

LESSON FOR THE FUTURE CLIMATE MIGRATION A STUDY OF RELOCATION AND DEVELOPMENT OF NEW SETTLEMENTS IN URBAN PERIPHERIES BASED ON SPATIAL DISPERSION OF FORCED MIGRANTS IN SERBIA BETWEEN 1991 AND 2021

MICHAŁ P. CHODOROWSKI, JELENA BOŽILOVIĆ, JAKUB ADAMSKI,
KAROLINA MESSYASZ, MAGDALENA REKŚĆ, VUK MILOŠEVIĆ, ANA ILIĆ

ABSTRACT. Climate migrations are going to affect the spatial structure in many regions of the world. We are now able to research long-term displacement and its spatial effects. Using the example of Serbia and the 30-year history of migration after the conflicts connected with the collapse of the former Yugoslavia, the article analyses the accompanying processes. The aim of this article is to study the spatial effects of long-term (forced) migration. The research is based on sociological methods and spatial analyses, i.e. statistical data, geospatial information and institutional document analysis. The analyses show social and spatial trends in migration and settlement formation in Serbia between 1991 and 2021.

Authors:

Michał P. Chodorowski, Białystok University of Technology, Faculty of Architecture, Oskara Sosnowskiego 11 st., 15-893 Białystok, Poland, m.chodorowski@pb.edu.pl, **ORCID:** <https://orcid.org/0000-0001-7675-5782>

Jelena Božilović, University of Niš, Faculty of Philosophy, Ćirila i Metodija 2 st., 18101 Niš, Serbia
jelena.bozilovic@filfak.ni.ac.rs, **ORCID:** <https://orcid.org/0000-0003-0240-3869>

Jakub Adamski, University of Łódź, Faculty of Economics and Sociology, Polskiej Organizacji Wojskowej 3/5 st., 90-255 Łódź, Poland, jakub.adamski@uni.lodz.pl, **ORCID:** <https://orcid.org/0000-0001-8655-6955>

Karolina Messyasz, University of Łódź, Faculty of Economics and Sociology, Polskiej Organizacji Wojskowej 3/5 st., 90-255 Łódź, Poland, karolina.messyasz@uni.lodz.pl, **ORCID:** <https://orcid.org/0000-0003-4534-3739>

Magdalena Rekść, University of Łódź, Faculty of International and Political Studies, Składowa 43 st., 90-127 Łódź, Poland, magdalena.reksc@wsmip.uni.lodz.pl, **ORCID:** <https://orcid.org/0000-0002-6927-5489>

Vuk Milošević, University of Niš, Faculty of Civil Engineering and Architecture, Aleksandra Medvedeva 14 st., Niš 18000, vuk.milosevic@gaf.ni.ac.rs, Serbia, **ORCID:** <https://orcid.org/0000-0003-1211-215X>

Ana Ilić, University of Niš, Faculty of Civil Engineering and Architecture, Serbia, Aleksandra Medvedeva 14 st., Niš 18000

Keywords: forced migration, relocation, Serbia, climate migration, Busije, Grmovac

Balcanica Posnaniensia. Acta et studia, XXXI, Poznań 2024, Wydawnictwo Wydziału Historii UAM, pp. 331–362, ISBN 978-83-67284-57-8, ISSN 0239-4278. English text with the summary in English

<https://doi.org/10.14746/bp.2024.31.16>



THE CLIMATE MIGRATION CHALLENGE AND THE EUROPEAN EXPERIENCE OF THE PAST DECADE OF FORCED MIGRATION

The challenges of climate migration and the relocation of populations to protect them during crises, especially in the absence of other adaptation possibilities, raise questions about the future scale of necessary relocations and the possible scenarios that societies and states can adopt to deal with them.

Phenomena related to climate change already affect the dynamics of the demographic situation in some regions of the globe with the most extreme climate conditions. The effects will also be increasingly felt in the countries of the North in the coming decades, not only in the form of changes in climate and ecosystems, but also increased migratory pressure. European countries have been under pressure from increased migration for over a decade, including post-Arab Spring movements, the 2015 “migration crisis” linked to the conflict in Syria and the conflicts in Ukraine (in 2014 and 2022).

Numerous migration studies use state-collected data; however, they do not collect data on all types of movement. One of the types of movement that is missing from these studies is climate migration, i.e. “the movement of a person or groups of persons who, predominantly for reasons of sudden or progressive change in the environment due to climate change, are obliged to leave their habitual place of residence, or choose to do so, either temporarily or permanently, within a State or across an international border”. The lack of a legal definition and the hard-to-define criteria, especially for long-term ecosystem changes, result in this group being omitted from the collected data. Depending on the economic, social and threat situation, the majority of the population will adapt to new conditions or choose local migration in a situation of resettlement. Relocation and *planned resettlement* are already an area of interest for urban and spatial planning forming a background for the discussion on the challenges that society and designers will face. The question is not “when?” but “where? and how?”.¹

The nature and scale of climate change and the associated climate migrations will be difficult to predict. As more factors that influence planning conditions will be subject to change, a change to the spatial planning approach to the planning process is required. This need was previously recognised as a result of the increased dynamics of technological and social change. Although climate change and climate migration will increase the variability of the whole process, as well as natural, geopolitical, eco-

¹ International Organization for Migration, *Glossary on Migration*, “International Migration Law” 2019, vol. 34 [further: IOM 2021], https://publications.iom.int/system/files/pdf/iml_34_glossary.pdf. [accessed 10.07.2022]; R. Hoffmann, B. Šedová, K. Vinke, *Improving the evidence base: A methodological review of the quantitative climate migration literature*, “Global Environmental Change” 2021, vol. 71; A. Forsyth, R. Peiser, *Lessons from planned resettlement and new town experiences for avoiding climate sprawl*, “Landscape and Urban Planning” 2021, no. 205, p. 2.

conomic, and demographic conditions, so far, they have been treated as stable and predictable factors.²

Since we do not yet have knowledge of the long-term effects of climate migration, we can make assumptions based on past and similar (consequence-wise) experiences of forced migration. Such experiences in Europe are the consequence of wars and the ensuing mass relocations. For this reason, in this article, we will present an analysis of two settlements that emerged due to the post-war influx of refugees to Serbia triggered by the Balkan conflict. The authors will not focus on the political aspect but on the sociological and urban issues. We will consider them as a starting point for a discussion on possible future scenarios of climate migrant settlement development.

The aim of this article is to study the spatial effects of long-term forced migration. The example of Serbia and the data related to aid programs also aimed at other Balkan countries allow us to adopt a time perspective of 30 years and look at the processes that took place at that time. The main interest is the quality of life in two settlements – Busije and Grmovac – which were chosen as case studies. We will search for answers to the following questions:

- What were the dynamics of the migration flows and the relocation process? What was their impact on the settlement regions?
- What was the development process of the selected settlements established to solve the issue of refugees and their integration?
- What are the reasons for any differences in this development?
- What can we learn from these examples to prepare for climate migration?

METHODS AND DATA

The approach to the issues related to migration in Serbia required a broad interdisciplinary approach. We used sociological methods (desk research, press analyses, interviews, visual analyses) and spatial analyses (geospatial analyses, official documents analyses). We based our research on pre-existing and evoked materials. The research material consisted of statistical data, geospatial information data, and institutional documents. Spatial information and statistical data were supplemented and verified with press queries, visitations and interviews with residents and people engaged in community associations in Busije and Grmovac (mid-June 2022) (see Fig. 1).

² R. Hoffmann, B. Šedová, K. Vinke, op. cit.; A. Stratmann, *Approaches of Flexible Spatial Planning to Sustainable Cities* [in:] *Proceedings of REAL CORP 2020: Shaping urban life – livable city regions for the 21st century*, Manheim 2020, p. 57–63.

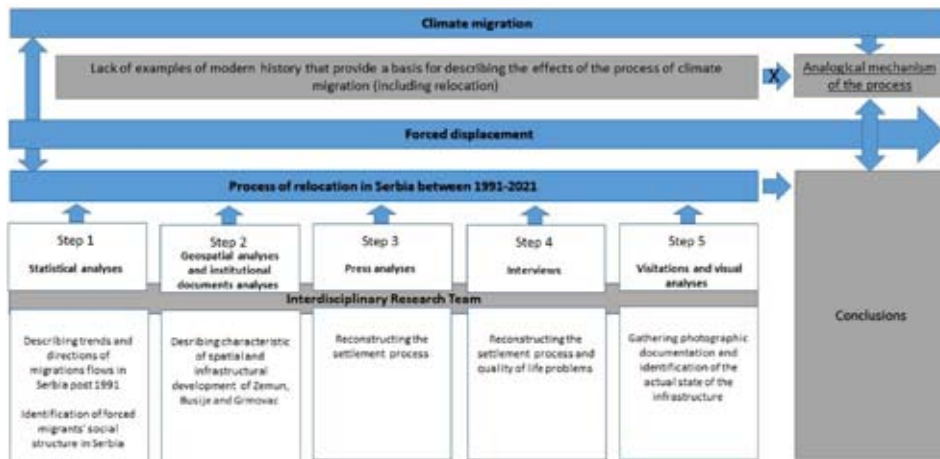


Fig. 1. Scheme of methodological approach used in the article.

In our research, a statistical approach to the distribution of migrants was used, specifying the reasons for its diversity in individual regions. The focus was on the situation of migrants and their integration into the city of Belgrade. Thus, the spatial development of the settlements within the municipality of Zemun, which is part of the agglomeration of the Serbian capital, was examined. Spatial analysis of the nature of the historical development of urbanised areas in the period 1985–2021 showed that the dynamics of these transformations were determined by the influx of refugees from Croatia and Bosnia and Herzegovina. In the spatial structure, two settlements, Busije and Grmovac, stood out as examples of “new settlements”.³ Their location, connections with Belgrade and neighbouring cities, as well as their functional layouts, are analysed later. Selected suburban settlements were used to analyse their form, location characteristics, demographic features, spatial structure, and development opportunities within the framework of planning documents.

The data relating to the two settlements were selective and indirect due to various problems regarding the availability of statistics. The analysis requires specific types of data, namely those related to migration stock and flows, the socio-economic structure of the migrant population, and their opinions on the quality of life in the place of residence.

The main challenge is the level of data aggregation. The settlements of interest were established in 1996 and 1997, so statistics available before that time are very generalised. Newer data can come in a few aggregation units: (1) the Republic of Serbia, (2) the Belgrade region, or (3) the Zemun municipality – where the suburban settlements of Busije and Grmovac belong. Altina, Kamendin, and Plavi Horizonti

³ A. Forsyth, R. Peiser, op. cit.

(other migrants-based settlements) also belong there, meaning that these two settlements likely make up a significant portion of the foreign-born population in Zemun. However, the same cannot be assumed regarding broader regions, as they all include Belgrade, the capital city of Serbia. As such, they are the main destination for most migrants. There is no source of official statistical data for Busije or Grmovac, as even the Statistical Office of the Republic of Serbia could provide only two datasets (subsets of the 2011 census) regarding the two settlements, and only after the precise location was specified in the request.

Publicly available data provided by the Statistical Office of the Republic of Serbia are scarce and do not make it possible to distinguish migrants for most of the variables. Furthermore, only the census from 2011 provides some insights with data regarding educational attainment, migration status/origin/ethnicity/citizenship, and denomination. This is not true for the 2002 census, however, from which extremely limited data were published (no migration-related data). Statistics from the 2021/2022 census are not yet available.

The databases of international organisations comprise another source of general and socio-economic statistics. Serbia is not a member of the OECD, so hardly any relevant data can be derived. The United Nations databases predominantly consist of country-level data derived from the 2011 census; only a few tabulations are original (e.g., on refugees assisted by UNHCR or migration projections). Socio-economic indicators regarding labour market activity at the Belgrade region level are offered by the Labour Force Survey. Apart from census-based indicators, other datasets consist of time series, allowing trends to be noticed.

The availability of public opinion data is limited. Serbia lacks a presence in public opinion research that would allow for trend analysis, e.g., in the European context, it took part in rounds 9 and 10 of the European Social Survey, and it is present only in the 2008 and 2018 waves of the European Value Study (with only a small number of immigrants). Since 2012, Serbia has started to appear in selected Eurobarometer surveys (with even fewer making it possible to distinguish migrants). Thus, there is a lack of public opinion research datasets available for the two settlements, or even Zemun.

All these challenges are common problems in migration-related research. Therefore, the statistical overview consists of primary data derived from: (1) the Statistical Office of the Republic of Serbia (2011 census), (2) the Commissariat for Refugees and Migration, (3) the United Nations, and (4) the Labour Force Survey (via Eurostat). Secondary data take the form of statistics presented in reports and articles, which refer to various sources (which are often no longer available or only available in non-digital form).

We analysed press sources and conducted unstructured interviews with residents of the settlements and members of organisations engaged in community issues as additional sources of information. We conducted the interviews when visiting the settlements. They were not in-depth but merely aimed to determine the condition of life

in the communities (physical and social infrastructure), local opinions on this issue, and to confirm the data collected from the press. They were aimed only at identifying problems and the level of quality of life in the two settlements and confirming press information.

CONFLICTS IN FORMER YUGOSLAVIA AS A MODERN CASE OF RELOCATION

In the modern history of Europe (20th and 21st centuries), the main reasons for displacement were armed conflicts, infrastructure projects (e.g., the construction of retention reservoirs or open-pit mines), natural disasters (e.g., floods, fires, or earthquakes) and those caused by man (i.e., by human activity and its errors or contamination). The greatest displacement and migration of people occurred as a result of World War II.⁴ Subsequently, the set of wars in the area of the former Yugoslavia (1991–1999) led to the largest forced migration in Europe (excluding the ongoing conflict in Ukraine in 2022).

One of the consequences of the wars in the former Yugoslavia at the end of the 20th century was the migration of people resulting from the ongoing fighting, changes in the situation at the fronts, and the demarcation of new borders. While all the Balkan states had to deal with the problem of external and internal refugees, the case of Serbia is special as Serbs escaped from other countries of the former Yugoslavia in the face of a deep economic crisis caused by Western sanctions. According to the results of the 1991 census, Serbia (excluding Kosovo) was inhabited by about 7 million people, so the new situation was a huge challenge for the poor state.

To provide context for the processes related to the development of the two settlements, we start with a general overview of the influx of refugees to Serbia post-1990. Figure 2 shows the total number of refugees in Serbia (stock) for every year between 1990 and 2020, as well as the numbers from Croatia, Bosnia and Herzegovina and Republic of North Macedonia. Our primary focus should be people fleeing from Croatia and Bosnia and Herzegovina for two main reasons. Firstly, both Busije and Grmovac are mostly comprised of refugees from these two countries.⁵

⁴ M. Guzi, P. Huber., Š Mikula, *The long-term impact of the resettlement of the Sudetenland on residential migration*, “Journal of Urban Economics” 2021, no. 126; A. Affek, J. Wolski, M. Zachwatowicz, K. Ostafin, V. Radeloff, *Effects of post-WWII forced displacements on long-term landscape dynamics in the Polish Carpathians*, “Landscape and Urban Planning” 2021, vol. 214, p. 214.

⁵ S. Vujadinović, D. Šabić, S. Stojković, M. Milinčić, *Years of refugee life in Serbia: challenges for a new beginning: stay or return home?*, “RAMES. A Journal of the Humanities and Social Sciences” 2011, vol. 15, p. 237, 255 [further: S. Vujadinović et al., 2011]; V. Kokotović, M. Filipović, *Refugees in Serbia: twenty years later*, “Journal of the Geographical Institute Jovan Cvijic SASA” 2013, vol. 63, p. 25. The Commissariat for Refugees and Migration (CRRS), *Migration Profile of the Republic of Serbia for 2020*,

Table 1. Number of refugees and war-affected persons based on census data.

| Dates of censuses | 1996 | 2001 | 2005 | 2011 |
|--|---------|---------|----------------------|--------|
| Total number of refugees | 617.728 | 451.380 | 104.246 ⁶ | 74.487 |
| <i>From Croatia</i> | 290.667 | 242.624 | 76.546 | 49.946 |
| <i>% of the total number of refugees</i> | 54.0 | 64.3 | 73.4 | 67.1 |
| <i>From Bosnia & Herzegovina</i> | 232.974 | 133.853 | 27.541 | 20.673 |
| <i>% of the total number of refugees</i> | 43.3 | 35.5 | 26.4 | 27.8 |

Source: Vujadinović et al., 2011; V. Kokotović, M. Filipović, op. cit.; UNHCR, *UNHCR Statistical Database. Table with data on Refugees*, 2022, <http://data.un.org/Data.aspx?d=UNHCR&f=indID%3aType-Ref%3abasy-ID%3aSRB%3boriID%3aBIH%2cHRV&c=0,1,2,3,4,5,6&s=yr:desc,asyEngName:asc,oriEngName:asc&v=1> [accessed 31.05.2022].

The Statistical Office of the Republic of Serbia presents migration waves to Serbia in 5-year intervals, for which breaking points are shown as dashed lines in Fig. 2. However, refugee waves should be associated with specific points on the timeline, which relate to the escalation of wars in Croatia (1991) and Bosnia (1992). For Croatian migration, they are the second half of 1991, the period between 1992 and 1995 (with the most significant influx in 1995 with slow burn until mid-1996), and 1998. Meanwhile, for Bosnia and Herzegovina, the dates are 1992, mid-1995, and the post-Daytona Agreement time (which ended the war in Bosnia and Herzegovina) in 1995 and 1996.⁷ An important caveat of the analysis is that it focuses on refugees and not on internally displaced people (IDPs), who, whilst vulnerable, are distinctly different from other forced migrants. However, it is worth mentioning that in 1999, over 200,000 IDPs moved from the region of Kosovo to farther-north parts of Serbia. In 2020, there were still 197,000 of these migrants, including 58,365 in the Belgrade region.⁸

2020 [further: CRRS, 2020], p. 17, 42, <https://kirs.gov.rs/media/uploads/Migration%20profile%20of%20Republic%20of%20Serbia%20for%202020.pdf> [accessed 30.05.2022].

⁶ The decrease in refugees was due to the revision of refugee status. The main reasons for the decrease in the number of refugees in Serbia may also be the possibility of getting Serbian citizenship and an identification card (from which a certain number were excluded), return to the countries of origin, and moving to third countries.

⁷ M. Grinvald, *Problems of integration of refugees and internally displaced persons in Serbia*, 2010, Palacký University in Olomouc (unpublished thesis), p. 43–45, <https://theses.cz/id/m9hywr/76864-676024508.pdf> [accessed 30.05.2022].

⁸ Ambroso G., *Field experiences, major actors and Policies. The Balkans at a cross-road: progress and challenges in finding durable solutions for refugees and displaced persons from the wars in the former Yugoslavia*, “Refugee Survey Quarterly” 2006, vol. 25, p. 147; CRRS, 2020, p. 44.

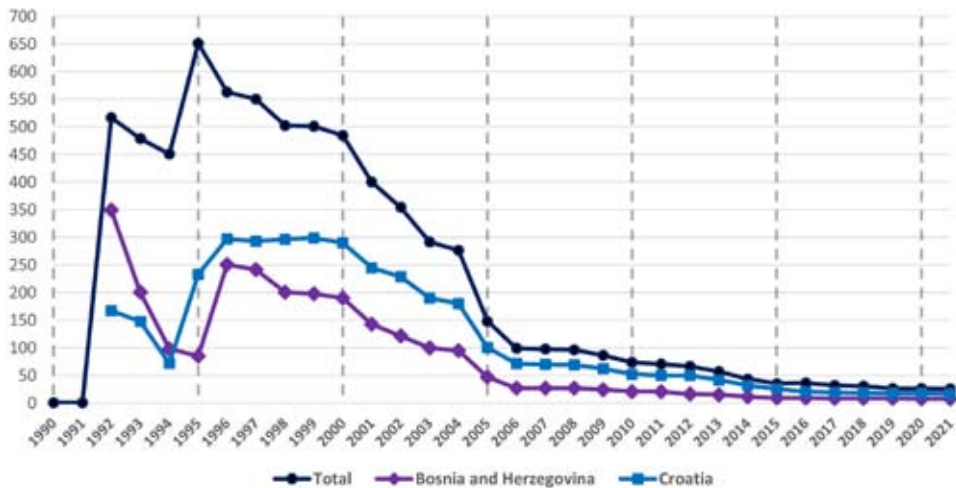


Fig. 2. Number of refugees and people in refugee-like situations in Serbia and Kosovo (S/RES/1244 [1999]) by country of origin from 1990 to 2021 (in thousands).

Sources: UNHCR (2022). The total number also includes refugees from countries other than the two that are present on the chart. Besides refugees, the data may include people in refugee-like situations, but for the two countries, both populations display the same numbers.

The most visible trend in Fig. 2 is the stable decrease in the number of people with refugee status in Serbia after 1995, which accelerates between 2000 and 2004. The fall becomes even more pronounced for 2004–2006, before flattening. A stable decrease in the numbers of the protected population from Croatia started only after 2000. In the case of Bosnia and Herzegovina, it had already started in 1996. This decline can be attributed to three long-lasting solutions for refugees.

The first solution is repatriation, although for refugees from Bosnia and Herzegovina, this was not the most popular option. Those who favoured this solution were 60 years old and older and owned a property in their country of origin. This solution amounted to almost 70,000 returnees from this country between 1996 and 2003. In the same period, 68,000 people returned to Croatia from Serbia.⁹ The second solution is resettlement to third countries, which was chosen by 22,000 refugees in the 1996–2003 period. The third and final solution is local integration (chosen by 62.3% of all refugees by 2002), which was designed for people who decided to stay in Serbia.¹⁰

⁹ V. Lukic, V. Nikitovic, *Refugees from Bosnia and Herzegovina in Serbia: A study of refugee selectivity*, “International Migration” 2004, vol. 42, p. 102–103); G. Ambroso, op. cit., p. 142.

¹⁰ V. Nikitović, V. Lukić, *Could refugees have a significant impact on the future demographic change of Serbia?*, “International Migration” 2010, vol. 48, p. 118); eidem, *Refugees from Bosnia and Herzegovina*, p. 102).

Integration is a multifaceted process of migrants becoming part of the host society. One of the indicators, sometimes regarded as the culmination of the whole process, is acquiring citizenship (naturalisation). In a similar timeframe as the other long-term solutions, at least 200,000 refugees acquired Serbian citizenship. However, researchers point out that becoming a citizen does not necessarily result in losing refugee status. Due to certain privileges connected with refugee status, many migrants (naturalised before 2001) decided to retain their refugee documents. What is more, while citizenship is important in many cases, it does not mean that the person's livelihood changes overnight, as they can still experience unemployment, housing difficulties, and poor living conditions. This is also why it is more accurate to refer to the country of birth rather than citizenship when analysing post-1991 data on refugee flows in Serbia. According to Serbian law, people who came to Serbia from Croatia before August 1995 received the status of refugees, those who came in August 1995 received the status of exiled persons, and those who came after August 1995 were not registered and were marked as persons without status.¹¹

In a refugee crisis, there are two groups of factors that impact the integration of migrants: institutional and socio-demographic (personal and collective). The first group includes any solutions that governmental, non-governmental and intergovernmental institutions use to support migrants' adaptation. Many organisations were involved in Serbia during the analysed period, e.g., the United Nations (including UNHCR, UNICEF, and UNESCO), the Swiss Agency for Development and Cooperation, the Norwegian Refugee Council, the Commissariat for Refugees and Migration of the Republic of Serbia (CRRS), and the European Agency for Reconstruction. One of the organisations that supported refugees in terms of shelter was UNHCR, which had provided over 175 million dollars by 2001, although it was deemed insufficient.¹²

The scale of needs and unresolved issues become clearer if we look at the basic provisions of the Regional Housing Programme, planned for 2012–2022 (due to the prolongation caused by COVID-19 it officially concluded in 2023). Out of an estimated 289 million euros, 165 million is to be distributed to Serbia to provide housing solutions for almost 22,500 people – a fraction of the initial number of refugees. In terms of the housing solutions that this and previous programmes offered (for an overview of integration solutions, programmes, and strategies related to housing, employment, and social services access, see IOM, 2011), e.g. the provision of building materials; building or repurposing buildings for social needs; providing accommodation in ex-

¹¹ G. Ambroso, op. cit., p. 143; V. Nikitović, V. Lukić, *Could refugees have*, p. 109; S. Vujadinović et al., 2011, p. 238, 254; V. Kokotović, M. Filipović, op. cit., p. 32.

¹² S. Vujadinović et al., 2011, p. 237; UN Office for the Coordination of Humanitarian Affairs (OCHA), *Country Profile and Humanitarian Assistance Fact-Sheet for the Federal Republic of Yugoslavia (excluding Kosovo) (update as of June 2001)*, 2001, p. 3, https://reliefweb.int/attachments/63a85ead-092e-3a50-9b14-28d659d3ebce/8F7BD7760C5107A785256A8500740BD0-OCHA_FRY_color.pdf [accessed 31.05.2022].

isting buildings.¹³ By 2010, the most popular forms of integration support for refugees from Croatia and Bosnia and Herzegovina were economic empowerment, housing units, and building materials.¹⁴

SPATIAL DISPERSAL OF MIGRANTS IN SERBIA 1991–2021

The analyses presented below show (on a regional scale) the places where migrants (refugees) concentrated, the factors that might have influenced their decisions, and the population growth that occurred in selected urban centres depending on the region and its economic situation.

At the beginning of the crisis, refugees were offered accommodation in collective centres. However, the idea was to carry out housing projects along the way and gradually close or repurpose the centres. Thus, they started with 700 centres in 1996, reduced the number to 466 in 2000, and further to 388 by the beginning of 2002, 99 by the end of 2005, 60 in 2010, and eventually 19 in 2013 (in Serbia without Kosovo and Metohija), and only 1 in 2019 (in Serbia, in Kosovo and Metohija, there were still eight centres).¹⁵ Accommodation in collective centres (which is rare in the Belgrade region) concerned circa 10% of the refugee population in 1996.

Most of the forced migrants stayed with friends or family, although the size of the group decreased rapidly (from 95% in 1993, to 54.2% in 1996, and 28.6% in 2005) in favour of owning or renting accommodation. What is more, people leaving collective centres were offered various forms of relief and assistance, e.g., building materials or the option to buy their own accommodation, among others.¹⁶

According to Vujadinović, in 1996, most (229,811 (42.7%)) of the refugee population in Serbia found refuge in the northern Vojvodina region of the country (see

¹³ CRRS, 2020, p. 65; UNHCR, *Good practices. Regional Housing Programme*, 2020, <https://globalcompactrefugees.org/article/regional-housing-programme-rhp> [accessed 8.10.2024]; idem, *Regional Housing Programme*. <https://www.unhcr.org/rs/en/regional-housing-programme> [accessed 8.10.2024]; S. Vujadinović et al., 2011, p. 254.

¹⁴ The Commissariat for Refugees and Migration (CRRS), *Migration Profile of the Republic of Serbia for 2010* [further: CRRS, 2010], p. 48. https://kirs.gov.rs/media/uploads/Migracije/Publikacije/Eng/Migration_Profile_of_the_Republic_of_Serbia_for_2010.pdf [accessed 30.05.2022]. For the IDPs, two solutions were especially popular: economic empowerment and improving housing conditions. This highlights the differences in integration between refugees and IDPs; *ibidem*, p. 49.

¹⁵ S. Vujadinović et al., 2011, p. 252; G. Ambroso, *op. cit.*, p. 143; The Commissariat for Refugees and Migration (CRRS), *Overview of the situation in formal collective centers in Serbia*, 2013, p. 2–3, http://arhiva.kirs.gov.rs/docs/izvestaji/collective_centers_overview_2013.pdf [accessed 30.05.2022]; The Commissariat for Refugees and Migration (CRRS), *Collective Centres*, 2019, <http://arhiva.kirs.gov.rs/articles/centers.php?lang=ENG#vrh1> [accessed 30.05.2022].

¹⁶ S. Vujadinović et al., 2011, p. 250–251, 253; V. Lukic, V. Nikitovic, *Refugees from Bosnia and Herzegovina*, p. 93.



Fig. 3. Regions of the Republic of Serbia. Author: CCGavranCC.

Source: https://pl.wikipedia.org/wiki/Serbia_Centralna#/media/Plik:SerbiaPoliticalDivision.png [accessed 31.05.2022].

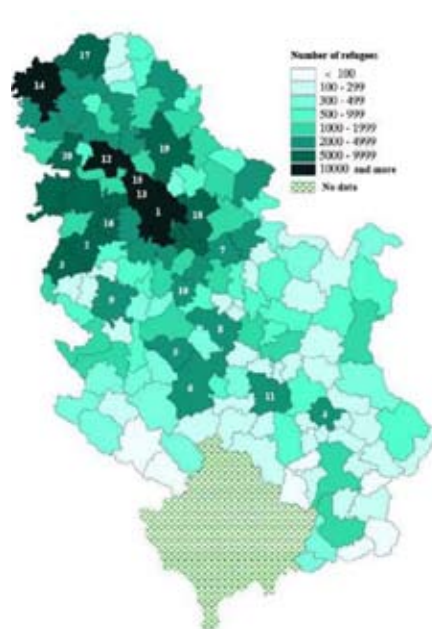


Fig. 4. Spatial arrangement of migrants in municipalities, 2002.

Source: *Становништво и домаћинства Србије према попису 2002. године*, ed. Г. Пенев, Београд 2006.

Fig. 3, Fig. 4).¹⁷ In Central Serbia, there were 148,367 (27.6%) refugees, and in the Belgrade territory, 140,662 (26.1%). In 1996, refugees comprised 8.7% of Belgrade's population, with the highest concentration in the border and town districts of Barajevo, Zemun, Grocka, Zvezdara and Čukarica. The largest number of refugees settled in Zemun (22,085), New Belgrade (21,392), Čukarica (16,026), Zvezdara (16,002) and Voždovac (10,506). This was due to earlier migrations that took place after World War II, when the Serb population settled in what is now Croatia and Bosnia and Herzegovina. At the time of the hostilities in these areas, the Serb population returned to their families in Serbia.

Figure 5 below shows the percentage share of migrants in Serbia's total population and the percentage share of refugee groups in individual local government units. It shows the unique situation in the Belgrade agglomeration in 2004. Belgrade received the most people – 111,300, which accounted for 7.1% of the total population of the city (and 29.4% of the total number of refugees). However, from the planning point of view, it is not the number of refugees that may be problematic but the propor-

¹⁷ S. Vujadinović et al., 2011, p. 240.

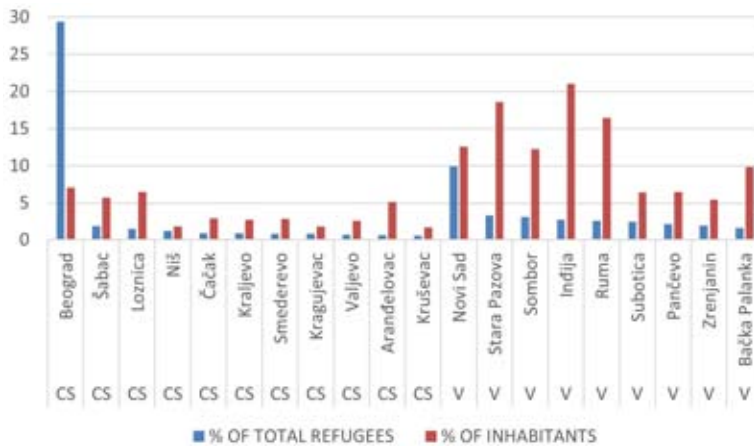


Fig. 5. Percentage share of total migrants' population in selected cities and percentage share of migrants in total city populations in selected regions of Central Serbia (CS) and Vojvodina (V).

Source: Б.С. Ђурђевић et al., *Становништво и домаћинства Србије према попису 2002. године*, Београд 2006.

tional share of migrants in relation to the local population. This is an important indicator that determines the possibility of absorbing an additional population, both temporary and permanent migrants. The data show a higher percentage of migrants in the Vojvodina region than in Central Serbia. The urban centres that received the highest percentage of refugees (about 20% of additional residents) were Indija, Stara Pazova, Ruma, Sombor, and Novi Sad. The largest cities in Serbia, guaranteed greater employment opportunities. In addition to the previously discussed family ties, economic issues and the possibility of employment determined the choice of the place of settlement. These opportunities were present mostly in the northern and central parts of the country. Fewer than 100 people were registered in the poorest municipalities, such as Crna Trava, Medveđa, Trgovište, Tutin, Sjenica, Bosilegrad and Bojnik.

The trends in migration directions show pressure on larger and economically stronger regions and urban centres. As Forsyth and Peiser point out, migration movements can help to revitalise such places, but at the same time, they burden infrastructure, increase housing needs, increase rental costs, enter agricultural or naturally valuable areas, force migrants to settle in areas without services and opportunities for economic development, and break social ties. The idea to resolve the issue of relocating refugees was to build special settlements for them: Busije, Grmovac, Kamendin, Altina, and Plavi Horizonti. They were all built on the outskirts of Belgrade. Data and maps show that, between 1996 and 2008, the refugee population progressively concentrated in the central northern part of Serbia, namely in Stara Pazova and surrounding municipalities, including Zemun, where Busije and Grmovac lie.¹⁸

¹⁸ A. Forsyth, R. Peiser, op. cit.; S. Vujadinović et al., 2011, p. 243–246.

Furthermore, the number of refugees who settled in the Belgrade region decreased from 140,662 to 20,709 in 2011 and 6,477 in 2020. In 1996, the highest number of refugees or former refugees was registered in Zemun, which still has one of the highest shares of refugee populations. The popularity of this and other border municipalities (with Vojvodina) resulted from, among other things, housing projects for refugees and land with build permits.¹⁹ Thus, considering this concentration and dominant position of Zemun, we may presume that whenever we refer to the Belgrade region, the data is strongly impacted by what happens in Zemun, including Busije and Grmovac. The latest data on the number of refugees in Zemun are presented in Fig. 6.

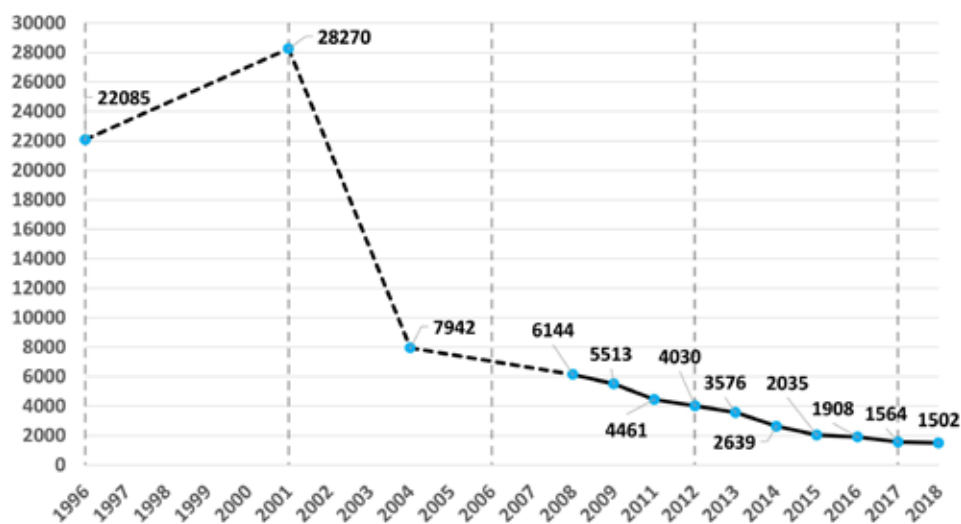


Fig. 6. Number of refugees in Belgrade's Zemun municipality between 1996 and 2018.

Source: The Commissariat for Refugees and Migration (CRRS), *Statistical overview of refugees and internally displaced persons by municipality for 2018*, https://kirs.gov.rs/media/uploads/Statistical_Overview_of_Refugees.pdf [accessed 31.05.2022]. The dashed trend line refers to the periods when the time series is broken. Data for 1996 and 2001 include war-affected persons. The numbers are based on refugee lists from 1996, 2001, and 2004/2005.

BUSIJE AND GRMOVAC: CASE STUDY ELEMENTS HISTORICAL, TERRITORIAL AND SOCIO-ECONOMIC CONTEXT

Zemun, as a municipality of Belgrade, occupied a high position among local governments in which the number of migrants accounted for a high share of the general population. The analysis shows the spatial development of the settlements that make up

¹⁹ V. Kokotović, M. Filipović, op. cit., p. 25–27; CRRS, 2020, p. 43; S. Vujadinović et al., 2011, p. 240–242, 247.

the municipality of Zemun. The territory occupied by Zemun forms a kind of a crescent, cut in several places by Belgrade's system of highways. The urbanised area is located in the eastern part of the municipality and was an area for the development of small industry, storage areas, crafts and cheap residential areas. The municipality's population increased by 15% (22,114) between 1991 and 2011, which corresponded with the municipal authorities' acceptance of refugees from Croatia and Bosnia and Herzegovina.²⁰ The spatial development of urban structures in the period 1991–2021 is presented in Fig. 7. The permanent settlement of refugees took place in two model directions: the expansion of existing towns and the establishment of new villages/settlements. Spatial development occurred in the settlements of Zemun Polje, Batajnica, and Ugrinovci. Several new settlements – Altina and Plavi Horizonti – in the vicinity of urbanised Zemun were also established, along with the peripheral Busije and Grmovac. The last two, as examples of separate settlements, will be discussed in length.



Fig. 7. Urban zone development in Zemun municipality, 1985–2021.

Source: Authors' own elaboration based on A. Kovjanić, *Refugees and intermediate displaced persons in Zemun municipality*, "Collection of Papers — Faculty of Geography at University of Belgrade" 2017, vol. 65, no. 1a, p. 367–378.

²⁰ A. Kovjanić, *Refugees and intermediate displaced persons in Zemun municipality*, "Collection of Papers – Faculty of Geography at University of Belgrade" 2017, vol. 65, no. 1a, p. 367–378.

Busije and Grmovac are two refugee settlements built in 1996–1997 in the suburbs of Belgrade, the capital of Serbia. The settlements were formed after the wars in the former Yugoslavia (the Croatian war of independence and the Bosnian war) and the ensuing refugee crisis. All the refugees were ethnic Serbs, who, due to the ongoing military operations, started to leave the republics they lived in and migrate to Serbia. Settlements were part of the local long-term integration solution. Administratively, they are part of Zemun, one of the seventeen municipalities that comprise the city of Belgrade and which is in the north-west of the city. Busije and Grmovac also belong to the community council of Ugrinovci, which is one of the six community councils in Zemun.

As mentioned above, Busije was established in 1997 when the president of Zemun, the leader of the right-wing Serbian Radical Party (SRS), Vojislav Šešelj, sold plots of land for affordable prices to refugees from Croatia and Bosnia. Busije was built on agricultural land (not intended for urban construction), i.e. land that used to be owned by the Napredak agricultural company. The settlement of Grmovac was formed in 1996 also on agricultural land (formerly owned by the PKB agricultural corporation) when the local authorities of Zemun sold 2,800 plots of land where 600 homes were eventually built. Like Busije, it is mostly inhabited by refugees from Bosnia and Croatia.²¹

These two locations were popular not only because they are situated in Zemun (where most refugees in Central Serbia reside), close to Belgrade and with lower unemployment rates than elsewhere in the country, but also because the land was cheap enough so that, when they sold their homes (in their country of origin), they could afford it. However, the land was not converted from agricultural to building land, which hindered settling the ownership status over the newly built family houses, and many houses and other buildings were constructed without permits. In 2009, Busije had 5,000 inhabitants, most of whom (80%) were refugees from Croatia and Bosnia and Herzegovina. The majority of inhabitants received Serbian identification cards.²²

The data on Busije and Grmovac are scarce, which is partly due to the context outlined above. The only two datasets for the two settlements were derived from the 2011 census, and they only refer to household size and age structure. Starting with household structure (Fig. 8), in 2011, households in Busije were larger than in Grmovac. However, such isolated data are difficult to interpret. Compared to the statistics for the whole Belgrade region, households in the region are much smaller than in the two settlements. This difference might be a result of the structural characteristics of refugees, namely, their likely background of living in rural areas before migration, where there tend to be extended families.²³

²¹ Ibidem, p. 255.

²² Ibidem, p. 250, 255.

²³ V. Lukic, V. Nikitovic, *Refugees from Bosnia and Herzegovina*, s. 100–102.

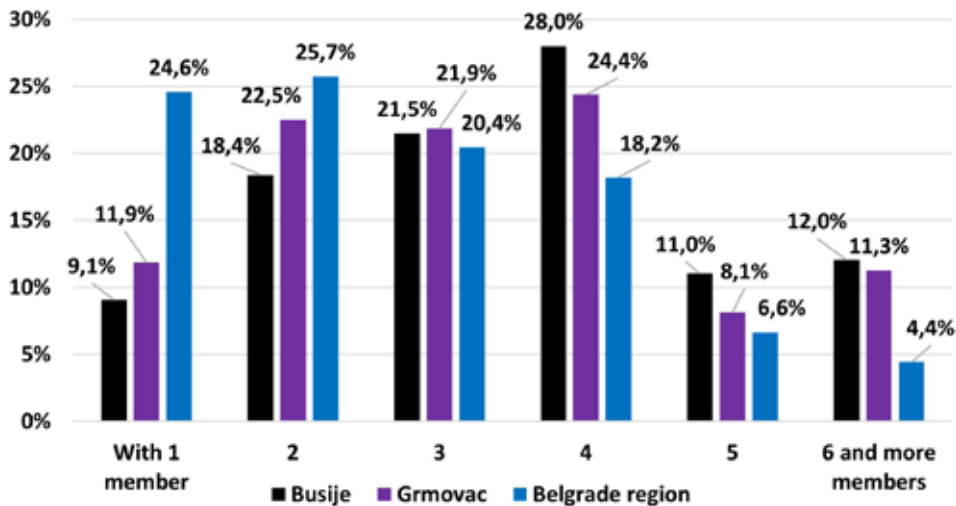


Fig. 8. Household structure in the two settlements (percentage for given settlement) in Zemun and the Belgrade region in 2011.

Source: Statistical Office of the Republic of Serbia (SORS), *2011 Census. Households and families. Households. Households according to the number of members*, 2017a, <https://data.stat.gov.rs/Home/Result/3102020101?languageCode=en-US&displayMode=table> [accessed 31.05.2022]. Data for Busije and Grmovac were derived separately upon request submitted by the authors to SORS. The base for percentages is the total number of inhabitants of a given territorial unit: $N_{BR} = 606,433$, $N_B = 1071$, $N_G = 160$.

Regarding the age structure of inhabitants of Busije and Grmovac in 2011 (Fig. 9), in the latter, two age groups were dominant: 25–34 and 50–59. In Busije, there is no dominant group other than working-aged people aged 20–59. What is characteristic of both settlements is the relatively small share of people aged 65+. Other researchers point out that at the beginning, refugees from Bosnia and Herzegovina were generally younger (those arriving in Belgrade had an average age of 31.4) than migrants from other countries. In 2020, the refugee population aged 65+ accounted for almost 66% of all people with refugee status, and those who were 50+ accounted for almost 83% (compared to a little over 48% in 2010).²⁴

In terms of the refugees' education level, those from Bosnia and Herzegovina were better educated than their Croatian counterparts and even relatively better educated than people who stayed in Bosnia and Herzegovina. The level was particularly high in Belgrad – 23% of refugees from Bosnia and Herzegovina had higher education in 2001. The refugees from Croatia have a higher share of people who have not completed elementary school. Thus, the brain drain in Bosnia and Herzegovina was severe; similarly, the brain gain in Serbia was extremely beneficial. However, data from the 2011 census, and the difference between Serbs, Croats and Bosnians is neg-

²⁴ Ibidem, p. 95; CRRS, 2020, p. 42; CRRS, 2010, p. 48.

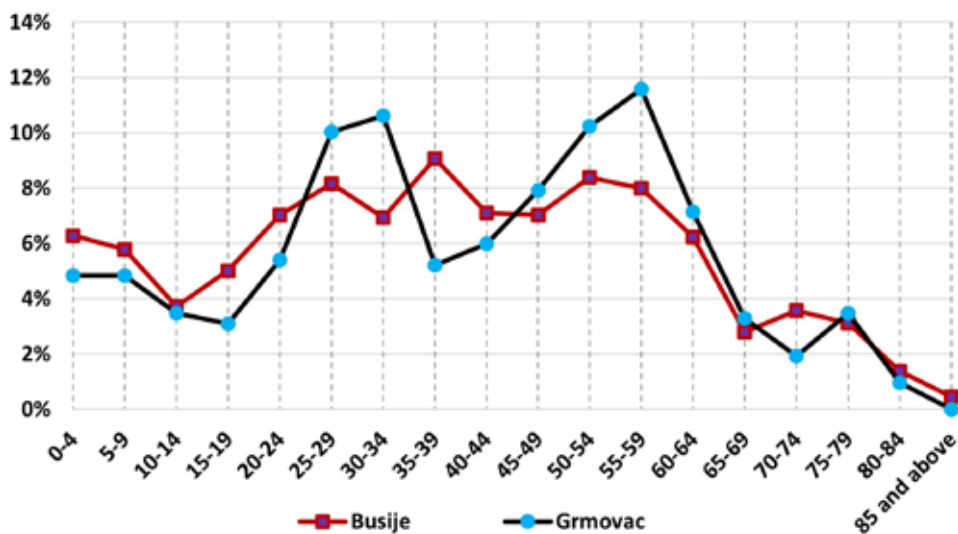


Fig. 9. Age structure in the two settlements in Zemun in 2011 (percentages for given settlement).

Source: Data were derived from Census 2011 separately upon request submitted by the authors to SORS. The base for the percentages is the total number of inhabitants of a given territorial unit: $N_B = 3790$, $N_G = 518$.

ligible, with the dominance of people with secondary education (circa 50%), followed by tertiary education (circa 20%). Therefore, educational attainments seem to have equalised over a decade.²⁵

Finally, regarding employment, the data from 2001 show that unemployment rates among refugees were much higher than in the general population of Serbia – 39.9% vs 27% (both rates are high). However, the higher the education level, the higher the employment rate. Over the years, the labour market situation changed. As Fig. 10 shows, the unemployment rate halved between 2013 and 2021 for the foreign-born population in Belgrade, and it is even lower than for natives. Meanwhile, activity and employment rates went up by circa 13%.²⁶

²⁵ V. Lukic, V. Nikitovic, *Refugees from Bosnia and Herzegovina*, p. 98–99. The Serbian education system distinguishes between Higher and High education, the former meaning non-academic post-secondary education of a more practical/professional nature, and the latter academic education. In the chart above, we refer to the former as professional education and the latter as tertiary education.

²⁶ *Ibidem*, p. 96.

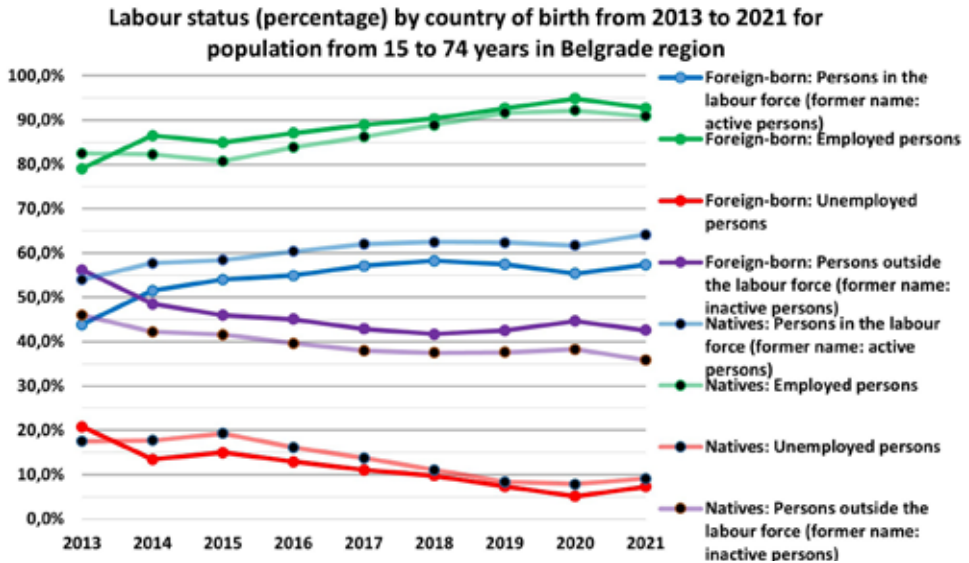


Fig. 10. Labour status (percentage) by country of birth from 2013 to 2021 for the population aged 15 to 74 in the Belgrade region.

Source: Eurostat, *LFS annual series. Population by sex, age, country of birth, labour status and NUTS 2 regions (LFST_R_LFSD2PWC)*, 2022, https://ec.europa.eu/eurostat/databrowser/view/LFST_R_LFSD2PWC_custom_2772068/default/table [accessed 31.05.2022]. Data derived from the *Labour Force Survey*. The base for the percentages for people in/outside the labour force is the total population for either foreign-born people or natives for a given year. The base for the percentages for employed/unemployed people is the total population of people in the labour force for either foreign-born people or natives for a given year.

SETTLEMENTS FUNCTIONALITY PROGRAM

As mentioned earlier, both Busije and Grmovac were established in areas of agricultural production without the technical infrastructure to ensure the functioning of houses in the 20th century (e.g., a lack of electricity and running water). In retrospect, this experiment, which resulted from various previously described motives, allows us to observe how residents and communities adapted to difficult conditions.

Both settlements are located on the outskirts of the Belgrade agglomeration and are approximately 20 km (as the crow flies) from the centre of the capital (Fig. 11). For this research, both settlements were characterised in terms of transportation links with neighbouring settlements as well as the centre of Belgrade (see Table 2).

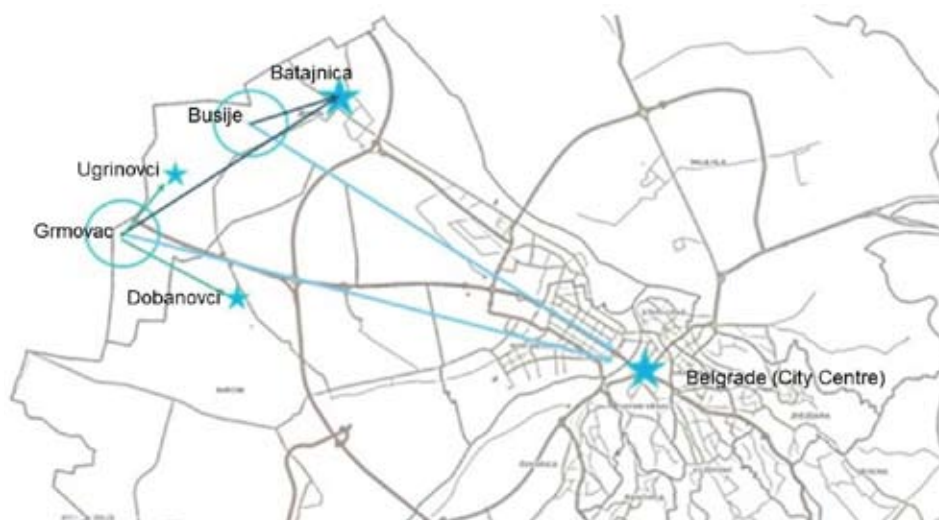


Fig. 11. Peripheral location of Busije and Grmovac in the Belgrade agglomeration.

Source: own adaptation based on data from GIS Beoland, <https://www.beoland.com/en/plans/gis-beoland/>

Table 2. General spatial information about the Busije and Grmovac settlements – location, administration information and distance to the nearest agglomeration.

| | Busije | Grmovac |
|---|--------------------|--------------------|
| Established | 1997 | 1996 |
| Population | 5,000 (2016) | 1,000* (2017) |
| Designed settlement population in the master plan | 16,708 (2014) | 15,950 (2014) |
| Master plan official approval | 30.12.2014 | 19.12.2014 |
| Distance from Belgrade centre | 19.9 km | 23.7 km |
| Distance to next existing settlement | 1.4 km (Batajnica) | 3.7 km (Dobanovci) |
| Time to travel to Belgrade centre | 28 min (28.9 km) | 26 min (25.6 km) |
| Time to train station or metropolitan transport system | 1 hour 40 min | 1 hour 25 min |
| Local government | Zemun | Zemun |

Source: Република Србија. Скупштина града Београда, *План детаљне регулације насеља Грмовац у Земуну* [Detailed regulation plan of Grmovac settlement in Zemun, Municipality of Zemun], *Општина Земун 2014*; idem, *План детаљне регулације за насеље Бусије*, Општина Земун 2014 [Detailed regulation plan for Busije settlement, Municipality of Zemun].

The data in Table 2 show the last recorded population status, provided in the planning documents, and the distance to neighbouring towns and the centre of Belgrade. Comparing the two settlements, the following differences in their development and the conditions that influenced it can be pointed out. Busije had the advantage of the technical and social infrastructure of the neighbouring town of Batajnica. It allowed residents to connect or invest in their own technical infrastructure and then create a social infrastructure. The lack of access to networks of basic technical infrastructure in Grmovac or a transport connection blocked the development of this settlement. Images of the historical development of the spatial structures in 2002, 2012 and 2022 (see Fig. 12 and 17) indicate the importance of the first decade of the 21st century for the development of Busije and Grmovac. Busije had already reached its current shape, while for Grmovac, its settlement is still in progress.

Travel time by car or public transport is comparable in both settlements. Grmovac is the smaller of the two and is also the least developed. It is located near the motorway that connects Belgrade with Zagreb on the border of the Belgrade agglomeration area. Unfortunately, Grmovac has no direct connection with the motorway. To get to the motorway exit, it is necessary to go to the neighbouring town.

It is also 3.7 km away from the nearest settlement (Dobanovci), and the only direct walking route leads through agricultural areas.²⁷ Located on the periphery of the municipality, Grmovac is separated from the other settlements in Zemun by the motorway. This isolation is not only transport-related but also functional, leading to a lack of access to utilities offered by larger and older urban centres.

As Zemun failed to support either settlement during construction or provide help obtaining sewerage, electricity, roads and other infrastructure, the citizens of Busije and Grmovac resorted to self-organisation and helped each other with construction. Thus, the whole settlements are the outcome of their joint efforts. As the citizens say, there was no support from the neighbouring settlements, so they relied on their own capacities and resources. The inhabitants of Busije financed the paving of roads and public lighting, as well as the construction of the church and the water supply system. Water was connected about two years after the first inhabitants came to form the settlement.

In terms of functions in both settlements, Busije, with a population five times larger than Grmovac, offers its residents an almost complete range of services that should have been created from the start. What mattered was the sheer number of inhabitants, estimated at 5,000–9,000 people. This number corresponds to the standardised urban unit of settlements, and it was able to provide enough users, recipients, and consumers for businesses to operate (Fig. 13).²⁸ Busije has the Church of St. Cyril and Methodius (Fig. 14), a health station (2009), which is located within the church, two pharmacies and a post office in the centre of the settlement which opened several years ago. The

²⁷ A. Kovjanić, op. cit.

²⁸ Ch. Alexander, S. Ishikawa, M. Silverstein, *A Pattern Language*, New York 1977, p. 109.

Years**2002****Fig. 12.1****2012****Fig. 12.2****2022****Fig. 12.3****Fig. 12.** Spatial development images for the urban structures in Busije, 2012–2022.

Source: *Busije*. 44°53'59.41" N and 20°13'32.99" E. Google Earth Pro. July 19, 2022. Fig. 15.1: April 29, 2002. Fig. 15.2: March 9, 2012. Fig. 15.3: March 2022.



Fig. 13. Local centre of commerce and services in Busije. Author: Magdalena Reškć (September 2022)



Fig. 14. Example of community functions: the Church of St. Cyril and Methodius in Busije (built in 2006). Author: Magdalena Reškć (June 2022).



Fig. 15. Regular street in Busije with road infrastructure and intensive land use. Author: Magdalena Reškć (September 2022).



Fig. 16. Busije street with a school building. Morovićkih šuma street. Author: Magdalena Reškć (June 2022).

school in Fig. 16 and the kindergarten were built in 2019 and opened in 2020. The settlement is rich in enterprises, so there are car mechanics, a machinist, and carpenter stores, as well as a dozen cafes and restaurants, a bakery, a butcher's shop, a currency exchange, and an outdoor market. In addition, Busije has a football club (established in 2003) and a karate club. What the settlement lacks, however, is a cemetery.

For ten years, the residents of Grmovac had no electricity, and it was only in 2007 that they got power stations, which they financed themselves, thus solving the electrification problem. The water supply system and public lighting were installed in 2012. As the inhabitants of Grmovac confirmed, before they got electricity and a water supply, they drilled wells and pumped water for years and used generators for electric power.

In Grmovac, just like in Busije, a church was built. St. Elijah's Church (Fig. 20) was completed in 2010 and is an important institution for residents due to its cohesive social function and the fact that it organises social events. The settlement also has a playground and a sports ground. However, many other facilities are missing. There is no health station, post office, cemetery, kindergarten or school. The settlement of

Years
2012



Fig. 17.1

2022



Fig. 17.2

Fig. 17. Spatial development images for the urban structures in Grmovac, 2012–2022.

Source: *Grmovac*. 44°51'13.13"N and 20°09'17.67"E. Google Earth Pro. July 19, 2022. Fig 20.1: March 9, 2012. Fig 20.2: March 2022.



Fig. 18. A single commercial and service point in Grmovac. Author: Magdalena Reškć (June 2022).



Fig. 19. Grmovac, Nova 4 street – the main street of the settlement. Author: Magdalena Reškć (June 2022).

Dobanovci, located about 5 km away, is where the inhabitants fulfil their everyday needs, while some use the social services of the Municipality of Ugrinovci, about 10 km away. There is a bus line connecting the settlement with Belgrade city centre, but it is infrequent, running only every 40 minutes. Thus, it is not suitable for residents who commute to work, or children who travel to other settlements for kindergarten or school. According to the inhabitant we talked to, there should be more departures in the morning when people go to work and school, as well as during rush hour. Grmovac also faces the problem of unpaved roads, forcing inhabitants to walk through mud to get to their houses (Fig. 21). On the other hand, the major advantage of the settlement, which attracts people from other parts of Serbia, is that Grmovac is located near the capital and has a traffic connection with the city.



Fig. 20. The social function – Temple of the Orthodox Church in Grmovac. Author: Magdalena Reškć (June 2022).



Fig. 21. Unpaved street with extensively developed area in the settlement. Author: Magdalena Reškć (June 2022).

Culturally, the settlement of Busije is trying to preserve the identity of the regions from which the people currently living there came. There are two folk ensembles and several cultural events, the most notable being “Krajiški otkos”, which has been held

every year since 2009. The most popular restaurants in the settlement were named after the provinces from which people were displaced: Kordun, Lika and Banija. Initially, the streets were marked by numbers, but today they bear the names of prominent figures from Krajina, like scientists, painters, and writers. Unlike in Busije, the streets in Grmovac are not named after people or events, but by numbers.

Both Busije and Grmovac have social media pages, and Grmovac has a citizen's association through which the inhabitants can articulate their common needs and interests. The goals of NGO Grmovac are numerous, such as strengthening participatory and democratic values, involving residents in making decisions about local life, empowering young people to launch initiatives to improve local life, providing information and assistance to the citizens of the settlement about the problems in the settlement, offering legal and material support to all displaced people, and affirming and promoting the cultural identity and cultural heritage of Serbs originating from Croatia, Bosnia and Herzegovina, and Kosovo and Metohija (<https://www.facebook.com/grmovacbeograd/>). Busije had its own citizen's association, but it ceased to exist a few years ago. According to the secretary of this former association, the reason was the lack of financial support from the municipality and the local community that Busije belongs to.

FUTURE DEVELOPMENT

Belgrade City Council did not adopt a detailed regulation plan for Busije until 2014, the same year as for Grmovac. Almost 20 years have passed since their foundation, so the plans were regulatory, which is more evident in the details of the Busije plan. They include a designated number of inhabitants – 16,708 for Busije and 15,950 for Grmovac. The planned future population of both settlements is similar. However, analysis of the functions provided in both settlements reveals that the Busije functional program envisages more commercial functions and more public facilities.

The spatial arrangement shows an attempt to repair the previously unregulated spatial structure by locating service functions on the outskirts of existing buildings in isolation from already functioning services. In Busije, undeveloped land between the current settlement and the road between Batajnica and Ugrinovci is used (see Fig. 22). This is a natural point of gravity in this spatial arrangement. In Grmovac, these functions are located to the south of the settlement, perpendicular to the street where most of the settlement's services are located (see Fig. 23).

However, it is evident that compared to Grmovac, Busije is more developed regarding communal and social infrastructure. Eight years after adopting the detailed regulation plans of both settlements, Busije has most of the institutions that the plan mentions, while Grmovac is underdeveloped, and its citizens are forced to use the social services of other settlements nearby to satisfy their daily needs.



Fig. 22. Detailed regulation plan for Busije settlement, Municipality of Zemun (2014).

Source: План детаљне регулације за насеље Бусије, Општина Земун. (2014). Република Србија. Скупштина града Београда.



Fig. 23. Detailed regulation plan of Grmovac settlement in Zemun, Municipality of Zemun (2014).

Source: План детаљне регулације насеља Грмовац у Земуну, Општина Земун. (2014). Република Србија. Скупштина града Београда.

CONCLUSION

There are predictions in UNHCR reports that the adaptation solutions will have a dominant role in preventing the negative effects of climate change, including the deterioration of living conditions in some areas of the world. Even then, part of the population will be forced to leave their houses. In the urban planning discussion of climate refugees, the question of “when” gives way to “where” and “how” to resettle affected individuals. Forsyth and Peiser describe two scenarios: bottom-up chaotic “climate sprawl” or climate gentrification of existing cities. As part of the adaptation to climate change, one of the solutions within the framework of planning activities could be comprehensively planned resettlement.²⁹

Our research assumed that some of the population, including some communities, will be forced to leave their current places of residence. In such a scenario, we have a community whose cultural and social ties are a value in themselves. In response to the question of where and how to settle, we decided to analyze the situation of refugees in Serbia between 1991 and 2021. We compared the conditions and development of two newly established housing estates as the realisation of the new town model. We also looked at the formation of the communities within them that take responsibility for the development of their settlements. The scale of future climate migration is difficult to predict, and centralised solutions may not meet future challenges. Are bottom-up initiatives rightly seen as a threat, or can they become a solution to the problem?

What were the dynamics of the migration flows and the relocation process and their impact on the regions? The hostilities in the Balkan region resulted in successive waves of migration. The migration movements that took place in the countries of the former Yugoslavia in the 1990s allow us to observe the directions of migration and the phases of the whole process (Fig. 24).

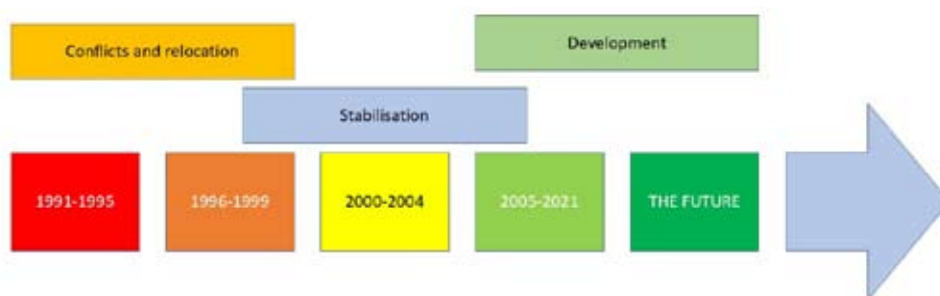


Fig. 24. Phases of the conflicts in the countries of former Yugoslavia in the context of the refugee situation and resettlement process.

²⁹ A. Forsyth, R. Peiser, *op. cit.*

The dynamics of resettling refugees, from finding shelter with families or in organised centres, to settlement, integration, and building new communities, were shown from an interdisciplinary perspective. In the settlements selected for the detailed analysis, their external location in relation to neighbouring towns played a decisive role, as did their location within the sphere of influence of the larger urban centre.

In Serbia, where the majority of people found shelter with private individuals (e.g. family and friends), the bottom-up involvement of the population in providing help during the first phase of forced migration was vital. The choice of migration direction indicates large, economically strong urban centres providing employment opportunities. This natural model of directing migration flows should be used in the development strategies of these cities. Assuming that there will be an increase in these cities' population, the city authorities should ascertain the possibilities of technical and social infrastructure or invest in increasing their capabilities. The result of unprepared and uncontrolled massive migration may be a decrease in the quality of services, increased social pressure, conflicts, overloading of technical and social infrastructure, and a short-term impact on the labour market.³⁰ Preparing this type of investment requires time and financial resources. The alternative is relocation, although this topic raises much controversy in the discussion at the European Union level, but also in discussions in individual countries. It seems reasonable to use the power of existing urban centres, their land, and technical reserves to build a compact settlement network.

What was the development process of the selected settlements? The examples presented in the article show how the connection with neighbouring units can affect the possibilities of supplying infrastructure to newly built settlements. They also show how a lack of this infrastructure may affect their development. The distance of a new housing estate (the model under consideration in an urban agglomeration) to the city centre or a neighbouring urban centre (with a fully functional program) is of key importance for the integration of the people living there. At the same time, it is important to ensure public transport connections to avoid exclusion (Fig. 26). In the Zemun commune, both the existing urbanised areas and the presented new estates (Fig. 25) increased. The spatial development of all the towns in Zemun during the period that the local authorities accepted refugees showed the possibilities of developing existing urban units and an attempt to create new ones.

Another question that remained open was the explanation of the difference in the development of both settlements. We agree with the opinion that they result from many overlapping factors: from urban conditions (e.g., location, inconvenient transport connections, connections with neighbouring towns), through differences in origin, and education, to very basic factors, e.g., the lack of infrastructure networks in

³⁰ P. Verme, K. Schuettler, *The impact of forced displacement on host communities: a review of the empirical literature in economics*, "Journal of Development Economics" 2021, vol. 150(C); G.J. Borjas, J. Monras, *The labour market consequences of refugee supply shocks*, "Economic Policy" 2017, vol. 32, p. 361–413.

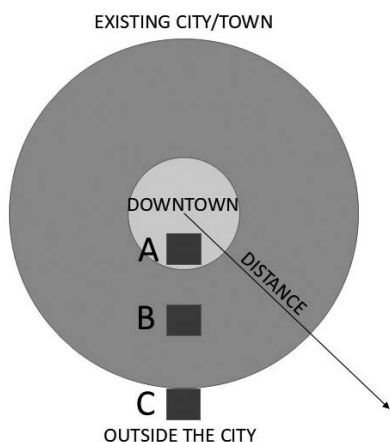


Fig. 25 Location of new settlements in the existing town area (A: city centre area, B: the area of the city, C: outside the city). Own adaptation.

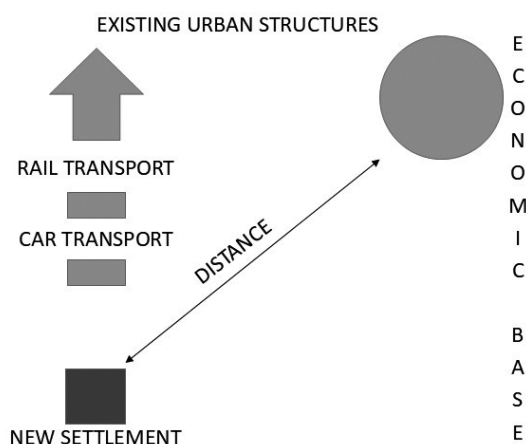


Fig. 26 The transport role in the integration of the new settlement population. Own adaptation.

settlements. Regardless of the above factors, merely selling land to people with refugee status should not end the assistance of the local government or the state. Serbia's economic situation at the time was difficult due to the sanctions imposed on the country (1992–1995), and this may explain the lack of support for its inhabitants. On the other hand, what appeared in media archives and individual conversations were testimonies to the determination of the inhabitants themselves of their mutual support and solidarity. The dominant impression is that both settlements, regardless of differences in their development, are products of the solidarity of the people who settled there. Citizen engagement in constructing the houses and other public buildings in the settlement, and their financial investment in the infrastructure, are key factors that helped build and develop Busije and Grmovac over the decades. This aspect should become a field of broader sociological research.

What can we learn from these examples to prepare for climate migration? The model, whether consciously adopted or not, in which residents were able to purchase land that is their property and on which they were able to build a house, seemed interesting to explore. Examining all the details revealed many disadvantages, such as the lack of involvement of the authorities in the construction of infrastructure, the isolation of these areas, and the difficult living conditions without basic networks. Yet, it is also a testimony to the determination of these people to rebuild their lives and build a settlement as a community. Informal settlements, in addition to the fact that they are a manifestation of the state's inability to provide part of the population with standard living conditions, are also a testament to the fact that without the means, we strive to provide ourselves with a shelter/home, regardless of the help of formal social institu-

tions. These examples show that bottom-up initiatives should not be treated as a problem but as a solution.³¹ Future solutions for climate migrants should combine top-down (e.g., the right to acquire land, the provision of infrastructure) and bottom-up solutions that take into account the migrants' needs and the opportunity to engage in (re)building a new community.

In the described cases of relocation, the authors of the article noticed an opportunity to study long-term changes and those that are reflected in urban processes. The scale of migration faced after conflicts in the 1990s, as well as the actions taken at the local authority level, show the problems and paths of legal and economic initiatives that can be implemented when relocating future climate refugees.

REFERENCES

Publications

- Affek A., Wolski J., Zachwatowicz M., Ostafin K., Radeloff V., *Effects of post-WWII forced displacements on long-term landscape dynamics in the Polish Carpathians*, "Landscape and Urban Planning" 2021, vol. 214, p. 214.
- Alexander Ch., Ishikawa S., Silverstein M., *A Pattern Language*, New York 1977, p. 109.
- Ambroso G., *Field experiences, major actors and Ppolicies. The Balkans at a cross-road: progress and challenges in finding durable solutions for refugees and displaced persons from the wars in the former Yugoslavia*, "Refugee Survey Quarterly" 2006, vol. 25, p. 141–153.
- Aravena A., Iacobelli A., *Elemental. Incremental housing and participatory design manual*, Berlin 2020, p. 17.
- Borjas G.J., Monras J., *The labour market consequences of refugee supply shocks*, "Economic Policy" 2017, vol. 32, p. 361–413.
- Dragojević M., *The Politics of social ties. Immigrants in an ethnic homeland*, London–New York 2016, p. 4.
- Eurostat, *LFS annual series. Population by sex, age, country of birth, labour status and NUTS 2 regions (LFST_R_LFSD2PWC)*, 2022, https://ec.europa.eu/eurostat/databrowser/view/LFST_R_LFSD2PWC_custom_2772068/default/table [accessed 31.05.2022].
- Forsyth A., Peiser R., *Lessons from planned resettlement and new town experiences for avoiding climate sprawl*, "Landscape and Urban Planning" 2021, no. 205.
- Grinvald M., *Problems of integration of refugees and internally displaced persons in Serbia*, 2010, Palacký University in Olomouc (unpublished thesis), <https://theses.cz/id/m9hywr/76864-676024508.pdf> [accessed 30.05.2022].
- Guzi M., Huber P., Mikula Š., *The long-term impact of the resettlement of the Sudetenland on residential migration*, "Journal of Urban Economics" 2021, no. 126.
- Hoffmann R., Šedová B., Vinke K., *Improving the evidence base: A methodological review of the quantitative climate migration literature*, "Global Environmental Change" 2021, vol. 71.
- International Organization for Migration, *Glossary on migration*, "International Migration Law" 2019, vol. 34, https://publications.iom.int/system/files/pdf/iml_34_glossary.pdf [accessed 10.07.2022].
- Kokotović V., Filipović M., *Refugees in Serbia – twenty years later*, "Journal of the Geographical Institute Jovan Cvijic SASA" 2013, vol. 63, p. 21–33.

³¹ A. Aravena, A. Iacobelli, *Elemental. Incremental housing and participatory design manual*, Berlin 2020, p. 17.

- Kovjanić A., *Refugees and intermediate displaced persons in Zemun municipality*, “Collection of Papers – Faculty of Geography at University of Belgrade” 2017, vol. 65, no. 1a, p. 367–378.
- Lukić V., Nikitović V., *Refugees from Bosnia and Herzegovina in Serbia: A study of refugee selectivity*, “International Migration” 2004, vol. 42, p. 85–110.
- Nikitović V., Lukić V., *Could refugees have a significant impact on the future demographic change of Serbia?*, “International Migration” 2010, vol. 48, p. 106–128.
- Republic of Serbia Country Housing Project, *Regional Housing Programme (RHP). Overview*, <http://regionalhousingprogramme.org/serbia/> [accessed 31.05.2022].
- Republika Srbija. Skupština grada Beograda. *Plan detaljne regulacije naselja Grmovac u Zemunu, Opština Zemun* 2014 [Република Србија. Скупштина града Београда, *План детаљне регулације насеља Грмовац у Земуну*].
- Republika Srbija. Skupština grada Beograda. *Plan detaljne regulacije za naselje Busuje, Opština Zemun* 2014 [Република Србија. Скупштина града Београда, *План детаљне регулације насеља Грмовац у Земуну*].
- Stanovništvo i домаћинства Србије према попису 2002. године*, ed. G. Penev, Beograd 2006 [Становништво и домаћинства Србије према попису 2002. године, ed. Г. Пенев, Београд 2006].
- Statistical Office of the Republic of Serbia (SORS), *2011 Census. Households and families. Households. Households according to the number of members*, 2017a, <https://data.stat.gov.rs/Home/Result/310202101?languageCode=en-US&displayMode=table> [accessed 31.05.2022].
- Stratmann A., *Approaches of Flexible Spatial Planning to Sustainable Cities* [in:] *Proceedings of REAL CORP 2020 (Shaping urban life – livable city regions for the 21st century*, Mannheim 2020, p. 57–63.
- The Commissariat for Refugees and Migration (CRRS), *Collective Centres*, 2019, <http://arhiva.kirs.gov.rs/articles/centers.php?lang=ENG#vrh1> [accessed 30.05.2022].
- The Commissariat for Refugees and Migration (CRRS), *Migration Profile of the Republic of Serbia for 2010*, 2010, https://kirs.gov.rs/media/uploads/Migracije/Publikacije/Eng/Migration_Profile_of_the_Republic_of_Serbia_for_2010.pdf [accessed 30.05.2022].
- The Commissariat for Refugees and Migration (CRRS), *Migration Profile of the Republic of Serbia for 2020*, 2020, <https://kirs.gov.rs/media/uploads/Migration%20profile%20of%20Republic%20of%20Serbia%20for%202020.pdf> [accessed 30.05.2022].
- The Commissariat for Refugees and Migration (CRRS), *Overview of the situation in formal collective centers in Serbia*, 2013, http://arhiva.kirs.gov.rs/docs/izvestaji/collective_centers_overview_2013.pdf [accessed 30.05.2022].
- The Commissariat for Refugees and Migration (CRRS), *Statistical overview of refugees and internally displaced persons by municipality for 2018*, 2019, https://kirs.gov.rs/media/uploads/Statistical_Overview_of_Refugees.pdf [accessed 31.05.2022].
- United Nations High Commissioner for Refugees (UNHCR), *Good practices. Regional Housing Programme*, 2020, <https://globalcompactrefugees.org/article/regional-housing-programme-rhp> [accessed 8.10.2024].
- United Nations High Commissioner for Refugees (UNHCR), *Regional Housing Programme*. <https://www.unhcr.org/rs/en/regional-housing-programme> [accessed 8.10.2024].
- United Nations High Commissioner for Refugees, *UNHCR Statistical Database. Table with data on Refugees*, 2022, <http://data.un.org/Data.aspx?d=UNHCR&f=indID%3aType-Ref%3abasyID%3aSRB%3borID%3aBIH%2cHRV&c=0,1,2,3,4,5,6&s=yr:desc,asyEngName:asc,oriEngName:asc&v=1> [accessed 31.05.2022].
- UN Office for the Coordination of Humanitarian Affairs (OCHA), *Country Profile and Humanitarian Assistance Fact-Sheet for the Federal Republic of Yugoslavia (excluding Kosovo) (update as of June 2001)*, 2001, https://reliefweb.int/attachments/63a85ead-092e-3a50-9b14-28d659d3ebce/8F7BD7760C5107A785256A8500740BD0-OCHA_FRY_color.pdf [accessed 31.05.2022].
- Verme P., Schuettler K., *The impact of forced displacement on host communities: a review of the empirical literature in economics*, “Journal of Development Economics” 2021, vol. 150(C).

Vujadinović S., Šabić D., Stojković S., Milinčić M., *Years of refugee life in Serbia: challenges for a new beginning: stay or return home?*, "TRAMES. A Journal of the Humanities and Social Sciences" 2011, vol. 15, p. 235–258.

The Press

Busije, najveće krajiško selo na svetu, "Novosti", 9.12.2012, <https://www.novosti.rs/vesti/naslovna/repordaze/aktuelno.293.html:409614-Busije-najvece-krajisko-selo-na-svetu> [accessed 31.05.2022].

Ерић И., *На 20 километара од Београда прије 20 година никло избјегличко насеље које и сада муче инфраструктурни проблеми*,

Izbeglištvo u Srbiji, "Vreme", 4.06.2024, <https://www.vreme.com/projekat/izbeglistvo-u-srbiji/> [accessed 31.06.2024].

Rakić N., *RTS*, 4.08.2019, *Meštani Busija posle „Oluje” sve gradili ispočetka*, 4.08.2019, <http://www.veritas.org.rs/rts-04-08-2019-mestani-busija-posle-oluje-sve-gradili-ispocetka/> [accessed 31.05.2022].

<https://ssr.org.rs/na-20-kilometara-od-beograda-prije-20-godina-niklo-izbjeglicko-naselje-koje-i-sadamu-ce-infrastukturni-problemi/> [accessed 31.05.2022].