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Cottage settlements in capital region of Ukraine

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Received: 04.11.2019 Received in revised form: 04.04.2020 Accepted: 02.05.2020 **Abstract**. In this paper, the phenomenon of suburbanization in Ukraine is considered for the first time on the example of cottage settlements of the capital region. The issue of cottage settlements has not been studied specifically in Ukrainian human geography. A review of the achievements of foreign colleagues has revealed that they are mainly being studied

as a new stage in the development of former summer cooperatives (dacha). In our opinion, it is rather one of the forms of pseudo-urbanization and imitation of Western European standards and forms of life. The cottage settlements have a higher quality of life than the surrounding villages and this causes social polarization within the urban agglomeration of the Ukrainian capital. It was revealed that the transport accessibility to Kyiv, the capital of the country, as well as the presence of natural attractors – the river, pond or forest plays an important role in their location. Conflicts have arisen over access to former public beaches and recreation areas. Currently, only residents of the respective cottage settlements have access to them, which causes social conflict with the local rural population. With the exception of four villages within the administrative boundaries of the capital, the rest are 10 to 30 kilometers away from the main motorways. The social stratification of cottage settlements has great importance. The most prestigious of them arose on the south direction 10 km from Kyiv. They are located in Koncha-Zaspa along the Dnieper river. Here their greatest concentration is revealed. Cottage settlements in the Koncha Zaspa area have become the main residence of the richest citizens of Ukraine. This led to the complete transformation of this settlement into a network of gated communities. Thus, a new structure of population distribution in the city agglomeration is gradually forming. It is presented on the map of accommodation of cottage settlements among traditional urban and rural settlements.

Keywords: suburbanization, cottage settlement, Kyiv, Ukraine.

Котеджні поселення столичної області України

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Анотація. У даній роботі феномен субурбанізації в Україні вперше розглядається на прикладі котеджних поселень столичного регіону. Питання котеджних поселень не вивчалось спеціально в український суспільній географії. Огляд напрацювань іноземних колег дозволив встановити, що переважно їх вивчають як новий етап у розвитку колишніх дачних кооперативів. На нашу думку це швидше одна з форм псевдоурбанізації та імітації західноєвропейских стандартів і форм життя. Котеджні поселення мають вищий рівень якості життя, аніж прилеглі села і це зумовлює соціальну полярізацію у межах міської агломерації столиці України. Виявлено, що важливу роль в їхньому розташуванні відіграє транспортна доступність до Києва, столиці країни, а також наявність природних атракторів - річки, іншої природної водойми або лісу. Виникли конфлікти щодо можливості доступу до колишніх громадських пляжів та місць відпочинку. Нині переважно доступ до них мають лише мешканці відповідних котеджних поселень, що зумовлює соціальний конфлікт з місцевим сільським населенням. За винятком чотирьох котеджних поселень у межах адміністративних кордонів столиці, решта – знаходиться на відстані від 10 до 30 кілометрів від головних автомагістралей. Велике значення має соціальне розшарування котеджних поселень. Найпрестижніші з них виникли на південному напрямку в 10 км від Києва. Вони розташовані у місцевості Конча-Заспі вздовж Дніпра. Тут виявляється їх найбільша концентрація. Котеджні поселення у місцевості Конча-Заспа стали нині основним місцем проживання найбагатіших громадян України. Це призвело до повної трансформації цього селища у мережу закритих спільнот. Таким чином, поступово формується нова структура розподілу населення у міській агломерації. Вона представлена на карті розміщення котеджних поселень серед традиційних міських і сільських поселень.

Ключові слова: субурбанізація, котеджне поселення, Київ, Україна

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Introduction. Suburbanization of post-Soviet countries is a new phenomenon of urban development. In a number of countries in Eastern Europe, such studies are quite active. A debatable question is whether this suburbanization is a manifestation of the specific features of post-socialist transformations or is it a universal phenomenon of urbanization? To study this, it is necessary to analyze the current trends in the development of not only post-socialist cities, but also cities in other countries that are experiencing a period of rapid development of suburbanization and changes in the territory adjacent to the large city.

Theoretical background. Suburbanisation development in socialist and post-socialist cities. A detailed overview of the different views on this issue is provided in (Hesse, 2015; Hirt, 2007; Kovacs, Farkas, Egedy, Kondor, Szabó, Lennert, Baka, Kohán, 2019; Kurek, Wojtowicz, Galka, 2015; Nefeedova & Savchuk, 2014; Makhrova, 2015; Leetmaa, Brade, Anniste, Nuga, 2012; Piron, Mesclier, Lortic, 2015; Reux, 2018). Therefore, we focus on the Ukrainian specificity of the suburbanization development:

- First, Ukraine is among the countries of the world with a steadily declining population and a negative natural balance.
- Secondly, a large part of the able-bodied population regularly travels to work in other European countries.
- Thirdly, in the country there are still old town-planning norms and rules that do not take into account the new economic conditions of the country's development.
- Fourthly, in Ukraine there is still no full-fledged land market and most of the land fund of settlements still belongs to local and state authorities. Much of them do not have clear physical boundaries. Only homestead plots of land that were privatized by the population have clear physical boundaries and are included in the state register of real estate objects.
- Fifthly, the country has a difficult economic situation, which led to a sharp restriction on the number of solvent segments of the population that can purchase or build their own homes for their own or borrowed funds. All this leads to a specific manifestation of suburbanization.

Existing types of individual development in the suburbs of large cities are very diverse – from gated communities and villas, surrounded by a park of the richest Ukrainian citizens to modest small houses on small plots of former dachas. In this case, they can coexist with each other. If the rich stratums of the population literally produce space, erecting for themselves copies of luxury villas of Western

European strongest, then representatives of the middle and lower middle classes include only new elements of the global style of the pavilion building of the suburbs of Berlin, London or Paris, into new or reconstructed houses. Mostly they introduce technical innovations – the use of aerated concrete, metal roofing, the makings of lawns and flower beds. It is important to note that if the rich are free in the location of their country estates, then most of the middle and poor stratums of society mainly transform former dacha cooperatives and partly existing rural residential development in the suburbs into the pavilion building. This is largely due to the need for guaranteed access to everyday services, such as the purchase of food. This directly depends on the condition of the transport and social infrastructure and its accessibility. A separate group of suburbia in the country consists of a "second dwelling", intended for recreation at sea or in the mountains. In this case, they really live only in the period of rest, whereas they mostly live all year round in the cottage settlements. This, in our opinion, is the reproduction of a typical model of the vital activity of the middle class of developed countries.

In Ukraine, from the perspective of geography, suburbanization has not been studied, with the exception of the research (Brade & Savchuk, 2012; Nefedova & Savchuk, 2014). This is largely due to the fact that there is no official suburbanization statistics, and the last census was carried out in 2001. Thus, to study modern forms of resettlement, it is necessary to collect and process a large number of primary data on each developer and each cottage settlement.

Methodology. In the absence of official statistics on cottage settlements, we used materials of free access from the Internet, from official websites of real estate agencies, building companies, and analytical centers. The basis of this study is the database created by the author on cottage settlements based on primary information posted in the Internet.

The goal of the study is to identify the main geographical patterns of housing cottage settlements within the city of Kyiv and the Kyiv region (the capital region of Ukraine). The task is to reveal the spatial patterns of location and the features of the formation of cottage settlements in the capital region of Ukraine. Results and discussion. The development of cottage settlements in Ukraine. The first cottage settlement "Zoloti Vorota" was built in 1993 in the immediate vicinity of the government dacha complex in Koncha Zaspa. It became a kind of standard of gated communities in Ukraine. In 2000, the development of the area of the Great Dam, which separates the Kozinka river from the Dnieper river

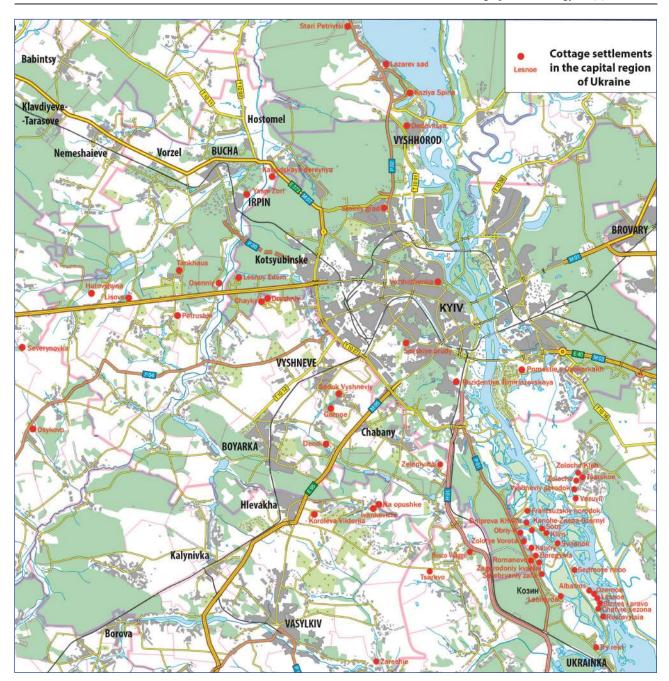


Fig. 1. Cottage settlements in the capital region of Ukraine (as for 2018.01.01) Compiled according to official websites of developer companies and realtor data bases. Base of mape is *DNVP Kartographia*.

- "Svitanok" cottage settlement (the former dacha cooperative of the Cabinet of Ministers of Ukraine). Now there are a number of cottage settlements built on washed sand (Figure 1). They created all the necessary infrastructure for a comfortable stay. In many respects this area resembles gated communities on the Rublyovskoye highway (Moscow region of Russia). Now cottage villages offer all kinds of suburban real estate: townhouses, duplexes, cottages, villas, residences.

There is a spontaneous territorial-social segregation of cottage settlements between different social classes. The basis of this process is the price of the plot with the cottage. As can be seen from Table 1, mostly cottage villages are present in the regions where the richest citizens of the state live. In addition, the effect of the sea has great importance. The second and third place in the country by the number of cottage towns are occupied by regions directly adjacent to the Black Sea (Table 2). In this case, the effect of capitalness has a direct effect on the hyperconcentration of cottage communities in the Kyiv region (see Figure 1). In this region, more than half of all houses of cottage settlements are concentrated; of the total land area under them and their number in the country (see Table 1). Based on these data, we believe that a

Table 1. The main characteristics of the constructed, under construction and projected cottage settlements in the regions of Ukraine (2018.01.01)

Region	Cottage settlements			
	Number of houses	Area, ha	Total number of settlements	
Vinnytsia region	40	12,00	1	
Dnipropetrovsk region	1607	337,00	4	
Zhytomyr region	33	5,00	1	
Zaporizhzhia region	184	25,60	2	
Ivano-Frankivsk region	143	9,30	3	
Kyiv region	12407	3535,48	115	
Kirovohrad region	18	4,50	1	
Lviv region	100	4,60	3	
Mykolaiv region	22	8,00	1	
Odesa region	1428	153,26	18	
Poltava region	16	1,60	1	
Ternopil region	234	7,50	1	
Kharkiv region	20	5,00	1	
Chernihiv region	90	46,00	1	
City of Kyiv	314	40,44	9	

Compiled according to official websites of developer companies and realtor data bases.

detailed study of the cottage settlements proper in the capital region of Ukraine will reveal common trends typical for the whole country.

It should be noted that most of the cottage communities are built outside the administrative boundaries of cities (see Tables 2 and 3). These settlements are built only in four administrative centers of the regions of the country (see Table 2). Kyiv occupies the second place by their number (see Table 2). The impossibility of constructing a large cottage settlement in the capital of Ukraine forces developers to bring under the administrative units of the Kyiv region directly adjacent to the city (Figure 1). Under the existing cottage development in the capital of Ukraine, only 0.05% of the total area of the city is occupied.

All built up cottage settlements in Kyiv are located on its periphery (Figure 1). They are located in the most comfortable, from the point of view of ecology and transport accessibility, parts of the city. With the exception of the largest in terms of the number of houses in the village – "Sovski stavky", the rest is dominated by houses with an area of 300 m² and more (analyzed by (Cottage villages, cottage townships)).

The development of cottage settlements in the most administrative borders of the capital of Ukraine is largely constrained by the existing master plan for the development of the city of Kyiv, in which their construction is not envisaged. It is for this reason that they are created in the areas of private development, as well as in the forest-park zone (see Figure 1). It should be noted that similar problems exist in other large cities of Ukraine.

This leads to numerous scandals in the sphere of land use in the main cities of the country. Indicative in this regard is the scandal with a free allocation on March 16, 2006 of 23.45 hectares of land on the territory of the Pushcha-Vodytsia reserve for individual construction of the cooperative "Society of Individual Builders "Chornobylets-2005" (44 Bogatyrska St., Pushcha-Vodytsia). For this, the land plots were transferred from the reserve to the homestead dwelling area with the right to privatization. This became possible due to the fact that the majority of the members of this cooperative are responsible officials of the Kyiv city state administration or their relatives (Return of the noble farmers). The situation is similar to the landscape reserve of local significance "Zhukiv Ostriv" on the eponymous island of the Dnieper river (Golosiivskyi district of Kyiv). The Kyiv City Council, by decision No. 162/26 of 2007.08.22, назвиѕресіfied the boundaries of the reserve, that its area was reduced from 1,794 to 196 hectares, transferring most of its territory for individual housing construction to various organizations (Correspondent...; On Building...).

Deficiency of free land, suitable for residential development, is forcing the use the former residential areas for cottage development. So, for example, the elite residential complex «Vozdvyzhenka» in the historical area of Honchary is designed as a partnership of owners and has its own necessary infrastructure connected to city communications. This gated community is located at the bottom of Honchary and Kozhemiaky tracts, surrounded by steep hills. Access to it is possible only on a secondary road from the Khrestovozdvyzhenska Church of the Ukrainian Orthodox Church (Moscow Patriarchate). This gated community arose on the site of the private quarter of potters that had been demolished for the Olympics in 1981. There is a gated mini-settlement of residential buildings with 3-4 floors and various shops, boutiques and service companies. The prestige of this closed community is due to its unique location – in the heart of the historic core of the city near the Starokyivska hill.

The number of cottage settlements in the Kyiv region exceeds their total number in other regions of the country (see Table 1). This superconcentration is

construction. In fact, construction is completed only in the settlements that are located in areas directly adjacent to the capital. Really populated such recently handed cottage settlements as: "Alpiiska derevnia", "Zelenyi hayi", "Zolotye Vorota", "Kantry", "Romanovo", "Sosnovyi Bir". They are mostly located in the Obukhiv district of the city agglomeration (see Figure 1).

In the Kyiv region, cottage settlements are located in administrative areas directly adjacent to the capital of Ukraine (see Figure 1). In the western direction, adjacent to them are cottage villages located in the Makariv and Fastiv districts (see Figure 1). Virtually all of them are in the zone of intensive ties in Kyiv as the center of the local settlement system. This explains the linear dependence of the rank of the cottage community on its distance from the capital of Ukraine (Figure 2), expressed by the formula:

$$y = 0.7667x + 1.9947$$

where y – rank of a cottage settlement; x – the distance on which the cottage settlement is located from Kyiv (km). The magnitude of the reliability of the approximation is $R^2=0.95$.

The most closely to the capital of Ukraine (up to 5 km from the city) are three cottage settlements

Table 2. The main characteristics of the constructed, under construction and projected cottage townships in the regional centers of Ukraine (2018.01.01)

City council	Area¹, ha	Cottage settlements		
		Number of houses	Area, ha	Total number of settlements
Vinnytsia	7000	40	12,00	1
Kyiv	83600	314	40,44	9
Odesa	16300	846	63,23	11
Poltava	7700	16	1,60	1

Compiled according to official websites of developer companies and realtor data bases.

caused by the effect of capitalness, since most of the cottage towns within this region are concentrated in the immediate zone of influence of Kyiv (Figure 1). According to our calculations, 140 cottage settlements are located in it and there are 12 more such settlements in the country's capital (see Figure 1). In the region, according to our data, 30 of them were built and put into operation, while within Kyiv there are only four such settlements (see Figure 1). In many respects this is due to the lack of necessary land plots for building in its administrative limits and the high cost of land.

As a result of political turmoil and military actions in part of the territory of Ukraine, most of the plans for the construction of new cottage settlements planned for the implementation of the plans have not begun in the administrative boundaries of Kyiv-Sviatoshyn (Hatne, Dmytrivka and Petropavlivska Borshchahivka villages), one in Obukhiv district (Lisnyky village) and one in Hostomel town subordinate Irpin City Council (see Figure 1). All of them are located outside the main roads near the forest.

All built cottage settlements are located at a distance of 30 km from Kiev. More than half of them are located in the range from 10 to 19 km from the city (mainly in Kozyn village). This settlement, located in the historic area of Koncha-Zaspa, is the leader in the Kyiv region in terms of the number of cottage settlements built (38.46% of all built cottage settlements in the region). It was the start point of such construction in the country.

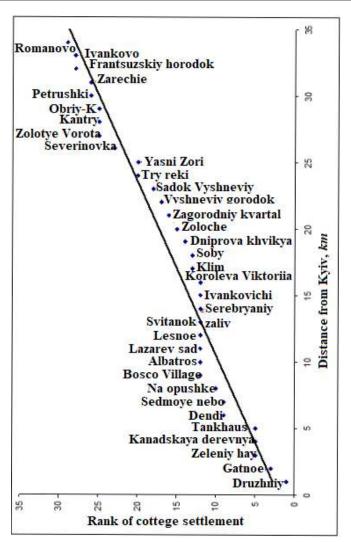


Fig. 2. The remoteness of the constructed cottage settlements in the Kyiv region from the capital of Ukraine by road to the checkpoint (by 2018.01.01). Compiled according to official websites of developer companies and realtor data bases.

The area under the cottage settlements sharply increases in the range from 12 to 18 km from Kyiv, which is caused by the location of most villages of this type in Kozyn village (Figure 2). The area of the house and the local area is also maximized in cottage settlements located within the administrative boundaries of the given locality. This is less apparent when comparing the number of houses in a cottage community and its distance from the capital of Ukraine. At the same time, their number drops sharply when they reach the 23rd km from the capital (the maximum value falls on "Severinovka" – 310 houses).

The root cause of the boom in the cottage construction in Koncha-Zaspa area is the placement of a government suburban town in which all the city infrastructure is laid and a road to Kyiv has been built. An important role is played by the picturesque local landscape of pine forests along the coasts of various hydrographic objects on the sandy coast with wonderful views on the Dnieper river. It was

the contrast of land and water that was the basis for choosing the location for the construction of the most expensive cottage settlements ("Zolotye Vorota", "Leonardo", "Soby", etc.). All of them have the status of gated communities and do not particularly advertise their activities. They do not have their own official sites, and information about the device of the village can be found only from ads about selling a house in it or in the analytical materials of real estate agencies.

In Kozin village, 34.89% of all houses are occupied, occupying 47.19% of the total area under the built cottage settlements of the Kyiv region (see fig. 1). In fact, in the area of the Great Dam, their maximum concentration is observed in the Kyiv region (see Figure 1). Such a hyperconcentration of cottage settlements led to the fact that almost all locals work in the village of Kozyn, serving as maintenance personnel in them and at the expense of the owners of elite cottages in gated communities in the village, modern roads have been built, streets are regularly

cleaned and private security is introduced. At the same time, constant deposition of sand from the river. The Dnieper in the swampy floodplain of this main river of Ukraine leads to a sharp change in the local natural ecosystem (Ecology sets in).

In the immediate vicinity of Kozyn village there are cottage villages in the administrative boundaries of Velyki Dmytrovychi and Pliuty villages, which are inferior to it in their appeal. They do not have access to the Dnieper river, which significantly reduces the interest of potential buyers of cottages in these settlements.

It should be noted that on the left bank there are only three built up cottage villages – "Vyshneviy gorodok" and "Zoloche" in the administrative limits of Vyshenky village and "Ivankovo" in Ivankiv village, Borispol district. The first two of them are on the opposite side of the Kozyn shore of the Kanivskyi Reservoir (Figure 1). In fact, their construction is an attempt to create a second Koncha-Zaspa in the area of the floodplain of the Dnieper river with numerous oxbows.

Conclusion. The analysis of the location of cottage settlements in Kyiv and in the Kyiv region allowed us to come to such conclusions:

The Kyiv region is the leader in Ukraine in terms of the number of cottage settlements;

The main part of them was erected within the Kyiv city agglomeration in the territory of the Kyiv region;

All built up cottage settlements are located at the distance of 30 km from Kyiv;

The largest number of built up cottage settlements is concentrated in the area of the Great Dam between Koncha-Zaspa and Kozyn in the interval from 12 to 18 km from Kyiv;

Political upheavals and fighting led to a sharp reduction in the volume of construction of cottage settlements in the Kyiv region.

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