# Sustainable development of the Russian-Ukrainian border zone cities

Viktor Sapryka<sup>1,\*</sup>, Larisa Shmigirilova<sup>1</sup>, Andrei Vavilov<sup>2</sup>, Alexander Pastyuk<sup>1</sup>

Abstract: The article discusses one of the burning issues of increasing the efficiency of local self-government, namely, the introduction of effective practices for sustainable development of border zone cities. The study actualizes the concept of social chronotope in the context of the study of sustainable development of small and medium-sized cities of the Russian-Ukrainian border region, which allows us to understand the nature of sustainable development of cities, the prospects for cross-border development and interaction. Based on the interpretation of the results of the questionnaire survey, an assessment was made of the standard of living of the population in medium and small cities of border regions, a management system in small and medium cities of the border region. The foundations of the integrated and sustainable development of medium and small cities of the border regions were also identified, the main directions and projects of cross-border cooperation were identified. A group of researchers concluded that, while ensuring the sustainable development of small and medium-sized cities of the Russian-Ukrainian border zone region, it is necessary to take into account the asynchrony of social processes in a single territory in the past, the formation of a special culture with relatively independent values and attitudes, as well as the possibility of using the potential of border zone territories.

### 1 Introduction

The introduction of effective practices for sustainable development of border zone cities is one of the most burning issues of improving the efficiency of local self-government. Despite the fact that the border is a real barrier to the development of border zone territories, effectively built cross-border interaction and inter-municipal cooperation can make a significant contribution to the development of municipalities and become an effective tool for solving specific problems of the population of the border territories. Moreover, many of these problems cannot be resolved systematically without inter-municipal interaction in the border region.

At the same time, nowadays, local authorities do not always consider cross-border interaction as an effective and necessary tool for solving social and economic problems, which is partly associated with objective reasons: difficulties in interstate relations,

.

<sup>&</sup>lt;sup>1</sup>Belgorod State University, 85 Pobedy Street, 308015 Belgorod, Russia <sup>2</sup>Moscow State University, 1 Leninskie Gory Street, 119991 Moscow, Russia

<sup>\*</sup> Corresponding author: <a href="mailto:sapryka@bsu.edu.ru">sapryka@bsu.edu.ru</a>

regulatory gaps, lack of funding, and lack of funding organizational support of these processes. At the same time, even in objectively challenging conditions, the cooperation of municipalities in solving common social, economic, humanitarian and environmental problems remains largely underestimated and at the same time a promising direction in the policy of territorial development of border zone regions. Some civil society institutions could play an important role in this.

This context requires some theoretical and methodological studies, the key issue of which is the multifaceted role of the border in the development of local communities. Border zone provides cross-border population movement, which is rapidly increasing due to the dynamically growing tourist movement, international population migrations, labor and educational trips. At the same time, the appearance on the world map because of geopolitical changes in the early 90s of new states makes it necessary to analyze the impact of new borders on their economic development.

## **2 LITERATURE REVIEW**

The issues of sustainable development of border zone areas are reflected in the works of foreign [1, 2, 3, 4, 5] and domestic scientists [6, 7, 8, 9]. In addition, a generalization of theoretical issues of studying the social and economic development of border zone municipalities indicates the relevance and the feasibility of research on this topic in Belgorod, as one of the most actively developing cities in the border zone regions.

The term "self-government", like most terms in legal and other social sciences, does not have an exact and uniform scientific definition. In different countries and by different authors, it is understood differently. Moreover, the concept of self-government of medium and small cities is included in the concept of local self-government, and the latter is included in the concept of self-government in the broad sense of the word, as a species. In a word, self-government of medium and small cities is only a special case of local self-government, including both urban settlements and other settlement territorial units [10].

Traditionally, the municipal management system can be represented as a system of interconnected elements:

- management object;
- control subsystem;
- information subsystem [11].

The theoretical foundations of the research program for the socio-economic adaptation of Russian urban communities are diverse and include a whole list of formed and developing research areas: the concept of sustainable development, neo-institutional economics, economic sociology, the theory of social reproduction, etc. Research in the field of a socially oriented market economy and social state, and the impact of integration geopolitical processes on the socio-economic development of Russia and its regions seem extremely popular for Russian society. All these facts are relevant for urban communities.

Ensuring sustainable development of urban areas is a complex problem and it is possible if the following is provided:

- macroeconomic stability and increase in gross domestic product;
- ensuring economic growth in the urban economy;
- achievements in medium and small cities of socially equal conditions with large cities for generating income and public goods;
- improving access for business entities conducting business to the markets of material, technical, credit, information, and other resources:
- the formation of civil society institutions that protect the economic and social interests of various groups of the population;
  - implementation of programs to improve the environmental situation.

Considering the development of local communities through the border zone theory, one can observe their evolution and evaluate the degree of progress towards international integration.

This context requires some theoretical and methodological studies, the key issue of which is the multifaceted role of the border in the development of local communities. Border zone provides cross-border population movement, which is rapidly increasing due to the dynamically growing tourist movement, international population migrations, labor and educational trips. At the same time, the appearance on the world map because of geopolitical changes in the early 90s of new states makes it necessary to analyze the impact of new borders on their economic development.

#### 3 METHODOLOGY

The study of the sustainable development of small and medium-sized cities of the Russian-Ukrainian border in the unity of spatial and temporal characteristics actualizes the concept of social chronotope. The relative autonomy of space and time, the incoherence of causal dependence by their bonds, is united by the third reality i.e. active substance, which is characterized by energy (tension, strength, and intensity). Therefore, applying the concept of a chronotope, we get the opportunity to understand the nature of sustainable urban development, the presence or absence of which significantly affects the prospects for crossborder development and interaction. The concept of "chronotope" inextricably links the subjective time of a person and the space of "his life for understanding the mechanisms of generation of various types of territorial systems, various images and phenomena of sociocultural space, in the unity of hierarchical and subordinated, subjective and objective coordinates. Which in real life arise, act, and which they determine" [12], providing a stable and directed functioning of the system.

Significant heuristic potential in relation to sustainable development of border cities has the concept of chronotope. It makes it possible to analyze this process in the multidimensional unity of spatial and temporal and activity coordinates, objective and subjective variables, which will ensure stable and directed functioning of cross-border interaction as a social and sociocultural system.

"Sustainable urban development refers to the sustainable development of the urban community, providing:

- the fulfillment by him of his national economic functions (the production of food, agricultural raw materials, other non-agricultural goods and services" [13], as well as public goods, the provision of recreational services);
- expanded reproduction of the population, rising levels and improving the quality of their life;
  - maintaining the ecological balance in the biosphere.

In order to study the issues of sustainable development of medium and small cities of the Russian-Ukrainian border zone in 2017, a sociological study was carried out in the form of a questionnaire survey of the population of the border Belgorod, Voronezh and Kursk regions. The survey involved 1000 respondents. According to the socio-demographic indicators of the Territorial Authority of the Federal State Statistics Service for the Belgorod Region, the total population was divided into 5 key age groups.

## **4 RESULTS AND DISCUSSION**

As part of the first question, respondents assessed the standard of living of the population in medium and small cities of border zone regions. Almost half of the respondents from three

regions believe that the standard of living is equal to the subsistence level (53.29%, 30.93%, and 42.34%, respectively).

An almost equal percentage of respondents in three regions responded that the standard of living was below the subsistence minimum (30.24%, 40.84% and 37.84%), and the answer "Above the subsistence minimum" scored the least in the Voronezh region (1.80 %) and in the Belgorod region (12.01%).

In general, it can be noted that the slopes surveyed rather negatively assess the standard of living of the population in medium and small cities of the border region.

**Table 1.** In your opinion, what is the standard of living of the population in medium and small cities of border zone regions today.

Possible answer			A riama a					
	Voronezh region		Belgorod region		Kursk region		Average across three regions	
	abs	%	abs.	%	abs.	%	abs.	%
Below poverty line	101	30,24%	136	40,84%	126	37.84%	363	36,3%
Above poverty line	6	1,80%	40	12,01%	43	12.91%	89	8,9%
Equal to poverty line	178	53,29%	103	30,93%	141	42.34%	422	42,2%
Difficult to answer	49	14,67%	54	16,22%	23	6.91%	126	12,6%

Residents of border zone regions are inclined to consider the management system in small and medium-sized cities of the border region rather closed in the Voronezh region of 59.58% and Belgorod region of 50.00%.

At the same time, one fourth of the respondents in each region believe that it is open to the public (Voronezh region 25.15%, Belgorod region 25.30% and Kursk region 34.83%).

In general, in the three regions, we can say that the management system in medium and small cities of the border zone regions is quite closed to the population (49.2%).

**Table 2.** Do you think that the management system in medium and small cities of border zone regions is sufficiently open for the population.

Possible answer			Average					
	Voronezh region		Belgorod region		Kurs	sk region	across three regions	
	abs.	%	abs.	%	abs.	%	abs.	%
Yes	84	25,15%	84	25,30%	116	34.83%	284	28,4%
No	199	59,58%	166	50,00%	127	38.14%	492	49,2%
Difficult to answer	51	15,27%	82	24,70%	90	27.03%	223	22,3%

In general, the population estimates the possibilities of their own development tools of the municipality lowly. It is believed that the comprehensive and sustainable development of medium and small cities of border regions should be based on 38.5% of the region's development programs, and 31.1% of the development strategy of the Russian economy until 2020. At the same time, they believe that the municipality should be guided by the strategy of the municipal district only 12.5%, and the development strategy of the municipality 7.6%. This indicates the impossibility of the municipality to develop its own development opportunities independently.

As the main areas of cross-border cooperation, which are most relevant according to the results for three regions, it is necessary to develop, first, "Economic Interaction" - 62.4%, "Social Interactions" - 48.5%, as well as scientific and educational projects - 40.6%.

**Table 3.** In your opinion, what should the integrated and sustainable development of medium and small cities of border zone regions be based on (Specify no more than one answer option)

	Quantity							Average	
Possible answer	Voronezh region		Belgorod region		Kursk region		across three regions		
	abs.	%	abs.	%	abs.	%	abs.	%	
On the development strategy of the Russian economy until 2020,	91	27,25%	103	30,93%	117	35,14%	311	31,1%	
On the regional development strategy	169	50,60%	127	38,14%	89	26,73%	385	38,5%	
On the development strategy of the municipal district	59	17,66%	28	8,41%	38	11,41%	125	12,5%	
On municipality development programs	11	3,29%	24	7,21%	41	12,31%	76	7,6%	
Difficult to answer	4	1,20%	1	0,30%	6	1,80%	11	1,1%	

Nevertheless, the cooperation of the public sector is not relevant according to the results of a sociological study, 18.0% of respondents answered.

**Table 4.** What areas of cross-border cooperation between small and medium-sized cities need to be developed in the first place (Specify not more than 3 answers)

				Average across three regions				
Possible answer	Voronezh region		Belgorod region			Kursk region		
	abs	%	abs.	%	abs.	%	abs.	%
Economic interaction	294	88,02%	184	55,26%	146	43,84%	624	62,4%
Social interactions	202	60,48%	142	42,64%	141	42,34%	485	48,5%
Scientific and educational projects	137	41,02%	124	37,24%	145	43,54%	406	40,6%
Territorial development	132	39,52%	102	30,63%	79	23,72%	313	31,3%
Interactions for the implementation and development of various forms of security	79	23,65%	81	24,32%	94	28,23%	254	25,4%
Public Sector Collaboration	52	15,57%	56	16,82%	72	21,62%	180	18,0%
Difficult to answer	8	2,40%	5	1,50%	3	0,90%	16	1,6%

Defining specific areas of cross-border cooperation projects that can ensure integrated and sustainable development of medium and small cities, respondents noted projects in the field of science and education (48.8%), cooperation in small business (45.9%) and projects in the field of rural tourism (39.5%). Least of all, respondents chose cultural projects, but this option also scored 27.9%.

**Table 5.** What cross-border cooperation projects would maximize the comprehensive and sustainable development of medium and small cities of border zone regions (Specify no more than three answers)

Possible answer		Average		
	Voronezh	Belgorod region	Kursk region	across three
	region	Beigorou region	rearsk region	regions

	abs	%	abs.	%	abs.	%	abs.	%
Small business cooperation	232	69,46%	126	37,84%	101	30,33%	459	45,9%
Scientific and educational projects	212	63,47%	125	37,54%	151	45,35%	488	48,8%
Projects in the field of rural tourism	183	54,79%	121	36,34%	91	27,33%	395	39,5%
Social project	122	36,53%	107	32,13%	120	36,04%	349	34,9%
Environmental project	84	25,15%	105	31,53%	104	31,23%	293	29,3%
Cultural activity	84	25,15%	93	27,93%	102	30,63%	279	27,9%
Difficult to answer	7	2,10%	5	1,50%	20	6,01%	32	3,2%

Thus, the respondents included science and education, the interaction of business structures, as well as projects in the field of rural tourism among the most relevant areas for the implementation of cross-border cooperation. At the same time, it should be noted that the latter area practically did not appear in studies of previous years.

## **5 CONCLUSION**

The chronotope concept has significant potential in relation to the sustainable development of cities of the Russian-Ukrainian border. Analysis of the sustainable development of medium and small cities must be carried out in the unity of social space and social time, which determine the influence of the external and internal environment on sustainable development, which provides the possibility of real strategic planning and management of territorial entities.

Often, the border small and medium-sized cities in the post-Soviet space are faced with greater problems than the same settlements that have no borders with other states. This is due not only to official indicators of socio-economic development, but also to population estimates, as well as migration processes that record the outflow of the population from bordering small and medium-sized cities.

To ensure sustainable development of small and medium-sized cities of the Russian-Ukrainian border, it is necessary to take into account the historical unity of the bordering loci, as well as the asynchrony of their development after the emergence of "new borders". Inadequate use of the potential of border areas can lead to the emergence of depressive territories on both sides of the border.

Priorities for sustainable development of medium and small cities of border regions are economic interaction, social interaction, scientific and educational projects. It is necessary to formulate a system for managing programs and projects of cross-border cooperation and interaction, using the latest information and communication technologies, which would make it possible to ensure integrated and sustainable development of medium and small cities of border regions.

We emphasize that the management system in medium and small cities of border regions should be open to the public, and projects and programs should be implemented with the active involvement of the public.

This article was completed as part of the grant of the Russian Federation President MD-578.2020.6 "Sociocultural threats to the transformation of civilizational fronts in the post-Soviet chronotope".

#### References

- 1. Gasparini, Journal of Borderlands Studies, 2, 165-201 (2014)
- 2. Sohn, Geopolitics, **3**, 587-608 (2014)
- 3. L. Braunerhielm, E.A. Olsson, E. Medeiros, Norwegian Journal of Geography, **73**, 96-109 (2019)
- 4. Birte N.Ch. Wille, Journal European Planning Studies, **28**, 1-7 (2020)
- 5. M. Fauser, Journal of Borderlands Studies, **34**, 605-622 (2019)
- 6. T.V. Morozova, Rural communities of Russia in the regional dimension (MPSF, Moscow, 2008)
- 7. A.V. Belova, Vestnik BFU im. I. Kant, **3**, 116-125 (2008)
- 8. M.T. Romanov, A.A. Chursina, Customs policy of Russia in the Far East, 1, 40-45 (2012)
- 9. O.B. Shumskaya, Regional studies, **1**, 47-56 (2007)
- 10. A.V. Butakov, *Problems of local self-government in the Russian Federation* (Omsk, 2006)
- 11. M.V. Novikov, Technical Science, **3** (**9**), 107-110 (1998)
- 12. N.V. Baraboshina, VESTNIK OSU, **7** (**143**), 243-247 (2012)
- 13. V.B. Khulkhachieva, Strategy for sustainable development of Russian regions, **31**, 30-34 (2016)