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#### THE TOURIST INFRASTRUCTURE OF LOCAL COMMUNITIES IN UKRAINE: CURRENT STATE AND IMPACT ON LOCAL ECONOMIC DEVELOPMENT

**Purpose.** The purpose of our work is to investigate the presence of tourist infrastructure elements to ensure a comfortable stay of tourists in tourist destinations, which can become a driver of the development of local communities, especially in rural areas; investigation of financial support for tourism development by local governments. A derivative task of our study is to identify challenges and prospects of tourism infrastructure in tourist destinations after the pandemic.

**Methodology / approach.** The theoretical basis of the study is the fundamental principles of economics and the scientific research of Ukrainian and foreign scientists. For the analysis, we used data from the official web resources of local governments of Ukrainian local communities with tourist potential, information from the Booking.com and the Internet about tourist facilities and events in local communities. During the research we used the following methods: analytical (to select tourist destinations for analysis, their grouping and analysis of their tourist infrastructure); comparison (to compare the tourist infrastructure in the local communities that were the object of our study); synthesis (to conclude the general state of tourist infrastructure in tourist destinations and prospects for its development in the future), graphic (for visualization of study results).

**Results.** The study highlights five elements of tourist infrastructure of the most popular tourist destinations in Ukraine: travel services, transportation services, accommodation services for temporary residence, catering services, services for the organization of recreation and entertainment. We analysed the state of functioning of the tourist infrastructure in the tourist destinations of Ukraine before the introduction of lockdown. The results of the analysis showed that only four out of five elements of the tourist infrastructure were at the proper level. We described the challenges of the tourism industry, which had arisen as a result of the epidemic. In conclusion, we considered the prospects for the attitude and development of tourist infrastructure in the local communities of Ukraine after the pandemic.

**Originality** / scientific novelty. During the study for the first time, we selected the most popular tourist destinations in Ukraine which in 2019 received the highest revenues from tourist tax as an indicator of the official stay of tourists, we grouped them according to their dominant type of tourism and researched their tourist infrastructure. We compared the revenues from the tourist tax with the expenditures of local communities for the development of tourism and found that local communities received much more money from the tourist tax than they had spent on the development and promotion of tourism.

**Practical value / implications.** We show the characteristic features of the development of the tourism sector in the post-quarantine period, which can be used by local governments and businesses of tourist destinations when planning the development of tourist infrastructure. **Key words:** local community, tourist destination, tourist infrastructure, pandemic.

**Introduction and review of literature.** Decentralization reform in Ukraine has become a kind of impetus to find the internal potential to ensure the capacity of local communities and their future development. Tourism is one of the drivers that can provide this. The functioning of tourism in cities and villages contributes to the job creation in tourism and in related sectors of the economy (trade, transport, etc.). Ultimately, this has a positive effect on the formation of revenues of residents of the local community and the local budget. However, the main prerequisite to transform tourism into a real development driver of the local community is a well-established tourist infrastructure. Therefore, the assessment of the ability of elements of tourist infrastructure to meet the needs of tourists requires in-depth analysis. The lockdown to prevent the spread of the COVID-19 pandemic has exacerbated this issue. As a result of its introduction, the activity in tourism fell by more than a third.

Tourism in general and its infrastructure, in particular, are the subject of research by many foreign and Ukrainian scientists and practitioners. L. Sechi, R. Moscarelli and P. Pileri [1], B. Liu-Lastres, D. Mariska, X. Tan and T. Ying [2] considered tourism as one of the main drivers that can stop processes depopulation of areas and improve destination livelihoods. C. Mertzanis marginalised and A. Papastathopoulos [3] studied the impact of the pandemic on tourist destinations and the decision of tourists to visit them. A. Pierscieniak, M. Grzebyk [4] determined key macro-factors for tourism development. P. Keerthi and M. Thyagaraju [5], H. Lin, C. Hsu, C. Liu, B. Cheng, C. Wang, J. Liu and S. Jhang [6], M. Ruiz-Pérez and J. M. Seguí-Pons [7], S. Kanwal, M. I. Rasheed, A. H. Pitafi, A. Pitafi and M. Ren [8], E. M. Mnguni, O. Mtapuri and A. Giampiccoli [9], S. Fatimah and S. K. Ayu [10] observed the development of certain elements of tourist infrastructure (transport, communications, attractiveness, etc.) in urban and rural communities. C. Dolezal and P. Burns [11], P. Kotler, J. Bowen, J. Makens and S. Baloglu [12], M. Westcott [13], and others pay more attention to the marketing aspects of the functioning of tourism enterprises and management activities aimed at promoting tourist destinations.

Among Ukrainian researchers, M. Barna [14], I. Blahun [15], S. Grabovenska [16], N. Korzh [17], I. Storonyanska [18; 19], V. Yarovy [20] and others highlighted in their works the role of tourism in ensuring the development of the economy of administrative-territorial units. In particular, scientists studied the development trends of the tourism market of Ukraine, the specifics of mechanisms for regulating and managing the potential of the tourism sector of Ukraine (M. Barna and I. Tuchkovskaya [14]), positioning tourist areas based on factor analysis of the main components of local markets of tourism services (S. Grabovenska [16]), considered administration aspects to the management of tourist destinations (N. Korzh and

D. Basyuk [17]), characterized the state, problems, and prospects of the enterprises of the tourist sphere (I. S. Blahun and I. M. Honak [15], I. Storonyanska, K. Patytska, I. Hrynchyshyn [19], V. Yarovyi [20]), etc.

However, issues of completeness and functional suitability of tourist infrastructure in local communities in the conditions before the introduction of lockdown and after its completion require thorough research, despite the considerable work of scientists in the field of tourism. Therefore, the topic of our study is relevant and timely.

**The purpose of the article** is to investigate the presence of tourist infrastructure elements to ensure a comfortable stay of tourists in tourist destinations, which can become a driver of the development of local communities, especially in rural areas; investigation of financial support for tourism development by local governments. A derivative task of our study is to identify challenges and prospects of tourism infrastructure in tourist destinations after the pandemic.

**Results and discussion.** We consider cities and villages with tourist potential as an integral tourist destination. It allows a comprehensive assessment of the functioning of tourist infrastructure in local communities.

For our study, a "tourist destination" means an attractive area for tourists to visit with the available tourist product and tourism infrastructure, which can ensure the most comfortable stay of tourists [17; 20]. Therefore, the local community (or individual settlements within it), which focuses on the development of tourism, must have the appropriate infrastructure to fully meet the needs of tourists in travel, accommodation, food, entertainment, communication, and more.

Tourist infrastructure includes the following elements [13]: 1) travel services; 2) transportation organization services; 3) accommodation services for temporary residence; 4) catering services; 5) services for the organization of recreation and entertainment.

Entities that provide travel services include tour operators and agencies, travel information centres, reservation services, etc. This group also includes entities that do not directly provide travel services, but whose activities encourage people to make travel decisions (advertising agencies, travel commentators and bloggers, etc.).

The group of tourism infrastructure companies that provide services for the organization transportation form enterprises specializing in air, rail, sea, bus transportation. Besides, this group also includes individuals who transport tourists by road transport (mostly within a tourist destination), car rental companies, taxis, etc.

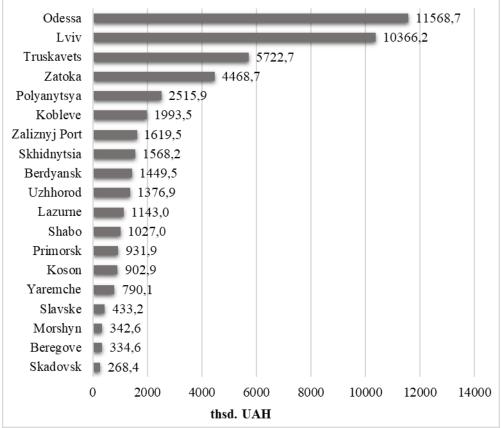
Hotels, motels, hostels, campsites, recreation centres, health camps, boarding houses, private estates provide accommodation services to tourists.

Restaurants, cafes, fast food, and similar enterprises form a group of enterprises that provide food to tourists.

Responsible for the organization of recreation and entertainment of tourists are museums, entertainment centres, clubs, theme parks, attractions, companies that provide services for the organization of skiing, water entertainment, cultural and educational tourism etc. This group also includes services in sports tourism, event

tourism and other types of tourism that contribute to the influx of tourists to the tourist destination, such as festivals, concerts, exhibitions, fairs, sports competitions, etc. [13]. The organization of festivals, concerts, fairs depends on the efforts of the local community. In other words, on the efforts of local governments and community residents.

For the purposes of our study, we got acquainted with the popular among tourists in Ukraine recreation areas [21]. The object of our study is the tourist infrastructure of the most popular tourist destinations in Ukraine. Among them, we selected for analysis those which in 2019 received the highest revenues from their tourist tax (as an indicator of the official stay of tourists) (Fig. 1).



#### Fig. 1. Tourist tax paid to the local budgets of some local communities in 2019

*Source:* compiled by the authors based on the analysis of data from web portal "Open budget".

These include (according to their dominant areas of tourism):

1) balneological resorts: towns Truskavets (further in the text – Truskavets) and Morshyn (Morshyn), urban village Skhidnytsia (Skhidnytsia) (all are located in Lviv region);

2) tourist destination with a focus on mountain tourism: village Polyanytsya (Polyanytsya) and town Yaremche (Yaremche) in Ivano-Frankivsk region, and urban village Slavske (Slavske) in Lviv region;

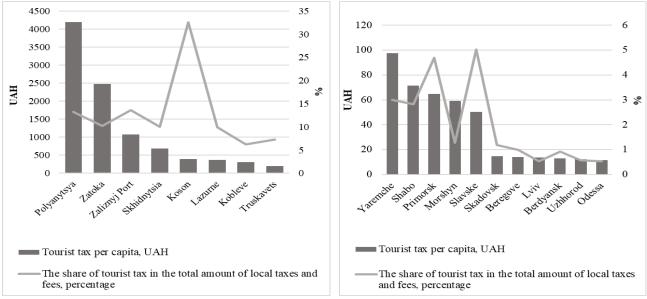
3) tourist destination with existing thermal springs: town Beregove (Beregove) and village Koson (Koson) in Zakarpattia region;

4) tourist destination with a focus on maritime recreation: village Shabo (Shabo)

and urban village Zatoka (Zatoka) in Odessa region, Berdyansk city (Berdyansk) and town Primorsk (Primorsk) in Zaporizhia region, town Kobleve (Kobleve) in Mykolaiv region, village Zaliznyj Port (Zaliznyj Port), town Skadovsk (Skadovsk) and urban village Lazurne (Lazurne) in Kherson region;

5) tourist destination with a focus on cultural and historical tourism: Lviv city (Lviv), Odessa city (Odessa) and Uzhhorod city (Uzhhorod).

Significantly, almost every second of the selected local communities are located in rural areas. Including: urban village Skhidnytsia, village Polyanytsya, urban village Slavske, village Koson, village Shabo, urban village Zatoka, village Zaliznyj Port and urban village Lazurne. Tourism is significant to ensure the socio-economic development of the vast majority of local communities in rural areas. Evidence of this is the data on the receipt of local budgets from the tourist tax (Fig. 2). Thus, the share of a tourist tax in 2019 in Koson was 32.6 % of the total amount of local taxes and fees, in Polyanytsya – 13.2 %, in Zalizny Port – 13.6 %, in Zatoka, Skhidnytsia and Lazurne – 10.0 % each. In six of the eight local communities in the rural area we surveyed (urban village Skhidnytsia, village Polyanytsya, village Koson, urban village Zatoka, village Zaliznyj Port and urban village Lazurne), the annual amount of tourist tax revenue per capita significantly exceeded 100 UAH. Therefore, we can argue that the development of the tourist's infrastructure of the local community, especially in rural areas, is an essential part of the growth of the community itself.



a) tourist tax over 100 UAH per capita b) tourist tax less 100 UAH per capita Fig. 2. The value of the tourist tax for the local community in 2019

*Source:* compiled by the authors based on the analysis of data from the web portal "Open budget" and State Statistics Service of Ukraine.

Tour operators and travel agencies are the main actors in the tourism infrastructure that organize tourist travel. However, the analysis of the data of the license register of business entities of tour operators [22] showed that almost all tour operators and most travel agencies-legal entities were concentrated in regional centres. Among the tourist destinations we researched, tour operators were present

only in some of them. Among them: 2 legal entities of tour operators operated in Berehove, 3 in Berdyansk, 7 in Yaremche, 1 in Polyanytsya, 16 in Truskavets, 2 in Skhidnytsia, and 1 in Skadovsk. The main reason is the significant number of potential consumers of tourist services in large cities, especially in regional centers. For example, 65 % of all tour operators registered within the region were concentrated in Uzhhorod, 93 % in Zaporizhia, 52 % in Ivano-Frankivsk, 80 % in Lviv, 83 % in Mykolayiv, 93 % in Odesa, 3 % in Odesa, and 73 % in Kherson. In some of the studied tourist destinations, there were travel agencies that worked closely with tour operators from other cities, as well as independently organized excursions for short distances (within the tourist destination). For example, in Yaremche and its environs, there were 12 tourist entities, in Berdyansk – 35.

Analysis of strategies and programs of socio-economic development and tourism development in local communities indicates that the presence of tour operators and travel agencies in tourist destinations may not have a significant impact on the development of tourism within the community. The reason is that these tourism entities mainly focus on outbound tourism. At the heart of their actions is the most inadequate infrastructure quality in tourist destinations within the country (for example, insufficient provision of beaches with beach infrastructure: showers, toilets, changing cabins, etc.), and the mismatch of price and quality of tourist products.

One of the major entities that provide travel services in tourist destinations – especially for unorganized tourists – are tourist information centres. They carry out advertising and information activities, cooperate with transport companies, initiate and develop new excursion and tourist products, improve existing tourist routes, provide excursion services, interact with museums, travel agencies and more. However, in the tourist destinations we studied, tourist information centres were only in every second of the 19 tourist destinations (in Truskavets, Skhidnytsia, Polyanytsya, Yaremche, Slavske, Berehove, Zatoka, Lviv, Odessa, Uzhhorod). Other tourist destinations only plan to create tourist information centres in their tourism development strategies. Among them are Kobleve, Primorsk, Shabo, and Morshyn.

Inside the second component of the tourism infrastructure (the organization of transportation services), we can identify rail transport and own transport as the most popular modes of transport for travel. Less often, tourists use bus transportation to get to remote tourist destinations (at a distance of more than 500 km). Air transport domestic tourists do practically not use because the cost of air tickets is much higher, then in other modes of transportation.

The popularity of long-distance passenger rail transport among tourists is due to the extensive network of railways of the Ukrainian railway. The total length of railways in Ukraine – over 22 thousand kilometres (the third-longest in Europe)) [23].

The analysis of transport infrastructure that provides passenger transportation (railway stations, bus stations, airports) showed that among the tourist destinations we studied, railway stations were in most, but not in all, tourist destinations (Table 1). The main reason for the lack of some transport infrastructure elements in tourist

destinations is their geographical location: mountainous terrain, sea coast, a long distance from national and regional railways. For example, in Skhidnytsia, Polyanytsya, Primorsk, Kobleve, Zalizny Port, Skadovsk, Lazurne and Koson – there is no railway connection. However, well-established intercity bus transportation from regional centres and cities of regional importance fully compensates for the lack of rail connections. Notably, this is typical for tourist destinations that focus on sea recreation. *Table 1* 

Indicator	Truskavets	Skhidnytsia	Morshyn	Polyanytsya	Yaremche	Slavske	Beregove	Koson	Shabo	Zatoka	Berdyansk	Primorsk	Kobleve	Zaliznyj Port	Skadovsk	Lazurne	Lviv	Odessa	Uzhhorod
Railway station	+	I	+	-	+	+	+	-	+	+	+	-	-	I	-	-	+	+	+
Bus station	+	+	+	+	+	+	+	-	+	+	+	+	+	+	+	+	+	+	+
Airport	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	+	+	+

#### **Transport infrastructure of tourist destinations**

*Source:* compiled by the authors on the basis on search resources of the Internet about the availability of railway stations, bus stations, airports in the studied local communities.

The tourist destination orientation to a specific type of tourism affects the number of passengers at railway stations. For example, the highest quantity of passengers at railway stations in tourist destinations focused on sea holidays, occurs in the second half of July – early September. Instead, in tourist destinations focused on mountain tourism and cultural and historical tourism – it is the summer months and December (the period of New Year's holidays) [24].

Almost all tourist destinations we explored (except the Koson village) had bus stations. They facilitate the movement of tourists over long distances and allow better organization of travel. Among all the studied tourist destinations the worst situation with the movement of tourists was to the Koson village. Tourists could get to the central tourist resource of the local community – recreation complex "Kosino" (thermal pools and water park) – only by vehicle, or rail/bus to Berehove, after then by taxi to "Kosino". So, it complicates travel and makes it more expensive.

In general, we can say that Ukraine has a well-established system of transporting tourists to tourist destinations. Evidence of this, in addition to the presence in most of the tourist destinations we studied, all types of long-distance transport (except for air transport), is also an increase in passenger transport during peak periods. For example, Ukrzaliznytsia annually in the summer increases the number of intercity trains in the directions of Odessa, Kherson, Berdyansk and Genichesk (in 2017 – by 13 trains, in 2018 and 2019 – by 23 trains) [23].

Hotels, motels, campsites, recreation centres, health camps, private estates provided services of the third component of the tourist infrastructure (accommodation for temporary accommodation of tourists). There are only fragmentary data on the collective accommodation of local communities, which we studied. For example, in Berdyansk in 2017, there were 22 public accommodation establishments (12.8 thousand people visited it), in Primorsk – 19 establishments (33.3 thousand

people were in them), in Koblevo – 60 establishments (48.3 thousand people temporary resided there), in Lazurne – 31 establishments (18.6 thousand people visited it). Given that unorganized tourists mostly live in private estates, to assess the available accommodation in the studied tourist destinations and the cost of living in them, we used one of the world's largest online booking resource, which accommodation offers nearly 30 million, – Booking.com [25]. The criteria for our selection of housing were:

- period of stay - 7 nights (from August 24 to August 31, 2020). Seven nights is the minimum rest period, and the end of August is less busy with tourists, which allows us to find more housing;

– a group of tourists – two people, will allow us to objectively choose a temporary place of residence and estimate its cost (from accommodations in a dormitory or a separate room in a multi-room apartment to a multi-room apartment or a whole house designed for more people);

- during the analysis of the price of accommodation, we did not exclude the tourist tax from it. In most cases, the tourist tax does not have a significant impact on the cost of accommodation.

The highest offer of apartments for temporary tourists among the tourist destinations we studied on Booking.com was in large cities of the group of cultural and historical tourism: in Odessa (1483 apartments) and Lviv (753) (Table 2).

Table 2

Other accommodation on Booking.com in some tourist destinations										
Tourist	Number of apartments	including by class,								
destination	offers, units	3 stars	4 stars	5 stars	without stars					
Odessa	1483	435	157	16	875					
Lviv	753	484	23	4	242					
Shabo	312	35	1	1	275					
Zatoka	208	22	-	-	186					
Yaremche	151	17	5	-	129					
Berdyansk	128	12		-	116					
Truskavets	102	34	3	2	63					
Uzhhorod	81	18	4	_	59					
Slavske	55	5	2	_	48					
Zaliznyj Port	51	2	-	-	49					
Skhidnytsia	34	4	3	-	27					
Beregove	32	11	-	_	21					
Kobleve	31	4	1	-	26					
Polyanytsya	30	7	1	-	22					
Skadovsk	28	2	1	-	25					
Lazurne	19	2	-	-	17					
Morshyn	15	2	-	_	13					
Primorsk	5	-	-	_	5					
Koson	3	-	-	-	3					

#### Offer accommodation on Booking.com in some tourist destinations

*Source:* compiled by the authors based on the analysis of data from the site Booking.com as of 10.03.2020 [25].

The Black Sea coast resorts (urban village Zatoka and village Shabo) were the most popular among the vacationers in terms of the number of apartments offers. The offers of apartments on Booking.com were the least presented in Primorsk and Koson. However, the number of apartments displayed on Booking.com does not indicate a shortage of apartments in the town of Primorsk and village Koson. On the one hand, it can indicate the ignorance of the local population about the possibility of using world-famous online resources for booking accommodation and, as well as the strict rules of Booking.com for owners of accommodation. On the other hand, it suggests that natural persons – homeowners do not want to provide housing for temporary rent officially to avoid paying taxes. Homeowners which provide informally rental services focus on regular customers who visit tourist destinations from year to year, or on occasional tourists looking for a place to spend the night upon arrival in the tourist destination.

The cost of one night in tourist destinations did not differ significantly (Table 3). The cheapest apartments (room for two people or two beds in a hostel in a dormitory) started from 200 UAH per day in the village Luzerne and up to 400 UAH per day in the Polyanytsya village (resort "Bukovel")<sup>1</sup>. In most of the tourist destinations we researched, the cost of a room for two people was up to and including 300 UAH per night. The offer of apartments at the highest prices (over 3 thousand UAH per day) mainly included luxury residences or villas for the simultaneous temporary stay of a large number of people (up to 15–16 people).

In almost all tourist destinations we studied (except Lviv, Odessa and Polyanytsya), the offer of apartments in the price range up to 1,490 UAH per day for two people prevailed (Table 3). The largest number of such apartments was in Morshyn (85 % of all accommodation presented on Booking.com in this tourist destination), Berehove (75 %) and Truskavets (70 %). In Odesa, Lviv and Polyanytsya, the offer of apartments in the price range of 1490–2980 UAH per night for two people prevailed. Its share was 40.8 %, 40.5 % and 34.5 % of all accommodation presented on Booking.com in the respective tourist destinations. The share of housing worth more than 2980 UAH in all tourist destinations, except Kobleve and Polyanytsia, did not exceed 25 % of all accommodation presented on Booking.com in the relevant tourist destinations. Thus, we can say that in the all studied tourist destinations, the supply of housing can satisfy tourists with different income levels.

The service providers of the fourth component of the tourism infrastructure (catering) in the tourist destinations were a variety of catering and accommodation facilities: from small mobile fast food establishments and cafeterias to fine restaurants. It is impossible to establish their number and compare between the studied tourist destinations, as official statistics on the number of food establishments in local communities were not provided, and sites such as Booking.com were absent

<sup>&</sup>lt;sup>1</sup> We did not take Koson and Primorsk into account due to the small number of offers on Booking.com.

in the field of catering. However, we could conclude that their number was sufficient not only to meet the needs of tourists but also to maintain competition. For example, in the territory of Yaremche Town Council, which includes Polyanytsya, there were 130 catering enterprises, in Skhidnytsia – more than 35 restaurants and catering companies, in Truskavets – 98.

Table 3

# The cost of one day of temporary accommodation for two people in tourist destinations

destinations									
	The lowest The highest Share of rooms/apartments (by price range						nges) for		
	price for two	price for two	two persons per night of accommodation, 9						
Tourist	persons per	persons per		1490—	2980-	4470—	more than		
destination	night of	night of	0-1490	2980	4470	5960	5960		
	accommo-	accommo-	UAH	UAH	UAH	UAH	UAH		
	dation, UAH	dation, UAH		UAII	UAH	UAH	UAII		
Koson	800.0	1250.0	100.0	-	-	-	-		
Primorsk	700.0	2711.4	30.0	30.0	20.0	10.0	10.0		
Polyanytsya	400.0	11000.0	31.0	34.5	12.1	5.2	17.2		
Skadovsk	390.0	3000.0	60.6	36.4	3.0	-	-		
Beregove	350.0	1755.0	75.0	22.5	2.5	-	-		
Slavske	318.9	6000.0	55.3	26.3	10.5	2.6	5.3		
Odessa	300.0	2000.0	34.4	40.8	13.9	6.2	4.7		
Shabo	300.0	5882.3	48.5	33.4	11.9	4.1	2.1		
Zatoka	300.0	7057.1	50.0	34.7	8.7	4.3	2.3		
Yaremche	300.0	10000.0	54.6	30.9	9.7	2.9	1.9		
Skhidnytsia	300.0	6500.0	42.6	33.3	16.7	1.9	5.6		
Zaliznyj Port	282.9	4000.0	53.9	31.6	10.5	2.6	1.3		
Morshyn	250.0	1100.0	85.0	10.0	5.0	-	-		
Berdyansk	247.0	5318.0	70.3	25.0	2.0	2.0	0.7		
Lviv	240.0	15000.0	40.4	40.5	12.8	3.8	2.4		
Uzhhorod	240.0	3200.0	51.4	43.2	4.1	1.4	0.0		
Truskavets	237.8	8471.4	69.5	18.8	5.5	3.1	3.1		
Kobleve	227.4	9142.9	34.8	28.3	21.7	10.9	4.3		
Lazurne	200.0	2128.6	57.0	32.0	8.0	2.0	1.0		

*Source:* compiled and calculated by the authors based on the analysis of Booking.com site data as of 10.01.2020 [25].

The analysis of the potential providing recreation and entertainment for tourists in tourist destinations, which we studied, showed that local governments and businesses tried on ensuring a comfortable and enjoyable stay for tourists. Proof of this fact was the presence of a wide range of various entertainment venues and events: from classical museums and small shows (within the accommodation) to zoos, dolphinariums and international festivals.

In the vast majority of tourist destinations (except for regional centres focused on cultural and historical tourism) there was only a small (one or two) number of classical museums (historical, ethnographic, museums dedicated to the life and work of famous people, etc.). But in each tourist destination, there were stylized and decorated private estates, apartments, restaurants, parks and other cultural centres to attract tourists.

The tourism infrastructure of some tourist destinations, except traditional cultural and arts facilities, included numerous specific recreation and entertainment facilities. For example, there were a zoo, water park, a dolphinarium, a Ferris wheel in Berdyansk, two water parks, a dolphinarium, a winery "Koblevo" entertained tourists in Kobleve, Adamivka Central Park and a dolphinarium were objects of tourists' interest in Truskavets. Besides, private entrepreneurs in each tourist destination provided horseback riding, mountain biking, SUVs, paintball, hot air ballooning, inflatable boats, catamarans, jet skis, parachutes etc.

Festivals, concerts, exhibitions and fairs are regularly held in all the studied local communities to interest tourists and increase tourist flows. Festivities mainly held before and at the end of the holiday season to attract as many tourists as possible during off-peak periods. It is especially true for tourist destinations that focus on sea recreation. Their peak holiday season lasts for a maximum of one and a half months (second half of July – August), in contrast to tourist destinations that focus on other tourism types (mountain, cultural and historical, etc.).

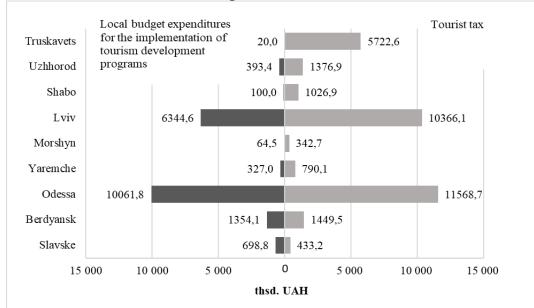
The development of tourism in local communities can be considered mainly due to business structures. An argument of this hypothesis is a review of programs and activities of local communities for tourism development. Local governments in 2018–2019 spent budget funds directly on the development and promotion of tourism only in half of the tourist destinations we studied (Slavske, Berdyansk, Odessa, Yaremche, Morshyn, Lviv, Shabo, Uzhhorod and Truskavets). Local governments of most tourist destinations in rural areas do not invest directly in tourism development. Most likely, this is due to the need to finance other expenditures that have a higher priority for the socio – economic development of the local communities that funded tourism development programs in 2019 spent significantly less on it than they received from the tourist tax (Fig. 3).

For example, in 2019 in Yaremche the amount of these expenditures corresponded to only 41.4 percent of local budget revenues received from the tourist tax, in Morshyn - 18.8 percent, in Shabivska local community - 9.7 percent, in Truskavets - 0.3 percent. In 2019, only in Slavske, the volume of expenditures on tourism development exceeded the revenues from the tourist tax by 61 percent.

However, local governments in all studied local communities indirectly contribute to increasing the attractiveness of a tourist destination for tourists. They incur social and economic expenditures. But it is impossible to separate part of the funds that strictly affect tourism in total expenditure for socio-economic development.

The COVID-19 pandemic and the lockdown introduced to prevent it led to a 75 % [26] drop in tourist flows in 2020 compared to the previous year. Also, the pandemic led to a reorientation of tourist flows from outbound to domestic. In the short and medium-term it needs to increase requirements for all components of tourist infrastructure for the safe stay of tourists in tourist destinations. Based on this, we can

assume that those tourist destinations will dominate that focus on outdoor recreation (active mountain and sea recreation, green tourism, etc.).



# Fig. 3. Revenues from the tourist tax and expenditures for the implementation of programs for the development of tourism in individual territorial communities in 2019, thousand UAH

*Source:* compiled and calculated by the authors based on the analysis of data from the official websites of local councils, responses to requests for implementation of local budgets and web portal "Open budget".

Characteristic features of the development of the tourism sector in the postquarantine period, which should be taken into account by local governments and businesses of tourist destinations when planning the development of tourist infrastructure, will be:

1) a decline in tourist flows. Many people, fearing a pandemic, are likely to decide not to visit popular tourist destinations, which will lead to a loss of revenue from the tourism sector not only by local budgets but also households and businesses that focus on providing services to tourists. To prevent the increase in tourist flows, local governments should promote the formation and rise of social responsibility of entities that provide tourist services and residents who provide tourist services. Communication tools and mass outreach can be tools to achieve this goal. Entities of tourist infrastructure should prudently set tariffs for their services. Ideally, they should reduce the cost of the services, given the loss of income by part of the population due to the introduction of lockdown. Besides, they must create the most comfortable conditions for tourists in compliance with sanitary and epidemiological norms, improving the quality of services, etc. Communication and social responsibility of business and community residents, in the long run, can be the basis for the emergence of a tourist cluster of the local community;

2) the decline in the popularity of tourist destinations focused on cultural and historical tourism. To restore domestic tourist flows after the end of lockdown, the local governments of such local communities should initiate a powerful advertising

campaign right now. One of the tools in this direction can be the organization of online tours, for which tourists can make charitable contributions. Promote actions of local governments will keep the interest of tourists in the tourist destination;

3) tourists will travel mainly by their vehicles. It is due to people' fears of contracting COVID-19 on public transport. Therefore, tourist destinations should take care of increasing the number of parking spaces for vehicles, allocate and equip places for the organization of campsites and tent camps;

4) requirements for compliance with safe living conditions stay of tourists to prevent COVID-19 will increase. In this regard, local governments in cooperation with the entities that provide tourist services and residents must develop and implement within tourist destinations the concept of accommodation, catering, and recreation of tourists, which will maintain social distance and prevent crowds. Local governments must strictly monitor compliance with established rules;

5) shifting the emphasis on outdoor recreation will require the organization of services in tourist destinations for active pastime. To this end, local governments, together with tourism infrastructure entities and residents, should develop routes and prepare the appropriate infrastructure for walking, cycling, horseback riding and similar walks. Ensuring active leisure will allow keeping tourists longer within the tourist destination and, on the other hand, will be a kind of compensation for the lack of mass events (festivals, concerts, etc.) due to quarantine restrictions.

**Conclusions.** 1. The infrastructure of the tourism industry in local communities includes five components: travel services, transportation organization services, accommodation services for temporary residence, catering services, recreation and entertainment services. Entities in the relevant economic activities provide them.

2. The presence of tour operators and travel agencies in tourist destinations may not have a significant impact on the development of tourism within the community. The reason is that these tourism entities mainly focus on outbound tourism. Only some tourist destinations (mostly urban) have tourist information centres. In rural tourist destinations, tourist information centres are only in Polyanytsya, Slavske and Skhidnytsia.

3. Ukraine has a well-developed organization of transportation services that allow tourists to get to tourist destinations. Rail transport and own transport are the most popular modes of transport for travel. However, some tourist destinations (both in cities and in rural areas) – Skhidnytsia, Polyanytsya, Primorsk, Kobleve, Zalizny Port, Skadovsk, Lazurne and Koson – due to their geographical location do not have a railway connection. Instead, well-established intercity bus transportation from regional centers and cities of regional importance fully compensates for the lack of rail connections. The worst situation with transport support in Koson. Tourists can get to the central tourist resource of the local community – recreation complex "Kosino" (thermal pools and water park) – only by vehicle.

4. In all the tourist destinations we have studied, the supply of housing can satisfy tourists with different income levels. The highest offer of apartments for temporary tourists among the tourist destinations on Booking.com was in large cities

of the group of cultural and historical tourism (in Odessa – 1483 apartments and in Lviv – 753). The Black Sea coast resorts (urban village Zatoka and village Shabo) were the most popular among the vacationers in terms of the number of apartments offers. The least presented on Booking.com site apartments offer in Primorsk and Koson. It may be due the ignorance of the local population about the possibility of using world-famous online resources for booking accommodation or it suggests that natural persons - homeowners do not want to provide housing for temporary rent officially to avoid paying taxes. Only in some tourist destinations - Odessa, Lviv, Skhidnytsia, Shabo. Yaremche, Truskavets, Uzhhorod, Slavske. Kobleve. Polyanytsya, Skadovsk - trere are apartments four and five-star class level. In most of the tourist destinations (13 from 19) the cost of a room for two people was up to and including UAH 300 per night.

5. Catering and accommodation establishments provide food to tourists in tourist destinations. There are a variety from small mobile fast food establishments and cafeterias to fine restaurants in every tourist destination. The number of catering and accommodation facilities is sufficient not only to meet the needs of tourists but also to maintain competition. This is true not only in cities but in rural areas too. In Polyanytsya there are 130 catering enterprises, in Skhidnytsia – more than 35.

6. A wide range of various entertainment venues and events is present in most of tourist destinations: from classical museums and small shows (within the accommodation) to zoos, dolphinariums and international festivals. Each tourist destination has stylized and decorated private estates, apartments, restaurants, parks and other cultural centres to attract tourists.

7. Local governments only in some tourist destinations (Slavske, Berdyansk, Odessa, Yaremche, Morshyn, Lviv, Shabo, Uzhhorod and Truskavets) implement tourism development programs in local communities. Local governments of most tourist destinations in rural areas do not invest directly in tourism development. At the same time, local communities received a larger amount of tourist tax than they had spent on tourism development. Only in Slavske, the volume of expenditures on tourism development exceeded the revenues from the tourist tax (by 61 percent). Thus, we assume that the functioning of tourist infrastructure that meets the needs of tourists is largely the merit of private business.

8. The COVID-19 pandemic and the introduced lockdown to prevent it led to a drop-in tourist flows in 2020. Additionally, the pandemic has led to a reorientation of tourist flows from outbound to domestic. After the quarantine, tourist destinations that can provide a suitable and safe infrastructure for unorganized tourists and provide quality tourist services will gain a competitive advantage. The tool to achieve this goal is the cooperation of local governments, businesses and residents of the local community in the tourist sector.

The prospect of further research is to establish the strength of the impact of changes in the functioning of tourist infrastructure in local communities due to the pandemic and measures taken by the government to prevent its spread on the formation of local budget revenues from tourism.

#### References

1. Sechi, L., Moscarelli, R. and Pileri, P. (2020), Planning tourist infrastructures to regenerate marginalised territories: the study case of North Sardinia, Italy. *City*, *Territory and Architecture*, vol. 7, 5. https://doi.org/10.1186/s40410-019-0108-x.

2. Liu-Lastres, B., Mariska, D., Tan, X. and Ying, T. (2020), Can post-disaster tourism development improve destination livelihoods? A case study of Aceh, Indonesia. *Journal of Destination Marketing and Management*, vol. 18, 100510. https://doi.org/10.1016/j.jdmm.2020.100510.

3. Mertzanis, C. and Papastathopoulos, A. (2021), Epidemiological susceptibility risk and tourist flows around the world. *Annals of Tourism Research*, vol. 86, 103095. https://doi.org/10.1016/j.annals.2020.103095.

4. Pierscieniak, A. and Grzebyk, M. (2020), Searching key macro-factors for cooperation in cross-border tourism: institutional matrix vs. PEST concept. *European Research Studies Journal*, vol. XXIII, is. 3, pp. 249–259. https://doi.org/10.35808/ersj/1636.

5. Keerthi, P. and Thyagaraju, M. (2020), Tourism infrastructure development: a case study on newly formed state of AP. *International Journal of Advanced Science and Technology*, vol. 29, no. 6s, pp. 2312–2319.

6. Lin, H. H., Hsu, C. H., Liu, C. Yu., Cheng, B. Y., Wang, C. H., Liu, J. M. and Jhang, S. (2020), The impact of cultural festivals on the development of rural tourism – a case study of Da Jia Matsu pilgrimage. IOP Conference Series: Earth and Environmental Science, vol. 526, 2nd *International Conference on Advances in Civil Engineering, Energy Resources and Environment Engineering*, May 22–24, 2020, Nanning, China. https://doi.org/10.1088/1755-1315/526/1/012060.

7. Ruiz-Pérez, M. and Seguí-Pons, J. M. (2020), Transport mode choice for residents in a tourist destination: the long road to sustainability (the case of Mallorca, Spain). *Sustainability*, vol. 12(22), 9480. https://doi.org/10.3390/su12229480.

8. Kanwal, S., Rasheed, M. I., Pitafi, A. H., Pitafi, A. and Ren, M. (2020), Road and transport infrastructure development and community support for tourism: the role of perceived benefits, and community satisfaction. *Tourism Management*, vol. 77, 104014. https://doi.org/10.1016/j.tourman.2019.104014.

9. Mnguni, E. M., Mtapuri, O. and Giampiccoli, A. (2020), Tourism in rural areas: a case study of opportunities in the south coast of KwaZulu-natal. *International Journal of Hospitality and Tourism Systems*, vol. 13, is. 2, pp. 96–105.

10. Fatimah, S. and Ayu, S. K. (2020), Rural tourism development: institution, disaster and communication. IOP Conference Series: Earth and Environmental International Conference on Climate Smart Science, vol. 466, Sustainable Agriculture, November 20–22, 2019, Majalengka, West Indonesia. Java, https://doi.org/10.1088/1755-1315/466/1/012023.

11. Dolezal, C. and Burns, P. M. (2015), ABCD to CBT: asset-based community development's potential for community-based tourism. *Development in Practice*, vol. 25, is. 1, pp. 133–142. https://doi.org/10.1080/09614524.2015.982075.

12. Kotler, P., Bowen, J. T., Makens, J. C. and Baloglu, S. (2017), Marketing for

Hospitality and Tourism, 7th ed, Pearson, UK.

13. Westcott, M. (2016), Transforming communities through tourism: a handbook for community tourism champions, available at: https://indigenoustourism.ca/corporate/wp-content/uploads/2016/12/Transforming-Communities-through-Tourism.pdf.

14. Barna, M. and Tuchkovska, I. (2016), Main tendencies of management of tourist activity in Ukraine. *Pidpryiemnytstvo i torhivlia*, vol. 20, pp. 5–8.

15. Blahun, I. S. and Honak, I. M. (2015), Features of formation of tourist space. *Modeliuvannia rehionalnoi ekonomiky*, vol. 1 (25), pp. 191–201.

16. Hrabovenska, S. P. (2017), Competitiveness of territorial markets of tourist services in Ukraine, Ph.D. Thesis, Economics and management of the national economy, Ivan Franko National University of Lviv, Lviv, Ukraine.

17. Korzh, N. V. and Basiuk, D. I. (2017), *Upravlinnia destynatsiiamy* [Managing destinations], Edelveis i K, Vinnytsia, Ukraine.

18. Storonyanska, I. Z. ed (2019), *Stale endohenne zrostannya rehioniv Ukrayiny v umovakh detsentralizatsiyi* [Sustainable endogenous growth of regions of Ukraine in the conditions of decentralization], Lviv, Ukraine.

19. Storonyanska, I., Patytska, K., Hrynchyshyn, I. and Chemerys, V. (2020), Spatial disproportions in development of territorial community under conditions of administrative and financial decentralization. *Agricultural and Resource Economics*, vol. 6, no. 4, pp. 43–62. https://doi.org/10.51599/are.2020.06.04.03.

20. Yarovyi, V. F. (2017), Status and prospects of development of enterprises and destinations in the tourism industry of the southern region. *Ekonomika ta derzhava*, vol. 11, pp. 25–28.

21. Dorogovkaz (2020), Rest in Ukraine 2020, available at: https://ua.dorogovkaz.com/index.php.

22. Ministry of Development of Economy, Trade and Agriculture of Ukraine (2019), Licensed register of tour operators, available at: https://www.me.gov.ua/Documents/Detail?lang=uk-UA&id=5386d976-11e4-4eb1-abdf-2948a2017c17&title=LitsenziiniiRestrSub-ktivTuroperatorskoiDiialnosti.

23. Ukrzaliznytsia (2019), For passengers, available at: https://www.uz.gov.ua.

24. Citizen passengers. How, where and how many Ukrainians traveled by longdistance service "Ukrzaliznytsia" in 2014–2015, available at: https://texty.org.ua/d/uz/#main-text.

25. Official site Bookig.com, available at: https://www.booking.com.

26. Business in the fields of culture and tourism lost 83 billion hryvnias due to quarantine, available at: https://www.ukrinform.ua/rubric-tourism/3134347-biznes-u-sferah-kulturi-j-turizmu-nedootrimav-83-milardi-griven-cerez-karantin-tkacenko.html.

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