Regional Studies, HUN-REN Centre for Economic and Regional Studies; Liszt Ferenc u. 10., H-9022 Győr, Hungary; smaho.melinda@rktk.hun-ren.hu; <https://orcid.org/0000-0002-4022-3490>

KEYWORDS: Sofia agglomeration; Webb types; soil sealing; suburbanization; zone of active influence

ABSTRACT: The paper studies the agglomeration area of Bulgaria's capital, Sofia. The territorial scope of the metropolitan agglomeration encompasses 7 (LAU 1) municipalities including Sofia, Bozhurishte, Elin Pelin, Gorna Malina, Kostinbrod, Slivnitsa and Svoje, and comprises 146 (LAU 2) individual settlements. The total area of Sofia agglomeration covers almost 3,550 km² (3.2% of national territory), while it had 1,359,270 inhabitants (almost 21% of national population) according to the last population census (7 September 2021). During the whole period between 2001 and 2021, Sofia agglomeration has grown in population by more than 95,000 people (7.6%). Bozhurishte, Kostinbrod and Elin Pelin,



along with Sofia municipality itself, are the municipalities with the best demographic indicators within the agglomeration area. According to the typology of Webb, type 6 agglomeration settlements (migratory and natural decrease, natural > migratory) are predominant during the first subperiod (2001-2011), while type 8 (migratory increase compensates for natural decrease) has become the leading type in the second subperiod (2011-2021). Despite the increasing number of type 8 settlements, however, the population decline of Sofia city alone (19,361 people) exceeds more than twice the combined population growth of all type 8 settlements (8,929 people), and as a result – the total population number of the agglomeration declined during the second subperiod.

In 2021, the GDP in Sofia agglomeration represented 43% of the national economy, while the GDP per capita in Sofia (BGN 38,891) was more than double the national average. A significant number of the industrial sites are located in the neighbouring municipalities that fall within the agglomeration, with leading economic activities in manufacturing, transport and logistics. The distribution of FDI, however, is uneven: some 97% of them concentrated in Sofia municipality alone. Sofia agglomeration is distinguished by a relatively stable and balanced labour market, characterized by high economic activity and low unemployment rate compared to other agglomerations in the country.

Together with the demographic processes, the increasing soil sealing is another evidence of the spatial expansion of suburbanization. The largest share of new soil sealing was observed in Sofia municipality itself (approximately 370 ha), followed by Elin Pelin (105 ha), Bozhurishte (46 ha) and Kostinbrod (32 ha). Based on the intensity of new constructions and population change, the so-called zone of active influence of the agglomeration core has been outlined. The zone is made up of settlements meeting two conditions: they have a high intensity of new constructions and they are type 8 or type 7 according to the typology of Webb in the period between 2011 and 2021.

During the considered period, the northern, eastern, southern and western peripheries of the agglomeration area developed each in its own specific way, with different new construction intensity, morphological structure and inter-settlement spaces. Suburbanization processes observed in Sofia are generally comparable to those of other post-socialist European capitals in terms of historical legacies, demographic transformation, spatial dynamics, and land use shifts.

KAZAKOV Boris: PhD, egyetemi adjunktus, Bolgár Tudományos Akadémia, Nemzeti Geofizikai, Geodéziai és Földrajzi Intézet; Acad. Georgi Bonchev u., Bl. 3., 1113 Szófia, Bulgária; boriskazakov1@gmail.com; <https://orcid.org/0000-0001-7935-1409>

HARDI Tamás: PhD, tudományos főmunkatárs, HUN-REN Közgazdaság- és Regionális Tudományi Kutatóközpont, Regionális Kutatások Intézete, Nyugat-magyarországi Tudományos Osztály; 9022 Győr, Liszt Ferenc u. 10.; hardi.tamas@rtk.hun-ren.hu; <https://orcid.org/0000-0002-9778-2840>

ILIEVA Nadezhda: PhD, egyetemi docens, Bolgár Tudományos Akadémia, Nemzeti Geofizikai, Geodéziai és Földrajzi Intézet; Acad. Georgi Bonchev u., Bl. 3., 1113 Szófia, Bulgária; nadeto.ilieva@abv.bg; <https://orcid.org/0000-0001-9553-2509>

RAVNACHKA Aleksandra: PhD, egyetemi docens, Bolgár Tudományos Akadémia, Nemzeti Geofizikai, Geodéziai és Földrajzi Intézet; Acad. Georgi Bonchev u., Bl. 3., 1113 Szófia, Bulgária; a.lrvnachka@abv.bg; <https://orcid.org/0000-0002-3502-7815>

POLEGANOVA Dessislava: PhD hallgató, Bolgár Tudományos Akadémia, Nemzeti Geofizikai, Geodéziai és Földrajzi Intézet; Acad. Georgi Bonchev u., Bl. 3., 1113 Szófia, Bulgária; dpoleganova@yahoo.com; <https://orcid.org/0000-0001-8214-8700>

RÁCZ Szilárd: PhD, tudományos főmunkatárs, HUN-REN Közgazdaság- és Regionális Tudományi Kutatóközpont, Regionális Kutatások Intézete, Dunántúli Tudományos Osztály; 7621 Pécs, Papnövelde u. 22.; szracz@rkk.hu; <https://orcid.org/0000-0002-9397-2620>

SMAHÓ Melinda: PhD, tudományos munkatárs, HUN-REN Közgazdaság- és Regionális Tudományi Kutatóközpont, Regionális Kutatások Intézete, Nyugat-magyarországi Tudományos Osztály; 9022 Győr, Liszt Ferenc u. 10.; smaho.melinda@rtk.hun-ren.hu; <https://orcid.org/0000-0002-4022-3490>

ABSZTRAKT: A tanulmány Bulgária fővárosának, Szófiának az agglomerációját, annak kiterjedését, népességdinamikáját, szuburbanizációs folyamatait, az új beépítéseket, valamint az agglomerációt alkotó települések közötti különbségeket vizsgálja. A települések népességdinamikájának elemzésére (a 2001-2021 közötti időszakot két szakaszra bontva) John W. Webb tipológiáját alkalmazza. A beépített területek és a vízzáró felszínek változásait műholdfelvételek és a Copernicus adatbázisban elérhető vízzárósági rétegek felhasználásával kutatja, különböző intenzitású új beépített területeket határoz meg. A települések gazdasági profilját és munkaerőpiaci helyzetét a GDP ágazati szerkezete, a foglalkoztatási és a munkanélküliségi ráta, a közvetlen külföldi tőkebefektetések és egyéb paraméterek alapján elemzi. Az agglomeráció központja – Szófia városa – morfológiai szerkezetét is vizsgálja. A demográfiai és gazdasági folyamatok, valamint az új építkezések intenzitása alapján körülhatárolja a főváros körüli aktív befolyási övezetet, amely egyrészt az intenzív új beépítés területeit, másrészt az utóbbi években jelentős bevándorlási többletet felmutató településeket foglalja magába. Ez a zóna képezi az agglomeráció lényegét, ahol a szuburbanizáció és a gazdasági tevékenységek a legintenzívebbek.

Introduction

Suburbanization is a complex phenomenon with diverse effects in the post-socialist countries such as Bulgaria. It offers opportunities for improved living conditions, a stronger sense of community and a slower pace of life, but it is also related to negative consequences including urban sprawl, environmental impacts and social inequalities. In the recent decades, new problems arose from the growing demographic importance of the capital cities and the controversial interaction between urban growth, urban sprawl and suburbanization.

The up-to-date literature survey indicates that suburbanization processes in Central and Eastern Europe share some common features and also have specific characteristics across the different countries (e.g. Kinossian 2022; Schmidt, Fina, Siedentop 2015; Taubenböck et al. 2019; Wolff, Haase, Haase 2018). It is now well established from a variety of studies that temporal and spatial transformation of urban cores and agglomeration areas of post-socialist cities are the subjects of research and typology based on predominantly demographic statistics, changes in housing stock and the urban fabric, and more recently – with the rapid development of GIS and remote sensing technologies – land usage and land cover (e.g. Cochechi, Petrisor 2023; Hardi 2022; Hirt 2013; Kubeš, Nováček 2019; Siedentop, Fina 2012).

Comparing Bulgaria to other post-socialist countries, the scale of suburbanization varies depending on the specific context of each country. However, a few general patterns emerge:

- *Central European countries:* Slovakia, Czechia and Hungary have experienced relatively moderate levels of suburbanization, with a more balanced distribution of the population between urban and suburban areas. The transformation of Bratislava agglomeration is in sync with the most

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ТЕРИТОРИАЛНО РАЗПРЕДЕЛЕНИЕ И ДИНАМИКА НА СЕЛСКОТО НАСЕЛЕНИЕ В БУРГАСКА ОБЛАСТ ЗА ПЕРИОДА 1992–2001 г.

БОРИС КАЗАКОВ

*Катедра Социалноикономическа география
e-mail: boriskazakov@yahoo.com*

*Борис Казаков. ТЕРИТОРИАЛЬНОЕ РАСПРЕДЕЛЕНИЕ И ДИНАМИКА СЕЛЬСКОГО
НАСЕЛЕНИЯ В БУРГАССКОЙ ОБЛАСТИ В ПЕРИОД 1992–2000 ГГ.*

Изменения болгарского общества в годы структурных реформ экономики, оказали значительное влияние на демографические процессы в стране. Существующее различие в стандарте жизни между сельским населением и, проживающего в столице и больших городах, возросло за последние 15 лет. Вот почему необходимо найти путь, который даст возможность преодолеть различия в условиях, в которых живут отдельные группы населения. Исследование демографических процессов является шагом к достижению этой цели.

Настоящая статья ставит акцент на жизнь сельского населения самой большой области страны. Здесь живут только около 5 % сельского населения Болгарии. Однако, в региональном плане были установлены значительные различия и контрастирующее течение в демографическом развитии населения. В тот момент когда поселки в некоторых частях областей (тех находящихся в близости города Бургас и по черноморскому побережью) отчели демографический прираст в течение обсужденного периода времени, большую часть из поселков уменьшили численность своих жителей. Эта тенденция очень хорошо видна в поселках южной части региона, а также в других, у которых демографическая ситуация сильно ухудшена. Различия являются результатом разных географических условий в отдельных частях области, этнического и религиозного состава населения некоторых поселках, условий для развития сельского хозяйство и т. д. Параметры относительного уменьшения населения демонстрируют значительную зависимость от размера сел (фиг. 1 и 2). Ареалы в которых преобладают большие села, проявляют тенденцию к стабильному демографическому развитию. Там где большинство поселков маленькие, особенно если плотность сети небольшая, формируется ареалы с интенсивными процессами депопуляции, подобно Странджанской области. Проблемы которые эти части территории порождают, надо разрешать через одновременное приложение косвенных демографических и экономических мер, которые согласованные с специфическими географическими условиями территории.

Ключевые слова: сельское население, демографическое развитие, Странджанская область.

The thorough changes in Bulgarian society during the years of structural reformations of the economy, affected significantly the demographic processes in the country. The general difference between life standard of the rural population and that of the capital and the larger cities, was additionally increased during the last 15 years. It is necessary, therefore, to do research in finding ways of equalisation of the conditions in which these different groups of the population live, and analysing the demographic processes is a step towards achieving that goal.

The article centers on the rural population of the largest district in the country. The district embraces only about 5 % of the total rural population in Bulgaria. Nevertheless, essential differences and contrasting tendencies have been established in the demographic development of the population on a regional scale. While the villages in some parts of the district (the ones close to the town of Bourgas and those situated on the Black Sea coast) have recorded demographic growth during the discussed period of time, the greater part of the rural settlements have decreased the number of their residents. This trend is best apparent in the villages in the southern margins of the region, as well as in other villages with extremely deteriorated demographical situation. Those differences result from the different geographical conditions, ethnical and religious composition of the population of some villages, conditions for farming etc. The parameters of relative decrease of the population show a significant dependance on the size of the villages (Fig. 1 and Fig. 2). Areas with larger villages tend to have more steady demographical development. Those with smaller settlements, together with a small density of the settlement network, form a territory of intensive depopulation processes, like the Strandja region. The problems those areas pose, are to be solved by using simultaneous, indirect demographical and economical measures, adjusted to the specific geographical conditions of the territory.

Key words: rural population, demographic development, Strandja region.

В годините на преход към пазарна икономика в нашата страна настъпиха съществени промени както в икономически и политически, така и в чисто социален аспект. Тези промени засегнаха в една или друга степен всички обществени прослойки и цялото българско население, като доведоха до съществени изменения в неговата структура, трудова активност и миграционна подвижност. Последната особено много се активизира и по този начин се превърна в основен фактор за изменение на броя на населението в отделни региони и населени места. В периода преди 1989 г., външната миграция практически не играеше роля за динамиката на населението на България. През последните 15 години нейното значение силно нарастна. Населението на страната намаляваше вследствие не само на отрицателните стойности на естествения прираст, но и поради значителния миграционен отлив. В регионален план и в различните типове населени места тези процеси се проявявиха по различен начин. Столицата и нейната периферия продължи да се оформя като район с най-благоприятни условия и социално-демографски характеристики, привличащ значителни групи от население от всички части на страната. От друга страна, големите областни центрове, макар и с редица изключения, също успяха да запазят относително благоприятното си състояние от гледна точка на своя демографски и стопански потенциал. В сравнение с тях, в по-малките градове и особено в селата, демографската ситуация се изостри до степен на демографска криза, което допълнително засили контраста между големите градове, от една страна, и малките градове и селата, от друга. На практика процесите на обезлюдяване на обширни селски райони от страната продължиха, макар и с относително по-бавни в сравнение с предходни периоди темпове. Положителните промени и нововъведения твърде бавно достигат тези райони и тяхното население, а, от друга страна, негативите, съпътстващи пре-

**СЪВРЕМЕННО СЪСТОЯНИЕ, ПРОСТРАНСТВЕНА ДИНАМИКА
И ПРОБЛЕМИ НА РОМСКАТА ГЕТОИЗИРАНА ГРАДСКА СТРУКТУРА
(КВ. ЛОЗНИЦА) В ГР. АСЕНОВГРАД**

Надежда Илиева

Национален институт по геофизика, геодезия и география,
Българска академия на науките, nadeto.ilieva@abv.bg тел.: +359876708600

Борис Казаков

Национален институт по геофизика, геодезия и география,
Българска академия на науките, boriskazakov1@gmail.com, тел.: +359877111966

Красимир Асенов

Пловдивски университет „Паисий Хилендарски“,
krasimirasen@gmail.com, тел.: +359899420707

***Анотация:** Статията представя резултати от изследване на ромската гетоизирана градска структура (кв. Лозница) – гр. Асеновград. На базата на предварително разработени въпросници (анкети) и провеждане на дълбочинни интервюта с представители на ромската общност, както и на местните власти, е направена характеристика на квартала и населението, което го обитава. Чрез дигитализация на всички постройки в рамките на квартала е изготвено цифрово изображение, отразяващо актуалното състояние на квартала, като е проследена и динамиката в развитието на квартала за периода 2003 – 2024 г. посредством ГИС. Резултатите от изследването показват значително площно разрастване на квартал Лозница, в резултат на приток на население от други градове на страната, независимо от засилената емиграция на част от населението в чужбина.*

***Ключови думи:** роми; ромска махала; гетоизирана структура; интеграция; сегрегация*

**CURRENT STATE, SPATIAL DYNAMICS
AND PROBLEMS OF THE ROMA GHETTOIZED URBAN STRUCTURE
(LOZNITSA NEIGHBOURHOOD) IN THE TOWN OF ASENOVGRAD**

Nadezhda Ilieva

National Institute of Geophysics, Geodesy and Geography,
Bulgarian Academy of Sciences, nadeto.ilieva@abv.bg, phone: +359876708600

Boris Kazakov

National Institute of Geophysics, Geodesy and Geography,
Bulgarian Academy of Sciences, boriskazakov1@gmail.com, phone: +359877111966

Krasimir Asenov

“Paisii Hilendarski” University of Plovdiv,
krasimirasen@gmail.com, phone: +359899420707

***Abstract:** The paper presents the results of a study on the Roma ghettoized urban structure (Loznitsa neighbourhood) in the town of Asenovgrad. On the basis of previously developed questionnaires and conducting*

in-depth interviews with representatives of the Roma community, as well as local authorities, a characterization of the neighbourhood, and the population that lives in it has been made. By digitizing all the buildings within the neighbourhood, a digital image was prepared, reflecting the current state of the neighbourhood, while the dynamics of the neighbourhood's development for the period 2003-2024 has been tracked using GIS. The results of the research show a significant spatial expansion of the Loznitsa neighbourhood, mostly as a result of an influx of population from other cities in the country, regardless of the increased emigration of the local population abroad.

Keywords: Roma; Roma neighbourhood; ghettoized structure; integration; segregation

УВОД

Град Асеновград е най-големият град в България, който не е областен център – според данните от последното преброяване на населението и жилищния фонд от 2021 г., населението на града е 45 322 д. (www.nsi.bg)¹, което го прави по-голям от десет от областните градове в страната. Подобно на много други градове в България – независимо от техния размер и географско положение – в Асеновград съществува сравнително голяма и добре обособена ромска махала, която официално е известна като кв. Лозница. Именно този квартал е обект на изследване в настоящата разработка, като основен акцент се поставя върху процесите на пространствено разрастване, жилищната инфраструктура, образованието, здравеопазването, както и на някои етно-културни характеристики на населението обитаващо квартала. Съществуването на квартали в градовете, които имат характеристиките на сегрегирани структура – както е случая с квартал Лозница – представлява многоаспектен проблем в градското развитие, който е налице в редица градове в страната. Ромските квартали заемат съществено място във функционалната структура на градовете и оказват влияние върху развитието им като цяло. Тези квартали се разглеждат като пространствени и функционални бариери в градското пространство, които дават негативна представа за града, представляват тежест за общинския бюджет и разкриват неспособността на властите да се справят с натрупаните проблеми. Изследването на подобни квартали (махали) представлява проблем както от научна, така и от практико-приложна гледна точка, тъй като наличието на надеждни данни за населението и жилищната инфраструктура е ограничено, а достъпът до тях често е затруднен. В същото време, изследването на сегрегирани ромски квартали е в основата на създаването на успешни политики за разрешаване на проблема с интеграцията на ромите в страната, тъй като животът в пространствено и социално сегрегиран квартал, наред с посещаването на сегрегирано училище, са сред основните пречка пред интеграцията на ромите в страната (Равначка, Казаков, 2022)². Концентрацията на ромското население в обособени квартали и махали води до тяхната социална изолация, трудности в подобряването на жилищните условия, проблеми с изграждането и поддръжката на инфраструктура, осигуряване на по-добри хигиенни условия, транспортни проблеми, и трудности при достъпа на услуги. Поради тези причини емпиричното изследване на пространствените модели на ромските гетоизирани структури в градовете в България предоставя важна информация, тъй като то е важен показател за степента на интеграция, от една страна, и до голяма степен за желанието на отделните групи да взаимодействат помежду си. Според Томова (2009)³

¹ www.nsi.bg

² Равначка, А., Б. Казаков. Социално-икономическа интеграция на ромите от Харман махала – гр. Пловдив. (2022) НИГГГ-БАН, София, ISBN 978-954-9649-18-5.

³ Томова, И. Здравето и ромската общност: анализ на ситуацията в Европа – предварителен национален доклад – България, Фондация „Здравето на ромите“, 2009.



Стопански
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Boris Kazakov*
Todor Lyubenov**
Nadezhda Ilieva***
Kamelia Petkova****
Aleksandra Ravnachka*****

SPATIAL AND SOCIAL DIMENSIONS OF ROMA SEGREGATION AND INTEGRATION (A CASE STUDY OF THE CITY OF KYUSTENDIL, BULGARIA)

Abstract: The paper presents the results of an empirical sociological study conducted in the Roma ghettoized urban structure of Kyustendil, Bulgaria. Based on the results of in-depth interviews with representatives of local authorities, educational mediators, informal Roma leaders and representatives of the Roma community living in the neighbourhood, the main socio-economic integration problems were established. Additionally, an analysis of the internal structure of the Roma neighbourhood has been performed, with the use of data obtained from aerial photography (UAV data). Since a significant part of the housing stock in Roma neighbourhoods is illegal, in most cases it is not correctly depicted on cadastral maps. Detailed maps of the current state of the Roma neighbourhood have been created, thus compensating for the lack of precise official data on the current state of the housing stock. GIS have been used to measure, analyze and visualize the spatial relationships, patterns and trends in the changes of the internal structure of the Roma neighbourhood in Kyustendil.

Keywords: Roma neighbourhood; survey; segregation; integration; UAV data.

Introduction

The EU policies on territorial cohesion place an emphasis on building more homogeneous cities in social-demographic terms. The European Commission Report “The future of cities...”¹ supports the

* **Boris Kazakov** – PhD, Assistant Professor at the National Institute of Geophysics, Geodesy, and Geography – Bulgarian Academy of Sciences, boriskazakov1@gmail.com

** **Todor Lyubenov** – National Institute of Geophysics, Geodesy, and Geography – Bulgarian Academy of Sciences, tlyubenov@gmail.com

*** **Nadezhda Ilieva** – PhD, Professor at the National Institute of Geophysics, Geodesy, and Geography – Bulgarian Academy of Sciences, nadeto.ilieva@abv.bg

**** **Kamelia Petkova** – PhD, Assistant Professor at the Institute of Philosophy and Sociology – Bulgarian Academy of Sciences, Kamelia.petkova@gmail.com

***** **Aleksandra Ravnachka** – PhD, Associate Professor at the National Institute of Geophysics, Geodesy, and Geography – Bulgarian Academy of Sciences, a_lavnachka@abv.bg

¹ **European Commission.** The Future of Cities: Opportunities, Challenges, and the Way Forward, 2019, ISBN 978-92-76-03847-4, ISSN 1831-9424 [online] [Accessed: 31 September 2023]. <https://doi.org/10.2760/375209>

LOCATION AND INTERRELATIONS OF THE ROMA QUARTER OF HARMAN MAHALA WITH THE URBAN STRUCTURE OF THE CITY OF PLOVDIV, BULGARIA

Nadezhda ILIEVA

National Institute of Geophysics, Geodesy and Geography, Bulgarian Academy of Sciences, Department of Geography, Sofia, Bulgaria
nadeto.ilieva@abv.bg

Omar KOUWATLI

Arab International University (AIU), Department of Architecture and Urban Design, Damascus, Syria
kouwatli2@gmail.com

Krasimir ASENOV

Deputy Mayor, Plovdiv Municipality, North Administrative Region, Plovdiv, Bulgaria
krasimirasen@gmail.com

Boris KAZAKOV

National Institute of Geophysics, Geodesy and Geography, Bulgarian Academy of Sciences, Department of Geography, Sofia, Bulgaria
boriskazakov1@gmail.com

Abstract

The main objective of this study is to analyse the location and the spatial interrelations of the Roma-populated Harman Mahala quarter of the city of Plovdiv, Bulgaria. Three types of boundaries of the ghettoized urban structure (GUS) have been distinguished – "solid", "blurry" and "symbolic". The solid boundaries are outlined taking into account the urban space inhabited by the Roma ethnic community, i.e. from a "static" point of view. In defining the "blurry" boundaries of the GUS, the specifics of the residents' spatial behaviour were analyzed. Movement in space is closely linked to the following "functional spaces": labour, education, recreation and leisure, sports, commerce, healthcare, transport and commuting, with their inherent material and technical facilities, organizational structure and interactions. Through those interactions, the so-called "functional space" is outlined. The third aspect taken into consideration is the outlining of the so-called "symbolic space" of the GUS, the boundaries of which are dependent on how the local Roma population perceives the urban space.

Keywords: *spatial segregation, Roma population, ghettoized urban structure, Harman Mahala, urban, functional and symbolic space*

1. INTRODUCTION

According to Lefebvre (1968) cities can be considered spatial projections of society. In recent years, especially in post-communist countries, new models of social and spatial polarization have emerged, based mostly on income inequality (Weclawowitzs, 2002) and ethnicity (Ladanyi, 2002). Duncan and Lieberman (1959) demonstrate the inverse correlation between

The change of the urban network along the middle and lower Danube during transition

Tamás HARDI^{1,*}, Chavdar MLADENOV, Boris KAZAKOV², Radu SĂGEATĂ³

¹ Institute for Regional Studies, Hungarian Academy of Sciences, Győr, Hungary

² National Institute of Geophysics, Geodesy and Geography, Bulgarian Academy of Sciences, Sofia, Bulgaria

³ Institute of Geography, Romanian Academy, Bucharest, Romania

* Corresponding author, hardit@rkk.h

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Abstract

The economy and urban development of the riparian regions have been partly determined by the Danube as an inland navigation line (e.g. Dunaújváros, Smederevo, Lom, Calarași etc.), or the economy of these towns has been based on the other features of the river (e.g. Komárom/Komarno, Nyergesújfalu, Paks, Orsova, Vidin, Kozloduy etc.). In the aftermaths of the collapse of the communist regimes and the Soviet Union and the blockade of the traffic due to the crisis of ex-Yugoslavia, the role of the Danubian transport line was changed radically (Hardi 2012). Due to these changes and the emergence of the new economy, the function and situation of these towns transformed in the last two decades. Some of them could use the new possibilities, but many of them lost their economic basis and population, becoming a peripheral region or town. Our paper gives a comparative study about the features of the Danube towns, and characterizes the typical development ways of the riparian towns. The present study summarizes the experiences of an academic exchange programme among Romanian, Bulgarian and Hungarian institutions.

Keywords: *the Danube, urban development, town-network, spatial development*

Rezumat. Schimbări în rețeaua urbană de-a lungul sectorului mijlociu și inferior al Dunării în perioada de tranziție

Economia și dezvoltarea orașelor din regiunile riverane Dunării au fost parțial determinate de fluviu, prin funcția portuară pe care acesta le-a imprimat-o (ex. Dunaújváros, Smederevo, Lom, Călărași etc.) sau prin alte caracteristici ale fluviului (ex. Komárom/Komarno, Nyegesúfal, Paks, Orșova, Vidin, Kozlodui etc.). În urma prăbușirii Uniunii Sovietice și a sistemelor politice comuniste din statele riverane Dunării și după blocada traficului naval ca urmare a crizei din fosta Iugoslavie, rolul axei dunărene de transport s-a schimbat radical (Hardi 2012). Datorită acestor schimbări și ca urmare a dezvoltării unor noi sectoare economice, funcția și importanța acestor orașe s-a modificat considerabil în ultimele două decenii. Unele dintre ele și-au pierdut baza economică și au devenit orașe sau regiuni periferice, altele au folosit sau ar putea folosi noile oportunități de dezvoltare. Lucrarea noastră oferă un studiu comparativ al orașelor dunărene și evidențiază modalitățile tipice de dezvoltare a orașelor riverane Dunării. Ea se rezumă la un program de schimb interacademic între România, Bulgaria și Ungaria.

Cuvinte-cheie: *Dunărea, dezvoltare urbană, rețea de orașe, dezvoltare spațială*

Introduction

The Danube and the cities characteristic types evolved along the Danube River, their existence and development being linked to the river. Three characteristic types can be separated: 1) bridge cities that are situated on one bank of the river or on both banks, or in the vicinity of the bank; 2) city pairs that are defense formations along the river that was a border for a long time; and 3) cities created by activities related to the river (Fig. 1). These three characteristics can of course be present at the same time in the same city, and can evolve into each other during the course of development.

Bridge cities. The birth of this city type is linked to the crossing facilities on the river (Mendöl 1963). Crossing opportunities were linked at that time of the start of goods transport to certain easily crossable sections of the rivers (fords, ferry), which could only be used temporarily. Consequently, at these favourable locations, special functions were established for the storage of goods, with a consideration to those times when the river cannot be crossed (ice drift, flood, small water level etc.). This means that they were built right on the river

bank or, if that was not suitable for settlement, a little bit farther away from that. These points attracted trade routes, so later the permanent bridges were built there. After the construction of the bridge the established centre continued to develop. Typical cities at the upper and middle reaches of the river are the bridge cities that developed to become regional centres or capital cities. They are junctions of the socio-economic development in all cases.

Their specialty is that they usually were established on one bank of the river, then, after the construction of the bridge, they became two-bank cities either by natural growth or following the integration of smaller settlements on the other side. This type involves the capital cities (Vienna, Bratislava, Budapest, and also Belgrade from the 20th century), and also the riverside regional centres like Ulm, Regensburg, Passau, Linz, Győr, Komárom, Esztergom, Baja, Sombor, Vukovar, Novi Sad and Smederevo. Of course the growth of these cities was affected throughout history by several other factors in addition to the bridge city role. The possibility of crossing in itself only designated their exact location.

URBANIZÁCIÓ BULGÁRIÁBAN

(The Urbanization Process in Bulgaria)

CHAVDAR MLADENOV – MARGARITA ILIEVA –
NADEZHDA ILIEVA – BORIS KAZAKOV

Kulcsszavak:

Bulgária városodás urbanizáció Balkán Délkelet-Európa

A tanulmány Bulgária urbanizációs tendenciáit foglalja össze. Elemzi a bolgár városhálózat fejlődését a múltban és a közelmúltban. Az általános tendenciák mellett kiemeli a balkáni, azon belül Bulgáriára érvényes sajátosságokat. Napjaink fejlődési jellegzetességeit két esettanulmányon keresztül mutatja be. Az első a vidéki kisvárosok átalakulását vizsgálja, különösen annak demográfiai és migrációs sajátosságait. Bulgáriában a vidéki térségek egyik nagyon fontos problémája a elnéptelenedés, kiüresedés. Nem mentes ettől a jelenségtől a kisvárosi hálózat sem, ami csak részben magyarázható a rendkívül rossz bolgár demográfiai mutatókkal. Nagy jelentősége van az elvándorlásnak is, aminek célpontja elsősorban a hazai nagyvárosokban (főváros, tengerpart), másrészt külföldön keresendő. A második esettanulmány a bolgár tengerpart városállományának átalakulását vizsgálja. Itt a városok számának, a városodottság mértékének növekedését tapasztalhatjuk. Bemutatja ennek hátterét, az adminisztratív várossá nyilvánítástól a sikeres, szerencsés földrajzi helyzetű agglomerációk fejlődéséig. Mindemellett utal a tengerparti sáv kevésbé szerencsés településeinek sorsára is.

Bevezető

Az urbanizáció, mint egy összetett gazdasági és társadalmi jelenség a városi lakosság növekedésében nyilvánul meg. Ez egy sokoldalú folyamat, amely megváltoztatja az életmódot, a teljes népesség képzettségi és kulturális szintjét is a városi életmód elterjesztésével. A városi térség összetett, önszabályozó térség, amelyen belül előfordulnak egyenlőtlenségek, különböző feszültségek, a gazdasági tevékenység és földhasználat átalakul, fejlesztések hatására megindul a népesség migrációja. A városi térség szervesen kötődik a központi városhoz és a változások párhuzamosan zajlanak a központban és a peremeken.

A városi és a vidéki népesség aránya visszatükrözi az országterület városodottsági szintjét és a nemzetgazdaság szerkezetét. Bulgáriában 1879-től egészen az 1960-as évekig a vidéki népesség aránya jelentősen meghaladta a városi népesség arányát (az 1946. évi népszámláskor is még 75,3/24,7% volt az arány). Mindez a mezőgazdasági irányultságú gazdaság következménye volt (Mladenov–Dimitrov 2009a). Az arányszámok változása leolvasható az 1. táblázatból¹.

DEMOGRAPHIC PROJECTION OF THE EDUCATION LEVEL OF THE ROMA POPULATION IN BULGARIA (2020-2050)

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UDC: 314.117-057:303.42(497.2:=214.58)"2020/2050"

Nadezhda Ilieva

Boris Kazakov

National Institute of Geophysics, Geodesy and Geography,
Bulgarian Academy of Sciences, **Bulgaria**

ABSTRACT

Education is one of the main indicators of the social status of a population group in modern and postmodern societies. According to "Education: the situation of Roma in 11 EU Member States" (2014) only 1/2 of the male Roma teenagers and just 1/3rd of the female Roma teenagers in Bulgaria aged 15-18 attended school (compared to 9/10 of Bulgarians). The projection of the attained educational level of the Roma population of Bulgaria aged 15+ years has been elaborated in two scenarios: 1) the so-called "base scenario" which stipulates that the current educational status and trends of the Roma population, the ethnic Bulgarian population and the total population of the country, will be maintained in the long term; 2) the so-called "integration in the education system scenario", which assumes a possible significant improvement of the educational status of the Roma community. The projection has been made by time intervals (until 2020, from 2020 to 2030; from 2030 to 2040 and from 2040 to 2050) and has been elaborated through several calculation steps (estimation of the total number of the population aged 15+, the number of population aged 15+ by ethnicity by 2020, 2030, 2040 and 2050, the population aged 5-14 years as of 2011, 2020, 2030, 2040 and 2050 by ethnicity, and estimation of the education level of the population in the age cohort of 15-24, which in the base year were aged 5-14 years. The cumulative changes from previous years were also taken into account in the calculations. As a result – a final total projection of the population aged 15+ by education level, based on the results obtained in each steps of the projection has been elaborated.

Keywords: Roma population, labor market, Harman Mahala, Plovdiv

INTRODUCTION

The Roma are one of the most stigmatized, marginalized and discriminated ethnic groups in Bulgaria, the Balkans and across Europe. Regardless of the measures and programs developed and implemented by both the state and non-governmental organizations, the desegregation and the integration of minorities at this stage have not achieved the expected results – the Roma in Bulgaria still have the lowest education level compared to all other ethnic groups in the country. According to the last population census in Bulgaria (February, 2011), (<https://www.nsi.bg>) the combined share of Roma people with high school and university level of education is just 7.2 %, while the level of illiteracy among the same ethnic group is considerably higher than the national average and has actually increased by 50.0 % in the period between the last two censuses (2001 – 2011). All that eventually hinders the overall integration of Roma people, since some 17 % of the Roma aged 16-25 (young working age) are unable to read or write, unlike Roma people in older

**THE ROMA ON THE LABOR MARKET
- TRENDS, PROBLEMS AND PERSPECTIVES
(A CASE STUDY OF HARMAN MAHALA – PLOVDIV, BULGARIA)**

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Aleksandra Ravnachka

Boris Kazakov

National Institute of Geophysics, Geodesy and Geography,
Bulgarian Academy of Sciences, **Bulgaria**

ABSTRACT

Over the past two decades the issues of social integration of Roma in Bulgaria, including their participation in the labor market, have been of growing importance to the society due to the growing number of Roma people in the country. Problems related to employment, type of income and reduction of unemployment benefits are becoming more and more urgent. The study represents the general overall situation of the Roma on the labor market in Bulgaria on the one hand and the results from a survey at a low territorial level – a Roma quarter – which makes it possible to reveal in detail the specifics of the process of Roma integration and their way of coping with the changes in the labor market. The specifics features of the various Roma communities in Bulgaria should be taken into account in the process of strategic and planning documents development, in order to achieve their main objective – to reduce regional and intra-regional disparities and social inequality.

The scientific research on Roma participation in the labor market, the policies of their integration and the accompanying problems are insufficient in Bulgaria. Most of the research is general, at national level. The main reason for this is the lack of information and limitations in studying the labor force and the labor market at local level, and especially on the basis of ethnicity. The paper presents the results from a survey among 500 residents of the Roma quarter of Harman Mahala, Plovdiv, based on questionnaires and expert interviews. The study aims to reveal the participation of the Roma in the labor market in terms of scale, types of employment, attitudes towards work and last but not least – the obstacles hampering the Roma social inclusion.

Keywords: Roma population, labor market, Harman Mahala, Plovdiv

INTRODUCTION

The Roma are the most vulnerable ethnic group in Bulgaria, featured by a low social status and a low labor market participation. The social integration of that ethnic community through increased participation in the economy of the country is crucial for raising the Roma's standard of living and improving their overall social realization. The attitude of the macro-society towards the Roma helps creating a separate social category with common problems: poverty, marginalization, segregation, poor access to social services, exclusion from the practice of active citizenship, intolerance, discrimination, prejudice, negative stereotypes, etc. Employment plays an important role as a tool of social inclusion since it provides opportunities for interaction, thereby reinforcing social cohesion.

Образователна структура на населението и състояние на образователната инфраструктура в планинските райони на България

Борис Казаков

НИГГГ – БАН, София 1113, ул. Акад. Г. Бончев, бл. 3

e-mail: boriskazakov1@gmail.com

Абстракт: Състоянието на образователната структура на населението е важен показател за цялостното ниво на човешко развитие в дадена територия. Статията разкрива съвременното състояние и особености на образователната структура на населението в планинските райони (общини) на страната, чиито центрове не са областни центрове, както и наличната образователна инфраструктура (мрежа от училища). Направен е анализ на мрежата от учебни заведения в планинските райони на страната с оглед тяхната структура по видове училища, териториално разпределение и дисперсност (респективно - концентрация в общинските центрове) и т.н.

Ключови думи: образователна структура, образователна инфраструктура, планински общини.

Обект и предмет на изследването. Информационна база и методика на изследването.

Обектът на настоящото изследване са планинските общини в България определени от екип на НИГГГ – БАН, без т.нар. общини от нулев и първи функционален тип (чиито центрове са не само общински, но и областни центрове като Кърджали, Смолян, Благоевград, Кюстендил, Перник, Сливен и др.). Така определени, планинските общини-обект на настоящото изследване са общо 120 на брой, като обхващат 47 395 хил. кв.км (или около 42 % от територията на страната) и според последното преброяване акумулират около 22 % от населението на България (1 602 904 д.). Най-голямата по население община сред така определените планински общини е община Казанлък, област Стара Загора, с население 72 581 д., следвана от общини като Асеновград, Петрич, Карлово, Дупница и др., чиито центрове са средноголеми български градове. От друга страна с най-малобройно население сред планинските общини в страната са общини като Трекляно (едва 644 д. по данни от последното преброяване), Чавдар, Челопеч, Антон, Макреш, Маджарово – с население под 1000 д., част от които са съставени само от едно населено място, което е и общински център.

Предметът на изследване на настоящата работа е състоянието на образователната структура и образователната инфраструктура в планинските общини в страната – т.е. предметът може да се разграничи условно на две части.

Образователната структура на населението е анализирана на базата на данни от последното преброяване в страната – 01.02.2011 г., докато анализът на образователната инфраструктура се базира на данни за броя на държавните, общинските и частните учебни заведения към началото на 2014 г. (по данни на Министерството на образованието и науката), а броят на децата в училищна възраст е преизчислен по **метода на повъзрастовото придвижване** (чрез коефициента на доживяване взет от таблиците за смъртност) към началото на същата година. При преизчисляването на броя на децата в училищна възраст не е взето под внимание влиянието на миграциите, поради липса на точни данни отразяващи този процес. Тъй като в изходната база данни за възрастовата структура на населението то е в 5-годишни възрастови интервали, населението на възраст съответно на 7 и 8 годишна възраст и на 18 годишна възраст е изчислено като 2/3 от населението на възраст 5-9 и 4/5 от това на възраст 15-19 г.

Изключването от анализа на планинските общини с общински център областен град е направено поради съображението, че областните градове като цяло акумулират основната маса от учебни заведения и натежават твърде много в дела както на децата в училищна възраст, така и в броя на учебни заведения, спрямо по-малките планински общини. В редица планински общини, чийто център е и областен център, броят на селищата е значителен и изключването им от настоящия анализ може да се отчете като недостатък, но пълният анализ на образователната структура и инфраструктура в планинските общини на страната в този случай би трябвало да се опира на анализа по населени места – нещо, което настоящото изследване няма за цел. Целта на настоящата работа е да се анализира състоянието именно на по-малките и респективно по-уязвимите планински общини в страната, поради което и „големите“ планински общини са изключени от обекта на изследване.

Образователна структура на населението в планинските общини.

Образователната структура е от изключително важно значение за цялостната характеристика на населението в даден регион или страна. Това произлиза от факта, че образователното равнище на населението има пряко отношение както към чисто демографски негови характеристики (нива на раждаемост, коефициента на детност, детската смъртност и т.н.), така и към цялостния социално-икономически статус на населението, и възможностите за неговото развитие – било то на базата на местните условия и ресурси или посредством външни фактори (чужди инвестиции). Както се посочва в «Актуализираната демографска стратегия...»: „Състоянието ѝ има голямо значение за развитието на страната, тъй като от образователното ниво на хората до голяма степен зависи мобилността им на пазара на труда, гарантираща по-добро заплащане, поддържане на по-висок жизнен стандарт и качество на живота”. Ето защо, без анализ на

CONTEMPORARY DEMOGRAPHIC DEVELOPMENT AND PROBLEMS OF DANUBIAN URBAN SETTLEMENTS IN BULGARIA

Chavdar Mladenov, Boris Kazakov

Key words: demographic development; Danubian region; urban settlements; demographic situation

INTRODUCTION

The basic goal of the regional development strategies and plans, including the National Strategy for Demographic Development of the Republic of Bulgaria 2006-2030 (<http://www.mlsp.government.bg/bg/docs/demography/demograph.htm>) and The Millennium Development Goals (UNDP, 2003) is to offer means and measures for solving the various problems posed by the demographic situation, according to the specificity of the socio-economic development of each municipality. The aim of this paper is to detect the trends in the demographic development of the Danubian urban settlements and the socio-economic problems that result from their specific demographic situation. The paper focuses on urban settlements located in all municipalities in Bulgaria which have access to the Danube River banks. Those municipalities are linked to one another by the river, which serves as a transport artery, but is not used rationally and on full-scale capacity, because of little or no economic integration between the Danubian municipalities.

There are a total of 23 municipalities bordering the Danube River in Bulgaria, out of which 4 have no urban settlements. The total number of the urban settlements in the discussed zone is 22, 12 of those – situated on the river bank itself (Fig.1.). The analysis is based on the period between 1992 and 2008 during which 2 settlements gained urban status – Slivo pole (in 2002) and Marten (in 2006).

The settlements along the Danube River, especially the urban ones, have always been connected to the river since their foundation. However, the river has always represented a border line, even until today, which eventually leads to a certain level of isolation from the inner parts of the country. This relative isolation hinders, more or less, the overall development of the settlements along the river. This results in

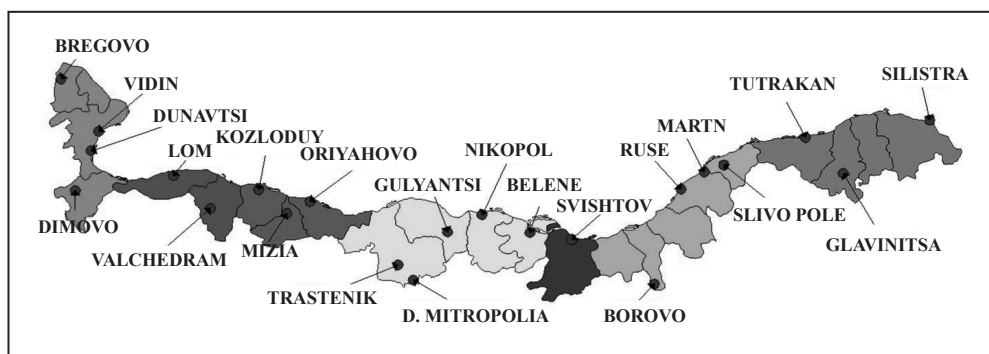


Fig. 1. Location of the urban settlements in the Danubian municipalities of Bulgaria

economic degradation, intensifying of emigration and basically – decrease of the population number.

Most of the Danubian urban settlements have been founded originally as fortresses along the higher right (Southern) bank of the river during Roman period, and later have gained importance as river ports and trade centers. In the following centuries, especially after The Liberation, the multifunctional utilization of the river prospered and this lead to economic development of the areas along the river. The range of human activities related to the river grew and the international river transport developed. The urban settlements along the river gradually gained a number of various functions. It was in those river ports where the national and the regional export-import traffic was realized. The Danubian urban settlements turned into important, multifunctional administrative centers which formed certain impact zones around them.

DYNAMICS OF THE POPULATION NUMBER

The current population dynamics of the Danubian urban settlements in Bulgaria is negative. The population number of all towns in the discussed area had been growing from 1946 till 1990. The three district centers – Ruse, Vidin and Silistra, tripled their population number during that period, mostly through attracting residents from the rural areas in their zones of influence. That process was relatively quick and thus the demographic potential of the rural settlements was exhausted, which lead to stagnation of the population growth by the end of 1970s. (Kiradzhiev, Mladenov, 1990)

The political, economic and social changes following 1990 lead to redistribution of the population in the country. The opening of the national borders, the removal of the settling restrictions concerning the large cities and the economic reformation, triggered many negative trends in the population development. During the discussed period between 1992 and 2011, only two urban settlements increased their population number – the university city of Svishtov (by almost 17 %) and the Bulgarian nuclear power plant hometown – Kozloduy (by over 3 %). All the other (20) urban settlements along the Danube decreased in population number: 2 of them registered a

ИНТЕГРИРАН МЕТОД ЗА ТИПОЛОГИЗИРАНЕ НА НАСЕЛЕНИТЕ МЕСТА СПОРЕД ДЕМОГРАФСКАТА СИТУАЦИЯ (НА ПРИМЕРА НА СЕЛАТА В ЮГОИЗТОЧНА БЪЛГАРИЯ)

гл. ас. д-р Борис Георгиев Казаков

НИГГГ – БАН, София 1113, ул. Акад. Г. Бончев, бл. 3,

email: boriskazakov1@gmail.com

Абстракт

Статията представя интегриран метод за групиране на населените места в Югоизточна България (областите Бургас, Сливен и Ямбол), които към 1.02.2001 г. имат статут на села, в типове според демографската им ситуация, който метод се базира на обединяването на няколко конкретни клъстеризационни метода. Типологията е извършена на базата на 12 подбрани показателя, които в най-голяма степен характеризират демографската ситуация в дадено населено място, административно-териториална единица, регион и т.н. Направена е кратка характеристика на формираните 5 типа демографска ситуация в изследвания регион от страната.

Ключови думи: типология, клъстерен анализ, демографска ситуация.

Увод

Идеята на предложената типология е обединяване на селата в изследвания регион в групи (клъстери), в които се наблюдават сходни състояния и нива на демографските показатели. Групирането е извършено на базата на подбрани показатели характеризиращи демографската ситуация, чрез използване на методи на многомерния статистически анализ, а именно – клъстерен анализ, факторен анализ (анализ на главните компоненти), метод на баловите (интегралните) оценки. Подборът на използваните показатели, въз основа на които да се извърши типологията на изследваните села е съобразен с тяхната представителност по отношение на демографската ситуация, с възможността, стойностите им да могат да бъдат изчислени на ниво населени места и в същото време да не са такива показатели, които на такова ниско териториално ниво получават „изкривени“ и „нереални“ стойности. Предвид тези съображения, като най-подходящи и представителни демографски показатели бяха подбрани следните 12 показателя:

1. Общ коефициент на раждаемост изчислен за периода 2001-2010 г.;
2. Общ коефициент на смъртност изчислен за същия период;
3. Коефициент на естествен прираст за същия период;
4. Относително изменение на броя на населението между преброяванията към 1.03.2001 и 1.02.2011 г.;
5. Относително изменение на броя на населението спрямо най-големия (респ. най-малкия) отчетен брой през периода 1946 – 2011 г.;
6. Темп на изменение на броя на населението за периода от началния момент на депопулация (съответно на нарастване) до 1.02.2011 г.;
7. Средна възраст на населението към 1.02.2011 г.;

GIS-BASED ASSESSMENT OF THE TRANSPORT ACCESSIBILITY OF THE MATERIAL ANTHROPOGENIC TOURIST RESOURCES IN SOFIA, BULGARIA

Velimira STOYANOVA ^{1*}, Boris KAZAKOV ¹, Aleksandra RAVNACHKA ^{1,2},
Emilia PATARCHANOVA ², Poli ROUKOVA ¹, Kristina GARTSIYANOVA ³

¹ National Institute of Geophysics, Geodesy, and Geography, Department of Geography, Bulgarian Academy of Sciences (NIGGG-BAS), Sofia, Bulgaria; stoyanovavelimira@gmail.com (V.S.); boriskazakov1@gmail.com (B.K.); poli.roukova@gmail.com (P.R.); a_ravnachka@abv.bg (A.R.)

² Southwest University "Neofit Rilski", Faculty of Natural Sciences and Mathematics, Blagoevgrad, Bulgaria; emilia_patarchanova@swu.bg (E.P.)

³ National Institute of Geophysics, Geodesy, and Geography, Hydrology and Water Management Research Center, Bulgarian Academy of Sciences (NIGGG-BAS), Sofia, Bulgaria; krisimar1979@gmail.com (K.G.)

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Abstract: The study aims to present a GIS-based assessment of the transport accessibility of the material anthropogenic tourist resources (historical, architectural, religious, and cultural-institutional) in the city of Sofia, Bulgaria. The method used in the study in order to achieve the objective is measuring the walking distance with the use of the ORC tool in QGIS. A vector point layer of all public transport stops was initially added, where the points (bus/tram/trolley stops) served as a starting point for walking distance measurement. The analysis of the pedestrian and transport accessibility to the anthropogenic tourist resources in Sofia Municipality has been conducted using data from the Ministry of Tourism's National Tourism Register, the Integrated Development Plan of Sofia Municipality 2021-2027, and the National Statistical Institute. The results show that the vast majority of the studied sites are concentrated in the historical and modern center of the city, which facilitates their accessibility by public transport. However, most of the sites fall within the hourly-paid, so-called Blue and Green parking zones, which hampers the accessibility by own vehicles, thus signifying the public transport importance for easy access to the tourist sites in discussion. Of the 50 sites examined, only 5 fall in neither the Blue, nor the Green Zone. The situation is further complicated by two services that additionally reduce the number of parking spaces for both city residents and visitors: 1) official subscription and 2) residential parking. Of the 50 sites studied, less than half (23) are suitable for people with disabilities. The analysis of the existing accessibility to cultural and historical sites is the basis for alternative proposals for accessibility improvement. In conclusion, the effect of tourist sites' accessibility on the development of tourism in Sofia Municipality has been determined.

Keywords: transport accessibility, museum, gallery, National History Museum, National History Museum, St. Alexander Nevsky Patriarchal Cathedral

* * * * *

INTRODUCTION

Tourism is of structural importance for the economic development of the country at national and regional scale. According to Loulanski (2023), the effects of tourism on the economy are divided into three groups: direct, secondary, and induced. Direct effects are expressed by the revenue from consumed tourist products and services (accommodation, food, transport, and additional services), the secondary effects - by the revenue from other tourism-related economic sectors, such as construction, retail sales, financial services, agriculture and many others. The attracted effects represent revenue realized as a result of the strong influence of tourism on the structure, parameters and business characteristics of the regions (additional employment, attraction of additional foreign investments, increased real estate prices and rents, improved infrastructure and living environment, increased opportunities for family planning, career development and active consumer behavior (Loulanski, 2023). Regardless of the differences in their nature, all of these effects reveal the increasing importance of tourism for the socio-economic development of the country. The effects of tourism are even more significant for the regional development of small municipalities and settlements in Bulgaria, the economy of which is highly dependent on the development of tourism as a leading economic activity (Karadzhev et al., 2024). In 2024, Bulgaria was visited by 13,249,456 foreign citizens, which was an increase of 621,909 people compared to 2023, and by 2,361,504 compared to 2022. In 2024, most tourists were from Romania (2,332,357), followed by those from Turkey (2,286,711), Ukraine (1,278,753), Greece (1,190,898), Germany (920,368), Serbia (728,980), etc. (NSI – Visits of foreign citizens to Bulgaria by months and countries).

* Corresponding author

APPLICATION OF GIS IN SPATIAL SEGREGATION MEASUREMENT (A CASE STUDY OF PLOVDIV, BULGARIA)

**Nadezhda Ilieva, Boris Kazakov, Stefan Genchev, Aleksandra Ravnachka,
Velimira Stoyanova**

Associate Professor PhD Nadezhda Ilieva
Department of Geography, National Institute of Geophysics, Geodesy, and Geography -
Bulgarian Academy of Sciences
Acad. Georgi Bonchev Str., Bl. 3, 1113 Sofia, Bulgaria
Tel.: +3592 979 3393
E-mail: nadeto.ilieva@abv.bg

Assistant Professor PhD Boris Kazakov
Department of Geography, National Institute of Geophysics, Geodesy, and Geography -
Bulgarian Academy of Sciences
Acad. Georgi Bonchev Str., Bl. 3, 1113 Sofia, Bulgaria
Tel.: +3592 979 3363
E-mail: boriskazakov1@gmail.com

Stefan Genchev
Department of Geography, National Institute of Geophysics, Geodesy, and Geography -
Bulgarian Academy of Sciences
Acad. Georgi Bonchev Str., Bl. 3, 1113 Sofia, Bulgaria
Tel.: +3592 979 3377
E-mail: st.genchev85@abv.bg

Assistant Professor PhD Aleksandra Ravnachka
Department of Geography, National Institute of Geophysics, Geodesy, and Geography -
Bulgarian Academy of Sciences
Acad. Georgi Bonchev Str., Bl. 3, 1113 Sofia, Bulgaria
Tel.: +3592 979 3369
E-mail: a_lravnachka@abv.bg

Assistant Professor PhD Velimira Stoyanova
Department of Geography, National Institute of Geophysics, Geodesy, and Geography -
Bulgarian Academy of Sciences
Acad. Georgi Bonchev Str., Bl. 3, 1113 Sofia, Bulgaria
Tel.: +3592 979 3396
E-mail: stoyanovavelimira@gmail.com

Abstract

In Bulgaria, spatial segregation is mostly related to the Roma quarters, which occupy a significant part of the urban space and thus represent a functional barrier to urban development. The paper presents the results of measuring spatial segregation in its five dimensions proposed by Massey and Denton's conceptual scheme: evenness, exposure, concentration, centralization and clustering. Specific indicators providing information on the above-mentioned dimensions of the Roma segregation in the urban area of Plovdiv have been calculated, based on official national statistical data, satellite and orthophoto images, and GIS. The proposed methodology can be used for other cities as well, making comparison and spatial analysis possible.

Keywords: *spatial segregation, Roma ethnic group, Plovdiv*

INTRODUCTION

In geographical research, the location of objects / subjects in space is a major determinant in the formation of interaction models. It is difficult to find a clear and commonly accepted definition of *spatial segregation* in scientific literature, as there are different ways of perceiving the problem. The definitions of spatial segregation in recent studies are numerous, and only a few examples are listed below:

- According to Johnston (1983), a low degree of spatial segregation is determined by the even distribution of a certain population group among the rest of the population in a given territory. The greater the deviation from this evenness, the greater the degree of segregation.
- The definition of spatial segregation in the dictionary of human geography is very brief and the term is simply defined as the division of a certain community into subgroups in the area where that community lives (Johnston et al., 1986).
- According to Bourdieu (1989), spatial segregation is the end result of a process where members of the population feel close to each other and are in close spatial proximity.
- Spatial segregation is the spatial division of different population groups within a given geographical area (Saltman, 1991).
- Spatial segregation is a spatial expression of social inequality (Fassmann, 2002).

It can be summarized that spatial segregation is a multidimensional spatial phenomenon concerning the spatial concentration of a particular group of people by social status, ethnicity and /or race. It is a result of both voluntary decisions (internal factors), and direct or indirect coercion, discrimination, economic constraints, social exclusion, etc. (external factors), or a combination of the two groups of factors. In Bulgaria, spatial segregation is mostly related to the Roma quarters, covering a significant part of the urban space and thus - representing a functional barrier to urban development. In recent years, there has been an expansion of the existing Roma quarters in Bulgaria and emergence of new ones.

One of the main reasons for the growing interest in spatial segregation (mainly related to immigrant communities in Western European cities and the Roma ethnic community in Eastern European cities) in recent decades has been the negative effects which the population living in segregated neighborhoods suffers from. As early as 1925, Park and Burgess summarized that "physical distance generates social distance." Later, in 1959, Duncan and Lieberson demonstrated the inverse correlation between spatial segregation and the integration of ethnic groups based on their spatial location in urban areas. Many scholars (Peach 1975; Massey and Denton, 1988, etc.) argue that models of spatial segregation are indicative of either assimilation or integration processes; Haussermann (2005) defines segregation as the "projection of social structure onto space", while according to Francini (2013), the formation of "ethnic enclaves" in cities can threaten the social, cultural and spatial integrity of the city. The prevailing view in most contemporary discussions on the topic is that spatial segregation exacerbates existing social inequalities and leads to many other negative consequences related to limited participation of segregated residents in the social life of the city, low quality of education, low level of integration into the labor market, deteriorating health indicators, etc.

Massey and Denton suggest a conceptual scheme characterizing spatial segregation, which includes five dimensions: *evenness, exposure, concentration, centralization* and *clustering*. The multidimensional nature of spatial segregation requires the application of interdisciplinary methods. Research over the last few decades has begun to develop indices and mathematical models that aim to measure these five dimensions in the most objective way possible. In this study, specific indicators providing information on the above-mentioned dimensions of the Roma population segregation in the urban area of Plovdiv have been calculated using GIS.

RESEARCH METHODOLOGY

The multifaceted nature of spatial segregation requires the application of interdisciplinary methods and the use of various indicators for its analysis. The indicators used can be grouped into two categories: sociological and spatial or geographical. Geographical research focuses on the spatial aspects of segregation. Sociologists focus their efforts on developing indices that describe social relationships and the reasons why individuals occupy a particular social space. In cases where the research is focused on the analysis of the spatial aspects of segregation, spatial indicators are developed, while in cases where the research is focused on the analysis of social relationships, non-spatial indicators are developed. Non-spatial indicators consider the social environment as a constant, a predetermined organizational or spatial unit - for example - a school, a neighborhood, a census unit, a constituency, etc. The literature on the topic describes two main problems (weaknesses) that exist in the application of non-spatial indicators: the first one is related to the so-called "chessboard problem" (Morrill, 1991; White, 1983), while the second one is related to the modifiable

Research Article

The Theory of the Ghetto through the prism of the Bulgarian reality (a case study of Harman Mahala, Plovdiv)

Nadezhda Ilieva¹, Boris Kazakov¹, Desislava Varadzhakova¹

¹ National Institute of Geophysics, Geodesy and Geography – Bulgarian Academy of Sciences, Sofia, Bulgaria
Corresponding author: Boris Kazakov (boriskazakov1@gmail.com)

Abstract

Ghettoised urban structures form an essential component of the urban environment wherever they are found and their distinctive physical traits make them clearly identifiable. In the present study, various theories, concepts and viewpoints – mostly of European and American scientists – have been examined and the theoretical aspects of the term "ghetto" have been outlined through the prism of the Bulgarian reality – based on the example of the Roma neighbourhood of Harman Mahala in the City of Plovdiv. The main research question to which an answer is sought is: are the Roma neighbourhoods in Bulgaria essentially ghettos and how many of the characteristics of the ghetto do they exhibit? The study is based on a survey amongst 500 inhabitants of Harman Mahala or 27.8% of its population, as well as on in-depth, semi-structured interviews, with representatives of local authorities, educational and health mediators from the studied Roma neighbourhood school principals, teachers and students. Through the application of the so-called checklist method, it was established that the studied Roma neighbourhood meets all but one condition (Involuntary segregation), in order to be referred to as a "ghetto" and, therefore, it can only be regarded as a "ghettoised urban structure".

Key words: ghetto, ghettoised urban structure, Roma, segregation, Bulgaria



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Introduction

The transformation in the socio-economic and political sphere that took place at the beginning of the 1990s and the invasion of the neoliberal model of development, in combination with the retreat of the "welfare state", led to an increase in social inequalities. With regard to the growing polarisation, various spatial patterns can be observed amongst the settlements. In Bulgaria, mostly in the cities, ghettoised structures have been formed, which, to a certain point, resemble the characteristics of the "ghetto", related to the spatial concentration of Roma population. A distinctive feature of those ghettoised structures are the interconnected problems accumulated over the years, of various nature: economic, social, urban planning, environmental.

The spatial dimensions of social processes and the reasons for their manifestation are the subject of research by a number of scientists. Studies in the American – (Massey and Denton (1988, 1993), Portes & Zhou (1993), Peach (1999, 2006), Reardon & O'Sullivan (2004), Eastern European – Szelenyi (1983),

PROBLEMS OF BORDER REGIONS IN BULGARIA

CHAVDAR MLADENOV – BORIS KAZAKOV

Introduction

The paper reveals some socio-economic and demographic issues of the municipalities that form a belt along the national borders of Bulgaria. For a long period of time, those areas have been in an unfavourable geographic position compared to the areas inside the country, because of wars and following border changes, and during the period between 1944 and 1989, those areas continued to suffer from isolation due to political reasons.

It should be noted that municipalities along the Black Sea are not considered as border regions. The paper concentrates on the areas along the southern, western and the northern national borders only.

In the years of the so called transition to the market economy, the border regions of Bulgaria (especially those along the southern and western border) became accessible and are no longer restricted areas. However, the impact of long-term isolation is apparently not so easy to overcome. Despite the new border check points that have recently been opened, Bulgarian borders still seem to be a separating line rather than contact lines of the national territory with neighbouring countries. To some extent, an explanation of that situation is the terrain itself – with very few exceptions, all the municipalities along the southern and western border are situated in mountainous and hilly areas, which poses many problems for transportation and economic development. On the other hand, an additional effect seems to have the degree of development of border regions of the neighbouring countries' themselves.

The modern national borders of Bulgaria were outlined back in 1940. Due to geopolitical reasons, border regions used to be treated as buffer zones used for military purposes, and therefore those areas were neglected and the investments limited. After the WW 2, because of the block separation and confrontation, border areas developed slower than the rest of the country. As a result, border regions became a less developed periphery of an unfavourable geographic location. On the other hand, the western and southern borders of Bulgaria are situated in mountainous regions, which further increased their isolation.

In this paper, the municipalities along the Black sea coast are not regarded as border regions (except for the northernmost and the southernmost). Only regions along the south-eastern, the southern, the western and the northern border have

Demographical development of Bulgaria during the transitional period

L'évolution démographique de la Bulgarie au cours de la période de transition

Chavdar MLADENOV

PhD - senior research fellow (assoc. prof.)
Deputy Director of the Institute of Geography
Bulgarian Academy of Sciences
chmladenov@abv.bg

Emil DIMITROV

PhD - senior research fellow (assoc. prof.)
Institute of Geography
Bulgarian Academy of Sciences

Boris KAZAKOV

Research fellow
Institute of Geography
Bulgarian Academy of Sciences
boriskazakov@dir.bg

Since 1989, Bulgaria's population faces a decrease, originally generated by a large number of ethnic Turks who emigrated to Turkey. In the period between 1988 and 2006, the decline reached approximately 1.2 million people. An estimated 71 % of this tendency is due to emigration process.

The trends in the basic demographical parameters (birth rate, death rate and natural decrease) are quite negative. According to the official data, the negative balance of migration is over 800 000 people for the period 1989-2006. During the 1990s, as a result of the emigration of many young people and because of the economic crisis (especially in the years 1997 and 1998), birth rates fell down to reach levels of 7,7‰ (1997) to 7,9‰ (1998). But it is the death rate (14,7‰ in 2006), and not the birth rate, that shows significant difference compared to most EU countries. Infant mortality rate, although lowering its value, is still too high. Another difference is detected in measuring the life expectancy, which is significantly low.

The demographic crisis is not only seen on a national scale, but on a regional level as well. With few exceptions, it has spread over each of the municipalities in the country, though with varying intensity and depth.

I - General view of the demographical picture on a national level. The demographical crisis

The present demographical situation in Bulgaria has the characteristics of a demographical crisis determined by many factors. As a result, extreme levels of the parameters which define the demographical situation have been reached, and the process of normal reproduction of the population has been permanently affected. On both regional and national level, there is a constant decrease of the population, very low birth rates, increasing death rates, deteriorated demographical structures, etc. According to the last census data (2001) the population of Bulgaria reached 7 929 000 people and the average annual decrease between the last two censuses (1992-2001) was 0,9%. In 2001 Bulgaria took the 20th place in a list of 46 European countries according to its population. The total inhabitants number fell by 1,2 million, of which 71% were due to emigration losses and the rest to natural decrease (fig. 1).

The first signs of demographical crisis were detected in the mid 1980s, when the birth rate fell lower than the level of the so called *simple reproduction* (14‰ at an average life expectancy of 71 years).

The depopulation process reveals the demographical crisis of the country. On a national level the natural decrease of the population is detected in 1990. The phenomenon is additionally amplified by the negative migration ratio. Under the totalitarian period (1944-1989), when emigration

Depuis 1989, la population bulgare connaît une crise qui trouve son origine dans le départ d'une grande partie des Turcs ethniques vers la Turquie. Entre 1988 et 2006, l'effondrement démographique a atteint 1,2 millions de personnes. Près de 71% de ce mouvement est dû à l'émigration.

Les indicateurs démographiques de base (taux de natalité et de mortalité, accroissement naturel) sont négatifs. D'après les données officielles, la balance migratoire pour la période 1989-2006 est négative, à hauteur de 800 000 personnes. Au cours des années 1990, l'émigration d'un grand nombre de jeunes et la crise économique (surtout en 1997 et 1998) ont conduit à une chute des taux de natalité (7,7‰ en 1997 et 7,9‰ en 1998). Mais c'est le taux de mortalité (14,7‰ en 2006) et non la natalité qui démarque la Bulgarie de la plupart des autres pays de l'UE. Le taux de mortalité infantile, bien qu'en diminution, est toujours très élevé. Une autre différence réside dans l'espérance de vie, elle aussi significativement basse.

La crise démographique n'est pas seulement abordée à l'échelle nationale, mais également au niveau régional. Cette crise s'est répandue, à quelques exceptions près, dans toutes les communes du pays, avec une intensité et une profondeur variables.

was practically forbidden, the population evolution was determined almost entirely by its natural increase. At the beginning of the transitional period a significant emigration

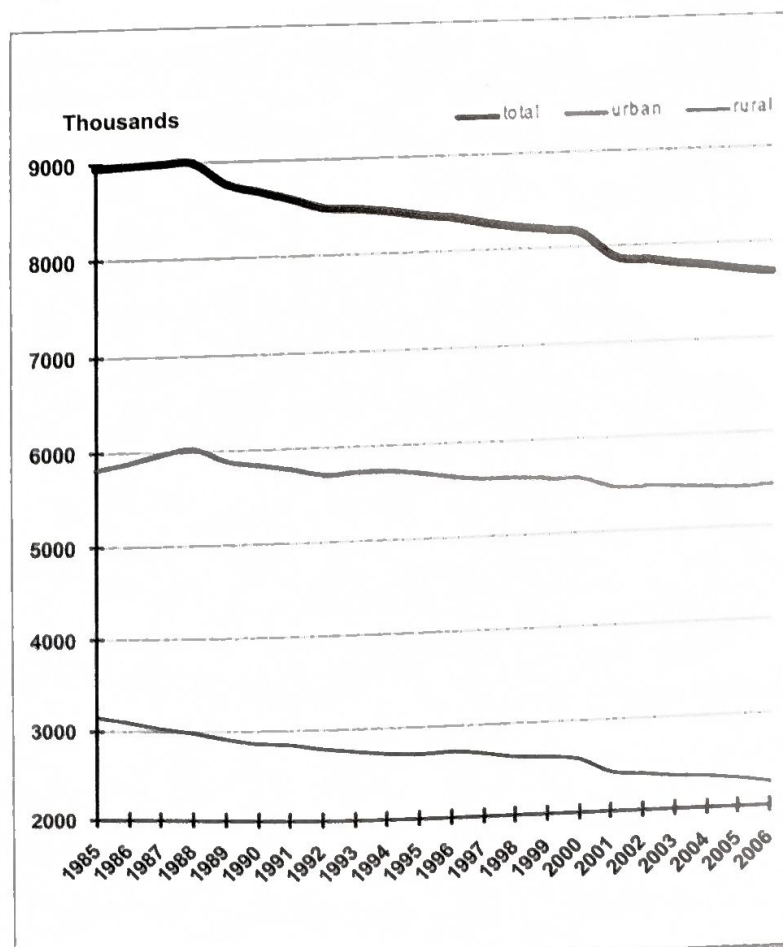


Fig. 1 - Bulgarian population at the end of the year (1985 - 2006)

ГОДИШНИК НА СОФИЙСКИЯ УНИВЕРСИТЕТ „СВ. КЛИМЕНТ ОХРИДСКИ“
ГЕОЛОГО-ГЕОГРАФСКИ ФАКУЛТЕТ
Книга 2 – ГЕОГРАФИЯ
Том 99

ANNUAIRE DE L'UNIVERSITE DE SOFIA "ST. KLIMENT OHRIDSKI"
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ДИНАМИКА НА СЕЛСКОТО НАСЕЛЕНИЕ В СЛИВЕНСКА И ЯМБОЛСКА ОБЛАСТ ЗА ПЕРИОДА 1992–2001 г.

БОРИС КАЗАКОВ

Катедра по социално-икономическа география
e-mail: boriskazakov@yahoo.com

Борис Казаков. ДИНАМИКА СЕЛСКОГО НАСЕЛЕНИЯ СЛИВЕНСКОЙ И ЯМБОЛСКОЙ ОБЛАСТИ В ПЕРИОДЕ 1992–2001

Публикация является частью более широкого геодемографического исследования сельского населения Юго-Восточной Болгарии. В данном случае показано изменение численности сельского населения в областях Сливен и Ямбол в периоде 1992–2001 г.

Ключевые слова: относительное изменение, депопуляция, группирование.

Boris Kazakov. DYNAMICS OF THE RURAL POPULATION IN SLIVEN AND YAMBOL DISTRICT IN THE PERIOD BETWEEN 1992 AND 2001

The article is a part of a larger geodemographic research of the rural population in South East Bulgaria. In this particular case it reveals the changes in number of rural population in the western part of the South-East planning region, during the period between the last two censuses in the country.

Key words: relative changes, depopulation, grouping.

Настоящата статия се явява продължение на изследването в териториален план на промените в селското население в ЮИР за периода между последните две преброявания, което е част от дисертационен труд на автора на тема „Селските селища в ЮИ България – демографска ситуация и класификация“. Динамиката на селското население за периода

1992–2001 г. в източната част от ЮИР за планиране – Бургаска област, е разгледана в статията „Териториално разпределение и динамика на селското население в Бургаска област за периода 1992–2001 г.“, публикувана в том 98 на ГСУ. Настоящата публикация има за цел да допълни изследването на промените в броя на селските жители в ЮИР за планиране, настъпили в годините на преход към пазарно стопанство.

СХОДСТВА И РАЗЛИЧИЯ МЕЖДУ ИЗТОЧНАТА И ЗАПАДНАТА ЧАСТ НА ЮИР

Сливенска и Ямболска област формират западната половина на ЮИР за планиране. Тяхната обща площ е съпоставима с площта на Бургаска област, независимо че взети поотделно те отстъпват в значителна степен на последната. В този смисъл ЮИР може условно да се раздели на източна и западна част, които са приблизително еднакви по територия и демографски потенциал. Така например към 1.03.2001 г. територията на Бургаска област е 7747 km², а тази на Сливенска и Ямболска област – около 6900 km² или с около 10–11 % по-малка. Сливенска и Ямболска област са приблизително еднакви по територия. Що се отнася до населението на трите области, то неговия общ брой в Сливенска и Ямболска област е с близо 50 000 д. по малък отколкото в Бургаска, но по отношение на селското население разликите са далеч по-малки, като в този случай лек превес имат Сливенска и Ямболска област. Към 1.03.2001 г. броя на селските жители в тях е около 127 хил. д. срещу малко повече от 124 хил. д. в Бургаска област, или относителната разликата е едва 2,3 %. Тази съпоставимост в броя на селското население в западната и източната част на разглеждания регион сама по себе си не е толкова важна, тъй като различията, които се наблюдават в качествено отношение, имат по-голямо значение при установяването на основните тенденции и промените в броя на селското население в изследваната територия.

Както и в предшестващата статия, посветена на същия проблем, основен източник на статистически данни, който е използван при изчисляване на относителното изменение в броя на населението през разглеждания период, са резултатите от преброяването на населението и жилищния фонд на 4.12.1992 и 1.03.2001 г. Като допълнителни източници са използвани ежегодните издания на НСИ „Население и демографски процеси“, както и някои други периодични издания.

Броят на селските селища общо за двете области и по общини не включва населените места, които са без постоянно население при последните две преброявания, макар и да не са заличени от Списъка на населените места. В случая става въпрос за селата Радинка и Ниска поляна от община Котел и с. Козин дол, община Сливен. По този начин броят на селата в тези две общини е съответно 24 (а не 26) и 46 (а не 47). Всички останали села са включени в общия брой на селските селища по общини и области, включително и онези, които са с

Несомненно в ближайшие годы развитие экономики ОАЭ будет тесно связано с притоком ПИИ. То значение, которое власти страны придают ПИИ вполне обосновано и вполне закономерно. Поддержка иностранных инвесторов и мероприятия, способствующие привлечению ПИИ, включены в государственные программы развития ОАЭ вплоть до 2021 г.

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INDUSTRIAL DEVELOPMENT OF THE BULGARIAN DANUBIAN AREAS

Ch. Mladenov, B. Kazakov

Department of Geography. Bulgarian Academy of Sciences
National Institute of Geophysics, Geodesy and Geography

Introduction. In historical aspect the industrial development of the Bulgarian Danubian areas is connected to the existing settlements network. This settlements network is, to a great extent, a reflection of the physical-geographic features of the Bulgarian part of the Danube River bank. The common Bulgarian-Romanian section of the Danube River has a total length of 470 km. There are 7 districts in the country (NUTS III regions), which border the Danube River, covering an area of 22.2 thousand sq.km (approx. 22% of the national territory). According to the 2011 census, the population in those seven Danubian districts is 1,319 million people (17,9% of the total population of the country). A total of 23 municipalities within those 7 districts have access to the Danube River and are located along the river banks. Their total area is 8.5 thousand sq.km (7,7% of the national territory) and they are home to some half a million

residents (534 thousand people, constituting 7,3% of the total population of Bulgaria).

Industrial development in the 1945–1989 period. As of the end of WW II the industry in the discussed area had a manufacture type of profile, while the urban settlements along the Danube River performed merely an administrative-management and trade-redistribution functions. The only industries that were developed were the food-processing and the textile industry. The city of Ruse was the most industrially developed urban settlement in the discussed area with its metal-processing, textile, oil-refinery etc. industries.

The actual industrialization of the Bulgarian Danubian areas only started after WW II. The Danube River was used as a transport axis along which water-demanding and import-oriented industries started to develop, within the frame of COMICON, as well as some river-port activities connected to the interior economy. The peak of the utilization of the Danube River transport potential was reached during the period 1950-1970. As of the beginning of the 1970s the river transport significantly decreased as the coastal (cabotage) navigation ceased and shortly after that – the passenger navigation as well. The main connections at that time were with the USSR from which Bulgaria imported coal, ores, metals, oil and oil products, as well as wood (timber) – within the bilateral agreement with Komi Republic. The main export, on the other hand, consisted of processed foods and textile. Based on imported raw materials, industries such as chemical industry, wood-processing and food-processing were developed in the Bulgarian Danubian cities of Ruse, Vidin, Silistra, Lom. Unlike the Romanian industrial plants, the enterprises on the Bulgarian side of the river, because of the physical-geographical features of the Bulgarian bank, did not cause problems with cross-border pollution.

As mentioned above, the industrialization of the Bulgarian Danubian cities and towns (urban settlements) was realized on the basis of water-demanding industrial branches – the Nuclear Power Plant in Kozloduy, the chemical plants in Vidin and Svishtov (chemical fibers), the paper-producing plants in Miziya and Silistra.

Apart of the industries directly connected to the river itself, other industries were also developed, such as machine-building (Vidin, Lom, Ruse, Oryahovo, Marten), metal-processing (Ruse, Tutrakan, Silistra etc.), production of electrical devices (Nikopol, Belene), ship-building (Lom), small-vessels building (Tutrakan) as well as the textile and apparel industry (Vidin, Lom, Oryahovo, Kozloduy, Silistra, Tutrakan), food-processing industry (Vidin, Lom, Svishtov, Gulyantsi, Ruse, Slivo

Mapping the Future Landscape: Ghettoization Patterns of Roma Population in Northwestern Bulgaria



Nadezhda Ilieva, Kaloyan Tsvetkov, Boris Kazakov, and Dimitar Enikiev

Abstract In the wake of Bulgaria's post-communist era, the chapter delves into the complexities of structural changes, unveiling new socio-spatial polarization models. A notable trend emerges as the Roma population increasingly relocates to urban areas often "hidden" for the authorities, establishing quarters within existing neighborhoods or forming entirely new ones. Focused on towns and cities in Northwestern Bulgaria, the study utilizes orthophoto images and QGIS tools to identify and map Roma neighborhoods and track their dynamics in the last decades. By using urban and socio-spatial indicators like ethnic homogeneity, location, ethnic surroundings, demographic trends, and formation time, the research categorizes these structures. This comprehensive analysis provides insights into the multifaceted nature of Roma neighborhoods and aligns with the overarching theme of future-ready geography. By dynamically visualizing the evolving landscape, the study contributes to preparing geographical science and education for future challenges, emphasizing the adaptability of geographical methodologies in understanding, and responding to societal changes in Northwestern Bulgaria. The chapter underscores the importance of examining broader social processes and historical patterns in understanding how policies impact Roma populations and contribute to marginalization. The findings emphasize the need for new policies to address and mitigate ongoing segregation impacting Bulgaria's Roma population.

Keywords Ghettoization · Urban Roma · Spatial polarization · Social segregation

N. Ilieva · B. Kazakov

National Institute of Geophysics, Geodesy and Geography, Bulgarian Academy of Sciences,
Akad. Georgi Bonchev 3 Str., Sofia 1113, Bulgaria
e-mail: nadeto.ilieva@abv.bg

K. Tsvetkov (✉)

Faculty of Geology and Geography, Sofia University St. Kliment Ohridski, Tsar Osvoboditel 15
Blvd., Sofia 1000, Bulgaria
e-mail: ktsvetkov@gea.uni-sofia.bg

D. Enikiev

The University of Library Studies and Information Technologies, 7-Mi Kilometar, Boulevard
"Tsarigradsko Shose" 119, 1784 Sofia, Bulgaria

METEOROLOGICAL DETERMINANTS OF COVID-19 DISEASE: A LITERATURE REVIEW

**Z. Mateeva^{1*}, E. Batchvarova¹, Z. Spasova², I. Ivanov³,
B. Kazakov⁴, S. Matev³, A. Simidchiev⁵, A. Kitev⁴**

¹*Climate Atmosphere and Water Research Institute at Bulgarian Academy of Sciences*

²*National Center for Public Health and Analyses at the Ministry of Health*

³*Sofia State University, Faculty of Geology and Geography*

⁴*National Institute of Geophysics, Geodesy and Geography at Bulgarian Academy of Sciences*

⁵*The Parliament of Republic of Bulgaria*

Abstract. The purpose of this investigation is to review the currently known studies on the meteorological preconditions of COVID-19, and analyze and synthesize the results from the existing research, with a view to further substantiating a methodological approach to assessing the daily meteorological factors of viral particles detention in the open air.

In pursuit of this goal, the present study attempts to derive and differentiate some findings of the recent research from all over the world about weather and climate factors of SARS-COV-2 dispersion in the atmosphere. The results are systematized according to the main climatic elements – air temperature, air humidity, solar radiation and wind speed. Some climatically sensitive social-demographic factors (such as gender, age structure, general morbidity and predisposition to chronic diseases, household conditions, personal habits, educational level and so on) that determine the resistance to COVID-19, are also commented in this study. Last but not least, the issue of scaling up and remote approaches to the study of the climate and COVID-19 relationship was also addressed.

Keywords: COVID-19; air temperature and humidity; solar radiation; wind speed; meteorological factors; social and demographic factors

Introduction

It is known that a number of environmental conditions, incl. climatic ones, are key to the emergence, life and behavior of microorganisms. They are directly related to the spread of diseases, transmitted in vector, water, air, nutritional and other ways. The climate impact on these processes is increasing even more in its changes, in which biotics and a-biotic mechanisms arise, some of which have already been studied and about some we will still learn. Climate change provokes the activity of the thermo-adaptation and immune system of macro-organisms, as well as these in

The Residential Quality in the “Hidden” Roma Neighbourhoods: A Case Study of Harman Mahala, Plovdiv

Nadezhda Ilieva and Boris Kazakov

Abstract The Roma represent the second-largest ethnic minority in Bulgaria and the most dynamic population group in terms of population growth. Typically, they live in segregated neighbourhoods in cities or smaller settlements. The expansion of these Roma neighbourhoods both horizontally and vertically (in height) is difficult to trace, considering that the vast majority of the buildings are illegal and in most cases not depicted on cadastral maps and urban plans, or—due to the rapid illegal construction—the existing plans do not represent the real situation. These neighbourhoods remain invisible to the general public, as they are excluded from their minds as possible places of visiting, let alone habitation, and in their essence represent a type of unused spaces. This paper presents the result of a study aiming to make an assessment of the residential quality in the Roma neighbourhood of Harman Mahala, located in the second-largest Bulgarian city—Plovdiv. The residential quality has been assessed in both objective and subjective aspects, based on urban planning documents and legislation, field survey among the residents, and data collected with the use of an unmanned aerial vehicle (UAV). Spatial data has been combined with field studies, quantitative and qualitative methods of gathering information, which complement both the objective and subjective assessments of the residential environment (how the residents of the neighbourhood perceive the city, their neighbourhood, and their homes). The study proposes a methodology for analyzing the internal structure of Roma neighbourhoods by using data obtained from aerial photography, which compensates for the lack of information on the current state of the housing stock. The terrain has been captured from a height of 90–120 m using precise sensing instruments, recording images in the visible spectrum. Through the subsequent processing of the obtained image data and through the application of appropriate methods and algorithms, detailed maps of the actual status of the surveyed buildings—outline, height, density, surface area, etc.—have been created, which also depict the changes that took place over time. Basic spatial indicators, such as building density coefficient and green space percentage, as well as their dynamics over the period 2016–2019 have been calculated. The results of the study indicate

N. Ilieva (✉) · B. Kazakov
National Institute of Geophysics, Geodesy and Geography, Bulgarian Academy of Sciences,
Sofia, Bulgaria
e-mail: nadeto.ilieva@abv.bg

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335

that while the objective assessment of the studied neighbourhood is relatively low, the subjective assessment of the residents is actually high, due to a strong sense of place and sense of security which the segregated community provides.

Keywords Roma neighbourhoods • Objective and subjective assessment • Residential quality • Harman mahala • Plovdiv

1 Introduction

One of the major challenges which modern European cities will face in the coming decades is the increasing social inequalities and spatial polarization, which are directly related to the integration processes (Cities of tomorrow etc. 2011).

Over the last decades, Bulgaria has seen a clear trend of growing number of Roma population living in cities (Ilieva et al. 2020). In most cases, the Roma inhabit existing Roma neighbourhoods or newly emerged ones. The intensive change of the Roma neighbourhoods both in horizontal and vertical (in height) aspects are difficult to trace, considering that most buildings are illegal and in most cases not depicted on cadastral maps and urban plans, or—due to the rapid expansion of illegal construction—the existing cadastral plans do not represent the real situation. These Roma neighbourhoods remain hidden to the ethnic majority, as they are excluded as possible places of habitation and represent a type of unused spaces, as far as the ethnic majority of Bulgarians is concerned.

The creation of sustainable neighbourhoods not only takes into account the quality of the environment but also increasingly focuses on creating stable, integrated communities where people live and work (Dempsey et al. 2011). The way these communities influence the space they inhabit largely determines the residents' perception of the living environment and the way it is assessed in terms of safety, health, aesthetics, comfort, and general welfare.

According to Bonnefoy (2007) “residential or housing quality refers to the physical condition of a person's home as well as the quality of the social and physical environment in which the home is located. Aspects of housing quality include air quality, home safety, space per individual, etc.” Wellner et al. (2015) point out that the dimensions of residential quality are “differentiated into built features (location, quality of building, etc.), economic (rent level, tenant mix, etc.), social (neighbourhood atmosphere, security, fluctuation, etc.), ecological and health-related (noise, pollution, etc.) aspects, thus contributing to the conceptualization of residential quality.”

The topic of evaluating the quality of the residential environment is discussed by Kain and Quigley (1970), while Ha and Weber (1994) developed a residential quality index and tested its relationship to residential satisfaction. The latter authors identified seven dimensions of residential quality by using the principal component factor analysis—environmental safety, planning/landscaping, housing policy, sociocultural environment, public services, housing economics, and physical quality of housing. Later these indexes were applied by Kesalkheh and Dadashpoor (2012).

Dynamics of the Internal Structure and Habitation Conditions of the Ghettoized Urban Structure of Harman Mahala Quarter—Plovdiv, Bulgaria (Through Combined Application of Remote Sensing and Field Research Methods)

Nadezhda Ilieva, Krasimir Asenov, Boris Kazakov and Todor Lubenov

Abstract Post-communist societies are facing numerous challenges leading to complex structural changes. New models of socio-spatial polarization of the cities have emerged. In recent decades, Bulgaria has seen a clear trend of growing number of Roma people residing in cities. In the majority of cases, the Roma settle either in already existing Roma quarters, or the new settlers form completely new Roma quarters. The swift explanation of the Roma quarters in both horizontal (spatially) and vertical (height) aspect, makes it difficult to trace the changes. Considering that most buildings are illegal, they are not present on cadastral maps and urban spatial plans. The serious difficulties which Bulgaria has been encountering regarding the integration of its Roma population, together with the increased ghettoization of the Roma living in cities and the eventual threats of social cataclysms, determine the necessity of carrying out this study. Its main objective is to analyze the spatial development trends and the internal structure of the Roma quarters, based on the case study of the Roma-inhabited Harman Mahala quarter in the city of Plovdiv, applying remote sensing and field research methods.

Keywords Spatial segregation · Ghettoized urban structure · Harman Mahala quarter—Plovdiv · Roma population

N. Ilieva (✉) · B. Kazakov · T. Lubenov
National Institute of Geophysics, Geodesy and Geography, Bulgarian Academy of Sciences,
Sofia, Bulgaria
e-mail: nadeto.ilieva@abv.bg

B. Kazakov
e-mail: boriskazakov1@gmail.com

T. Lubenov
e-mail: tlubenov@gmail.com

K. Asenov
Plovdiv Municipality, Plovdiv, Bulgaria
e-mail: krasimirasen@gmail.com

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Chapter 17

Changes in the Ethnic and Demographic Profile of the Population in Eastern Stara Planina Region

Nadezhda Ilieva and Boris Kazakov

Abstract This chapter focuses on the ethnic groups of the population in the Eastern Stara Planina region, the changes in their spatial distribution and population numbers during the period between 1965 and 2001. This region is one of the regions in Bulgaria with a significant concentration of ethnic Turks and a Roma population, which greatly affects the demographic, social, and economic profile of the region. The region is also important from the NATURA 2000 point of view because vast areas in Eastern Stara Planina Mountain are protected areas according to (in most cases) both NATURA 2000 directives. The specific features of the ethnic and cultural development of ethnic groups influence their reproduction and migration behavior in various ways. The dynamics and spatial distribution of the ethnic Bulgarians are also described. The main factors for the changes in population numbers are outlined. The chosen period is set between the three most representative, in terms of ethnicity, censuses in Bulgaria, that is, 1965, 1992, and 2001, which define important subperiods of changes in the ethnic structure of the population in Bulgaria in past decades.

Keywords Ethnicity • Ethnic groups • Ethnic composition of the population • Demographic profile

17.1 General Notes

The 1965 census has been chosen as the beginning of the period to be discussed because that was the last census in which ethnicity was impartially observed. During the 1975 census, such data were gathered, but were immediately classified, whereas

N. Ilieva (✉) • B. Kazakov
National Institute of Geophysics, Geodesy and Geography, Bulgarian Academy of Sciences,
"Acad. G. Bonchev" street, bl. 3, 1113 Sofia, Bulgaria
e-mail: nadeto.ilieva@abv.bg; boriskazakov@dir.bg

COMPARATIVE ANALYSIS OF SMALL TOWNS IN BULGARIA AND HUNGARY – THEORETICAL FRAMEWORK

*Melinda Hajdú-Smahó¹, Tamás Hardi¹,
Boglárka Horváthné Barsi¹, Ádám Páthy², Nadezhda Ilieva³,
Desislava Varadzhakova³, Dessislava Poleganova³,
Boris Kazakov³, Marina Raykova³, Aleksanda Ravnachka³*

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Definitions of small towns vary across European Union countries. Typically, the criteria for defining them as such are related to population size, density, and functions. Current paper aims to elaborate a theoretical framework for comparative analysis of small towns in Bulgaria and Hungary by presenting a critical review of theoretical debate on the definition and the nature of small towns in the European context; a thorough examination of the theoretical debate related to the concept and distinct features of small towns in Hungary; and a comprehensive analysis of the scholarly discourse that underpins the notions and unique characteristics of small towns in Bulgaria.

Keywords: settlement network, comparative analysis, theoretical framework, Bulgaria, Hungary, small towns

¹ HUN-REN Centre for Economic and Regional Studies Institute for Regional Studies West Hungarian Research Department; Albert Kázmér Faculty of Agricultural and Food Sciences of Széchenyi István University in Mosonmagyaróvár Department of Regional Science and Rural Development, smaho.melinda@krtk.hun-ren.hu, hardi.tamas@krtk.hu, barsi.boglarka@krtk.hu

² HUN-REN Centre for Economic and Regional Studies Institute for Regional Studies West Hungarian Research Department, Széchenyi István University Apáczai Csere János Faculty of Humanities, Education and Social Sciences, Department of Social Studies and Sociology, pathy.adam@krtk.hu

³ Bulgarian Academy of Sciences, National Institute of Geophysics, Geodesy and Geography, Department of Geography, nadeto.ilieva@abv.bg, dvaradzhakova@gmail.com, dpoleganova@yahoo.com, boriskazakov1@gmail.com, marinanikova@yahoo.com, a_ravnachka@abv.bg

СРАВНИТЕЛЕН АНАЛИЗ НА МАЛКИТЕ ГРАДОВЕ В БЪЛГАРИЯ И УНГАРИЯ – ТЕОРЕТИЧНА РАМКА

*Мелинда Хайду-Шмахо¹, Тамаш Харди¹, Богларка Хорватни Барши¹,
Адам Пати², Надежда Илиева³, Десислава Вараджаскова³,
Десислава Полеганова³, Борис Казаков³, Марина Райкова³,
Александра Равначка³*

Дефинициите за малки градове са различни в отделните страни от Европейския съюз, в които обикновено се прилагат морфологичният и функционалният подход с използване на определени критерии – единият се основава на броя на населението, а другият – на мястото на тези селища в градската йерархия според функциите им. Често тези два подхода се прилагат заедно, въпреки че повечето учени са на мнение, че малките градове се описват най-добре във функционален смисъл. Изследователският проект (TOWN), изпълнен по програмата ESPON на Европейския съюз, препоръчва прилагането на интегриран подход, съчетаващ морфологични и функционални критерии, за по-добро описание и концептуална яснота при разграничаването на малки и средни градове. Настоящото изследване има за цел да разработи теоретична рамка за сравнителен анализ на малките градове в България и Унгария, като представи критичен преглед на теоретичния дебат относно дефиницията и същността на малките градове в европейски контекст; задълбочено разглеждане на теоретичния дебат, свързан с концепцията и отличителните характеристики на малките градове в Унгария; и цялостен анализ на научния дискурс, който е в основата на представите и специфичните характеристики на малките градове в България. Понастоящем малките градове в Унгария се определят въз основа на демографски, административни и функционални критерии. Обикновено те обхващат население между 2000 и 30 000 души, имат статут на град и предлагат градски начин на живот, но имат само местно влияние. Днес те се борят с многобройни проблеми поради демографския спад, застаряването на населението и миграцията на младите хора към по-големите градски центрове. Голяма част от тях разчитат на културното и природното си наследство за устойчиво развитие и разгръщане на туристическия си потенциал. След 1990 г. интензивните процеси на обезлюдяване и пространствена демографска и икономическа поляризация в България променят обхвата, структурата и стабилността не само на селата, но и на градската мрежа, и разликите между големите и малките градове нарастват значително. Малките градове имат решаващо значение в периферните и селските региони и служат като микрорегионални центрове, като играят ключова роля в регионалното и градското развитие. Въпреки че малките градове са от съществено значение за постигане на устойчиво и балансирано пространствено развитие, те много рядко са обект на цялостно географско изследване в България.

Ключови думи: селищна мрежа, сравнителен анализ, теоретична рамка, България, Унгария, малки градове

School Segregation of the Roma Ethnic Group: A Case Study of Harman Mahala Roma Quarter, Plovdiv

Aleksandra Ravnachka, Boris Kazakov, Nadezhda Ilieva
and Krasimir Asenov

Abstract School segregation among minority groups represents a serious social and educational problem in a number of countries across Europe, including Bulgaria. While in some countries this problem arises on the basis of social stratification or concerns both local minority communities and immigrant communities, in Bulgaria—as in other Eastern and Central European countries—school segregation is mainly associated with the Roma ethnic group. Education of Roma children is almost entirely provided in segregated schools located in or near the Roma quarters, regardless of the efforts by the governments to implement measures for overcoming the problem. The paper analyzes the specifics and the trends of the Roma school segregation in Bulgaria, based on the example of the Roma children from Harman Mahala quarter in the city of Plovdiv.

Keywords Segregation · Educational integration · Roma ethnic group · Harman Mahala

Introduction

The Roma are one of the most stigmatized, marginalized, and discriminated ethnic groups in Bulgaria, the Balkans, and across Europe (Makaveeva et al. 2013). In recent decades, the issues related to segregation and integration of ethnic minorities have been of growing importance for a number of countries across Europe, including

A. Ravnachka (✉) · B. Kazakov · N. Ilieva
National Institute of Geophysics, Geodesy and Geography, Bulgarian Academy of Sciences,
Sofia, Bulgaria
e-mail: a_ravnachka@gmail.com

B. Kazakov
e-mail: boriskazakov1@gmail.com

N. Ilieva
e-mail: nadeto.ilieva@abv.bg

K. Asenov
Plovdiv Municipality, Plovdiv, Bulgaria
e-mail: krasimirasen@gmail.com

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SUBURBANIZATION PROCESSES IN SECOND TIER CITIES
IN BULGARIA – DEMOGRAPHIC, SOCIO-ECONOMIC,
AND SPATIAL TRANSFORMATION OF THE AGGLOMERATION
AREAS (A CASE STUDY OF PLOVDIV AND BURGAS)

*Nadezhda Ilieva¹, Tamás Hardi², Stefan Genchev¹,
Aleksandra Ravnachka¹, Dessislava Poleganova¹,
Szilárd Rácz², Boris Kazakov¹*

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The main goal of this study is to explore the suburbanization process by analyzing the population dynamics, socio-economic and spatial transformation in the agglomeration areas of the second tier cities (according to ESPON's classification) of Plovdiv and Burgas in Bulgaria. For the scope of the present study, three essential tiers of analysis have been defined: demographic transformation, socio-economic transformation, and changes in land cover. Depending on the population change trends (positive and negative) and the impact of the two main components (natural and migratory growth), a settlement typology has been done using the methodology of Webb (1963) for the 2001–2011 and the 2011–2021 periods. Subsequently, an analysis of particular social and economic indicators has been carried out in order to track the changes and highlight the differences between the urban transformation of Burgas and Plovdiv respectively. The most valuable sources for spatial transformation analysis are the geospatial databases obtained by decoding satellite images enabling the study of land cover types and their change. Currently, various information sources are available, but as far as European countries are concerned, the database created and coordinated by the European Commission under the Copernicus programme is considered the most applicable (the layers containing information on the land imperviousness), as well as the JICA data. The agglomerations of Burgas and Plovdiv differ in terms of the type and intensity of changes in land cover in the 2006–2018 period. During the entire period, the agglomeration of Plovdiv

¹ Department of Geography, National Institute of Geophysics, Geodesy and Geography – Bulgarian Academy of Sciences (NIGGG-BAS), Sofia, Bulgaria; nadeto.ilieva@abv.bg; st.genchev85@abv.bg; a_l_ravnachka@abv.bg; dpoleganova@yahoo.com; boriskazakov1@gmail.com

² Centre for Economic and Regional Studies. Institute for Regional Studies. West Hungarian Research Institute (WHRI), Hungarian Academy of Sciences; Széchenyi István University Faculty of Agriculture and Food Sciences - Hungary, Győr; hardi.tamas@rtk.hu; szracz@rkk.hu

exhibits a definite prevalence of the new land cover in its periphery, at the expense of the agglomeration core, in contrast to the agglomeration of Burgas. In the case of Plovdiv, the changes in its agglomeration periphery occur at least twice as fast as those in the agglomeration core. In the agglomeration of Burgas, on the other hand, the relative share of new types of land cover prevails in the periphery during certain time periods (2006–2009 and 2012–2015), at the expense of the size of that same class of land cover in the agglomeration core.

Keywords: agglomeration area, core-periphery, suburbanization, imperviousness, land cover

СУБУРБАНИЗАЦИОННИ ПРОЦЕСИ В ГРАДОВЕТЕ ОТ ВТОРО НИВО В БЪЛГАРИЯ – ДЕМОГРАФСКА, СОЦИАЛНО-ИКОНОМИЧЕСКА И ПРОСТРАНСТВЕНА ТРАНСФОРМАЦИЯ НА АГЛОМЕРАЦИОННИТЕ АРЕАЛИ (НА ПРИМЕРА НА ПЛОВДИВ И БУРГАС)

*Надежда Илиева, Тамаш Харди, Стефан Генчев, Александра Равначка,
Десислава Полеганова, Силард Рач, Борис Казаков*

Основната цел на изследването е анализ на процеса на субурбанизация през призмата на динамиката на населението, социално-икономическата и пространствената трансформация в агломерационните райони на градовете от второ ниво (според класификацията на ESPON) Пловдив и Бургас в България. В зависимост от тенденциите в изменението на броя на населението (положителни и отрицателни) и въздействието на двата основни компонента (естествен и миграционен прираст) е направена типология на селищата по методологията на Webb (1963) за 2001–2011 г. и 2011–2021 г. Въз основа на избрани социални и икономически показатели са очертани промените в градската трансформация на Бургас и Пловдив. Най-ценните източници за анализ на пространствените изменения на дадена територия са геопространствените бази данни, получени чрез декодиране на сателитни изображения, позволяващи изследване на типовете земно покритие и тяхната промяна. Налични са различни източници на информация, но по отношение на европейските страни, базата данни създадена и координирана от Европейската комисия по програма Коперник, се счита за най-подходяща (слоеве, съдържащи информация за запечатаност на територията), както и данните от JICA. Агломерациите Бургас и Пловдив се различават по вида и интензивността на промените в земното покритие през периода 2006–2018 г. През целия изследван период Пловдивската агломерация показва стабилно преобладаване на новото земно покритие в периферията, за сметка на агломерационното ядро (за разлика от Бургаската агломерация). В Пловдив промените в периферията на агломерацията настъпват над два пъти по-бързо от тези в агломерационното ядро. В Бургаската агломерация, от друга страна, относителният дял на новите типове земно покритие преобладава в периферията през определени времеви периоди (2006–2009 г. и 2012–2015 г.), за сметка на размера на същия клас земно покритие в ядрото на агломерацията.

Ключови думи: агломерация, център-периферия, субурбанизация, запечатаност на територията, земно покритие