

DOI: 10.15593/2409-5125/2022.3.01

УДК 711

E.K. Bulatova

Ural Federal University

SUSTAINABLE ARCHITECTURAL TOURIST AND RECREATION ENVIRONMENT IN A CLUSTER DEVELOPMENT CONCEPT

The study presents a comparative historical analysis of the architectural tourist and recreational environment formation from the perspective of the cluster approach. Territory clustering is considered the most effective way to influence the sustainable tourism system at the regional and local levels using the economic potential of the region. The study aims to identify the position of periodization in the comparative historical analysis due to the development of the cluster approach in national and international practice for the formation of a recreational environment in tourism. Moreover, the study is aimed at identifying the prerequisites for the cluster formation, primary problems within the cluster development model, and finding solutions on the example of the Ural region at the federal and regional levels. We used the following research methodology: to conduct a comparative historical analysis of the clustering forms in the architectural and recreational environment, to identify the stages of creation and implementation of clustering objects in the architectural tourist and recreational environment on the example of the Ural region on the basis of a comprehensive analysis. The study also determines the primary problems of complex architecture objects in regional tourism within the framework of the cluster development model, decelerating the functioning of the tourist and recreational environment of the Ural region (except for the big cities). The novelty of the study is to determine the most effective recommendations, which will contribute to improving the productivity of the developed federal and regional cluster support programs, thereby contributing to increasing the productivity of clustering in general and in the Ural region in particular. One can apply the primary provisions of the study in project practice and the educational process in the study, including the design of cluster formations of the tourist and the recreational environment with regional specifics, related to the regional tourism and social economy, as well as in the field of improving regional tourism policy.

Keywords: sustainable environment, tourist and recreational complex, cluster development model.

Currently, the positions of the cluster concept are rapidly progressing in tourist and architectural theories, providing an idea of regional tourism. Today, the concept of a tourist and recreational cluster is being formed in Russia and abroad. This aspect indicates the economic and sociological trend of improving the region in terms of tourism and gives an idea of reliable resource information about the region for Russian and international guests of regions and countries.

The development of the general theoretical apparatus in the concept of the cluster approach was initiated by A. Marshall, who formulated [1] the advantages of forming an agglomeration in economic activity with an indicator characteristic of specialization and the availability of qualified labor. In 1979, in the works of S. Czamanski and L. Ablas, one could identify the problem of an “industrial cluster,” which implies “a subset of economic productions connected by flows of goods and services, stronger than with other sectors of the national economy” [2]. M. Porter [3] identified four main principles that determine clustering in the tourism sector. The primary basis of the tourist destination is the competitive attractiveness, and the additional one is the tourist infrastructure and the quality of services provided. As a result of such interaction, we can obtain a tourist product. According to M. Porter, the term “cluster” means a swarm, an accumulation [4]. And the concept of “tourist cluster” is defined [5], as a spontaneously or planned organized and geographically fixed structure of tourist attractions and organizations of the tourist-industrial sector and tourist improvement, among which are: the territorial organization of society, the innovative life cycle of the product and the tourist pricing policy. And in the interpretation of N.A. Pelevina [6], clusters are formed under the condition that all relevant indicators, competencies, and elements of architectural and tourist potential are increasing. However, K. Rohrmeier and P.F. Stars [7] define a tourist cluster as a phenomenon characterized by all of the above-described features and investments from the tourist flow income.

Tourist and recreational clusters represent a stable specificity of the region, they are divided into technoparks, science cities, business incubators, technology transfer centers. Tourist regions, increasing the geographical localization of the scientific and production potential of the recreational cluster, work for Russian and world tourism.

In the humanitarian theories of the early 2000s, during the formation of tourist and recreational views [8], we applied three leading concepts: integrated development of the territory, the concept of historical periodization and the concept of sustainable development-playing a significant role in excursion and tourist practice in the origin of the “tourist destination.” The term “destination” [9] originally represented a stable tourist and recreational system, providing excursion and educational services to the population. The destination covers the development of infrastructure for sightseeing, information, and distribution center and ensures the safety of tourists. A tourist destination should be suitable for investment if it is actively promoted at the prestigious state and international forums [10].

For the first time, the characteristics of a tourist destination were theoretically argued by Professor N. Leiper of the Massey University (Auckland, New Zealand) [11]. He studied tourism as a complex structure organized from the following significant components: 1) territorial formation; 2) tourists; 3) tourist and industrial manufacturing. At the same time, according to N. Leiper, the territorial formation includes three main components: the beginning of the tourists' path; the transit region; the region of the tourist destination.

As a result, according to the review of tourist and economic studies on a sustainable recreational environment, we can conclude that many authors have refined the terminology, identified criteria for evaluating the organization of the tourist and recreational environment, and put forward the features of clustering in the concept of the approach. Historical analogs were also classified and studied, but, in relation to the sustainable cluster approach. In addition, not enough attention was paid to the principles and characteristics of the object concept in a specific historical period.

Materials and Methods. Among the study, purposes are to identify the stages of creation and implementation of clustering objects in the tourist and recreational environment in general, and the Ural region in particular on the basis of comparative historical analysis, innovative international experience in the creation and functioning of cluster formations.

Study objectives:

- to form a comparative historical analysis of Russian and foreign clusters on the formation of the architectural tourist and recreational environment at each stage from the 1970s of the 20th century to the present time;
- to reveal the prerequisites for the cluster origin and characteristics of each declared period;
- to identify the problems of recreation in the cluster approach.

The study uses a comparative historical analysis of the chronological typology of tourist objects, which has a significant contribution to the authors' research on the recreational and urban environment. The method of analyzing objects from a historical point of view will be productive in order to describe the functioning of tourist and recreational objects, their origin, and their combination with a similar structure. The comparative-historical method of analyzing the tourist and recreational environment was formed in the studies of A. Marshall [1], and then in the works of S. Czamanski and L. Ablas [2] and N. Leiper [11]. In relation to the tourist and recreational environment, the comparative-historical method provides the analysis of the communication system in the studied clusters with the initial stages of development or later periods based on the classification under study.


For the historical and comparative method of studying the already formed cluster systems, in Russia, Europe, and Asia, and in order to identify them with different categories of the tourist and recreational environment, starting from the 1970s of the 20th century to the present day, one could propose to form three groups of analogs: 1) clustering objects in Europe since the early 1970s and from the 1980s to the 2000s in Russia, marked the beginning of the formation of a tourist “destination;” 2) from 2000–2010, the beginning of the formation of the competitive clusters, created as a support for sustainable regional tourism development; 3) 2010s to the present, the creation of a new economic model of a tourist center in the context of sustainable tourism. We limit ourselves to the selection of proper analogs for the considered sustainable tourist and recreational center.

The only exception may be that the comparative-historical analytical method has direct deviations from other methods: it will not be accurate and consistent, and the results formulated mainly from the comparative analysis may not be completely correct. To increase the effectiveness of the research result, we need to resort to auxiliary analysis structures.



Results. In the course of the study, we compiled a comparative historical analysis of national and international clusters on the formation of an architectural tourist and recreational environment, identified the prerequisites for the cluster origin and principles of clustering, identified problems in the cluster approach, and presented the characteristics of each period (see Table 1).

Table 1

The cluster approach, the arrangement of the architectural environment in tourism from 1970 until now

Number of clusters	Key objectives and targets	Principles	Period characteristics
1970–2000  16 international and 13 local tourism clusters	<ul style="list-style-type: none"> • Formation of the tourism environment on micro-and meso-levels • Operation of touristic centers and related organizations interconnected in one system • Formation of touristic destinations on the regional level 	<ul style="list-style-type: none"> • The primary resource principle • Formation of touristic clusters • The territorial concentration of non-competing organizations • Focus on innovation 	As the touristic environment is developing and becoming more complicated, functions of management bodies change, and their role in the maintenance of sustainable development increase with more tourism-related human pressures

The end of Table 1

Number of clusters	Key objectives and targets	Principles	Period characteristics
2000–2010  Created 144 regional clusters and 82 “virtual” clusters	<ul style="list-style-type: none"> • Formation of competitive clusters promoting sustainable development of tourism on the regional level • Development of new recreational environments through touristic products • Establishment of priority clusters on the meso- and micro-levels • Formation of specific economic zones that include regional and local clusters 	<ul style="list-style-type: none"> • Tourism concentration of related companies • Objects of tourism potential, attracting non-local people • Ecologically clean and cheap infrastructure • Governmental authorities influence cluster formations 	Establishment of a tourist recreational zoning system and a new model for tourism development with the up-to-date vision of its territorial structure
2010 – until now  more than 833 cluster structures	<ul style="list-style-type: none"> • Formation and development of touristic clusters related to large investment projects on the federal level • Development and application of support measures on the regional and local levels • Formation of a new economic model for the touristic center under sustainable tourism conditions 	<ul style="list-style-type: none"> • Usage of natural and man-made touristic resources in destinations • Complementary processes to allow addition and preservation of touristic functions 	Tourist recreational zoning and formation of a new economic touristic center model under sustainable tourism conditions with the up-to-date vision of its territorial structure

Based on a comparative analysis of sustainable recreational areas in the Ural Federal District, we can conclude that the Sverdlovsk Oblast is characterized by the creation and development of tourist clusters in large investment projects [12]. The basis of the tourist flow is made up of tourists who come with business (45 %), cultural, and educational (17 %) goals. The region demonstrates the best growth dynamics in terms of the strengthening of the regional tourist market (see Table 2).

According to the analysis of the formation of the cluster approach, innovative international experience in the creation [13] and functioning of cluster formations, we revealed the features of tourist and recreational clusters, the factors of their implementation, including the Ural region, and significant difficulties within the cluster approach, hindering the adaptation of the tourist and recreational territory of the Ural region (see Table 3).

Table 2

The improvement of the regional tourist market, %

Federal subject	Tourist potential	Business potential	Cultural and educational potential	Sports potential	Religious potential	Ecological potential
Sverdlovsk Oblast	36	45	17	16	10	12
Chelyabinsk Oblast	30	37	26	3	12	22
Tyumen Oblast	18	56	35	0,5	0,5	8
Khanty-Mansiysk Autonomous Okrug-Yugra	7	61	4	–	1	34
Kurgan Oblast	5	26	44	9	12	9
Yamalo-Nenets Autonomous Okrug	4	67	–	–	27	6

Table 3

Necessary support measures and recommendations for various cluster forms

Indicator	International clusters	Federal and regional clusters
Clusters' peculiarities	small part of the territories on the functioning of modernization based on the competence of the regions; sponsoring programs that take into account the creation of a multimedia association of managers and stakeholders of “virtual” clusters	in Russia, including the Sverdlovsk Oblast, the program “Regional cluster Policy of the Sverdlovsk Region” has been adopted, including the following features: the main directions and tools for supporting regional clusters
Factors of tourist clusters implementation	the presence of the complexity of organizations operating within the boundaries of business processes, applying consumer mobility of the territory sector and targeting actively emerging market areas; the number of scientific institutes with high entrepreneurial and investment benefits; qualified working staff; free technological modules and conglomerates appropriate for the functioning of entrepreneurship; highly profitable commercial and industrial enterprises and effective professional associations, international forums, and symposiums	the work process of small companies, using a variety of productions or producing a separate type of services; formed infrastructure, contributing to the technological development of companies (information technology centers, business incubators) in small cities of the Chelyabinsk and Sverdlovsk Oblast; a cooperation and self-expression climate based on mutual prerogatives used by companies located on the same site (festivals and events: the summer and autumn harvest festival in the Chelyabinsk Oblast, “Sabantuy” in Kadnikovo village in the Sverdlovsk Oblast, “Music Night” in Yekaterinburg); the policy of regional authorities and management focused on the promotion and development of the tourism sector and the weakening of organizational barriers

The end of Table 3

Indicator	International clusters	Federal and regional clusters
Creation challenges	unsatisfactory degree of culture, recreation, and entertainment associations; the primitiveness of tourist services and tourism infrastructure; unsatisfactory advertising and information functioning, forming the image of small and medium-sized cities as an attractive center of tourism	partial or complete absence of federal methods of control and budget allocations for the formation of the tourism industry in small historical cities (including the cities of Kasli and Minyar); “dilapidation” of “objects of excursion display”, (investigated: the Demidov Estate (1809), the Europe-Asia sign, the hospital building (1830–1846) in Kyshtym; insufficiency of recreational and health-improving institutions (an analysis of the complex architectural and tourist potential in the cities of Kyshtym and Troitsk of the Chelyabinsk Oblast was performed); in the settlements of the Ural region (except for the largest cities), one can identify a small number of cultural, commercial, industrial, sports entertainment infrastructure that contributes to the strengthening of tourist attendance of objects

The primary obligation to implement the sustainable competitive potential of the regions is the formation of a virtual network of territorial production clusters. Based on the opinion of V.L. Abashkin [14] we can conclude that among the recommended measures is the creation of two types of objects clustering -improved formed objects of a stable environment and unstable objects at the origin stage of the recreational environment. As an example of a raw material cluster, we can emphasize a cluster of oil and gas production in the Priyamal shelf of the Kara Sea.

In the Federal Target Program “Development of national and inbound tourism in the Russian Federation for 2019–2025” [15], the following tourist and recreational territories were added: the Ural, Siberian, and Far Eastern Federal Districts-“Siberian Tract,” as well as the promising tourist enlarged investment project “Ural” (Sverdlovsk and Chelyabinsk regions, Khanty-Mansyisk Autonomous Okrug-Yugra). Currently, we determined two innovative territorial clusters, operating in the Ural region-the “Titanium Cluster” (Sverdlovsk Oblast) and the territorial cluster of rocket engine construction “Technopolis Novy Zvezdny” (Perm Krai). A tourist and recreational cluster “Bolshaya Sysert” will soon appear in the Sverdlovsk Oblast. It will be an industrial amusement park with a history of the development of the metallurgical industry. Moreover, one will organize open-air exhibition spaces, concert halls, and other events related to scientific and educational projects.

Discussion. The discussion about the different forms of sustainable regional clusters affects the experts of the United Nations World Tourism Organization [UNWTO]. In 2001, an international sequence of recreational cluster resources was prepared: first, 16 international and 13 local clusters on tourism topics were provided [12], then, at the end of the formation, for each of the tourist and recreational clusters, due to a dialogue between various spheres of associations located in clusters and the governing circles of various areas, the essential and sufficient methods for promoting the formation of clusters were investigated and put into action [16]. At present, the EU is moving from the Lisbon Strategy adopted for the period 2000–2010 to the economic strategy “Europe 2020” (A European strategy for smart, sustainable, and inclusive growth), focused on technological resources and the recruitment of new jobs in the service sector. Thus, one should emphasize that cluster conglomerations should be one of the primary elements of increasing EU productivity [17]. In Russia, since 2011 the demand for clustering is increasingly expanding with the adoption of the Federal Target Program “Development of national and inbound Tourism in the Russian Federation (2011–2018),” (2019–2025), in which we identified the crisis situations of the formation and development of tourism, but also research with the current analysis and use of assistance measures, at the regional and local levels [12]. The lack of information about the Ural forms of stable cluster structures, the development of stable cluster structures, and implementation in the thematic area of tourism and conglomeration causes difficulties.

Conclusion. In conclusion, we defined recommendations within the boundaries of the cluster approach at the regional and federal levels, which will help to increase the effectiveness of the federal and regional cluster support program being developed.

The results of the study are as follows: the formation of a comparative-historical system from national and international clusters for the development of the tourist and recreational environment at each stage from the 1970s of the 20th century to the present; the identification of prerequisites for the cluster emergence at the global level; the presentation of characteristics of each declared period; and findings in the recreation issues of the cluster approach.

Tourist clusters will be a “surge” of the national market of the Chelyabinsk and Sverdlovsk Oblast, replenish budget revenues at different levels due to the growth in the production of tourist services.

Thus, we identified that the main results of interaction, along with the formation of territorial clusters, the complex development of the territory, and the cluster, are the real element of interaction and cooperation of the prerequi-

sites for architectural tourist and recreational territories. Some of the recommendations outlined in the study for the development and improvement of the tourist and recreational cluster, within the borders of the Ural region, can soon be applied by the structures, providing improvement of tourist services in Russia and the Ural region in particular.

References

1. Marshall A. *Industry and Trade*. London, Oxford University Press, 1920, p. 679.
2. Czamanski S., Ablas L.A. Identification of industrial clusters and complexes: a comparison of methods and findings. *Urban Studies*, 1979, vol. 15, no. 1, pp. 61-80.
3. Porter M.E. Location, clusters and the new economics of competition. *Business Economics*, 1998, vol. 33, no. 7, p. 17.
4. Cucculelli M., Goffi G. Does sustainability enhance tourism destination competitiveness? Evidence from Italian Destinations of Excellence. *Journal of Cleaner Production*, 2016. DOI: 10.1016/j.jclepro.2014.12.069
5. Czamanski S., Ablas L.A. Identification of industrial clusters and complexes: a comparison of methods and findings. *Urban Studies*, 1979, vol. 16, no. 1 pp. 61-80.
6. Pelevina N.A. Cluster approach to the maintenance of a region's recreational sphere development. *Izvestia: Herzen University Journal of Humanities & Sciences*, 2008, no. 3, pp. 340-344.
7. Rohrmeier K., Starrs P.F. The paradoxical Black Rock City: all cities are mad. *Geographical Review*, 2014, vol. 104, no. 2, pp. 153-173.
8. Baaij M., Greeven M., Dalen J. van Persistent superior economic performance, sustainable competitive advantages and Shumpeterian innovation. *Europ Management*, 2014, no. 22(5), pp. 517-531.
9. Kruzhalin V.I. Tourism and Recreation on the Path of Sustainable Development. *Sovetskiy sport*, 2008, no. 5, pp. 7-14.
10. Cucculelli M., Goffi G. Does sustainability enhance tourism destination competitiveness? Evidence from Italian Destinations of Excellence. *Journal of Cleaner Production*, 2016, vol. 11, no b, pp. 370-382.
11. Leiper N. The framework of tourism: Towards a definition of tourism, tourist, and the tourist industry. *Annals of Tourism Research*, Department of Habitational Resources, *University of Wisconsin-Stout*, 1979, vol. 6, no. 4, pp. 390-407.
12. Bulatova E.K., Ulchitsky O.A. Cluster approach at the development of tourism and recreation environment on the example of the Ural region. *Bulletin of Civil Engineers*, 2019, vol. 4, no. 75, pp. 161-167.
13. Selin S. Developing a typology of sustainable tourism partnerships. *Journal of Sustainable Tourism*, 1999, vol. 7, no. 3, pp. 260-273.
14. Abashkin V.L., Boyarov A.D., Kutsenko E.S. Cluster policy in Russia: From theory to practice. *Foresight and STI Governance*, 2012, vol. 6, no. 3, pp. 16-27.
15. Gurieva L.K., Kurskiy T.G. Cluster approach to the development of tourism in the region, 2012, available at: <http://uecs.ru/uecs-47-472012/item/1707-2012-11-27-06-16-18> (date of access: 12.12.2022)
16. Yenin A.E., Azizova-Poluektova A.N. Arkhitekturnaia turistsko-rekreacionnaia sistema: struktura, svoistva, otnosheniia [The architectural touristic and recreational system: Structure, properties, relationships]. *South of Russia: Ecology, Development*, 2017, vol. 12, no. 1 pp. 139-147.
17. Trukhachev A.V. Biznes-model' formirovaniia sel'skogo turizma pri formirovanii turisticeskogo klastera [Business models of rural tourism in the formation of a tourism cluster]. *Services in Russia and Abroad*, 2016, vol. 3, no. 64, pp. 260-275.

Булатова Евгения Константиновна (Екатеринбург, Россия) – кандидат архитектуры, доцент кафедры «Архитектура», Уральский федеральный университет имени первого Президента России Б.Н. Ельцина (Екатеринбург, 620002, ул. Мира, 17, e-mail: Bulatova_ek@bk.ru).

Evgeniya Bulatova (Ekaterinburg, Russian Federation) – PhD in Architecture, Associate Professor of Architecture Department, Ural Federal University (17, Mira str., 620002, Ekaterinburg, e-mail: Bulatova_ek@bk.ru).

Финансирование. Исследование не имело спонсорской поддержки.

Конфликт интересов. Автор заявляет об отсутствии конфликта интересов.

Вклад 100 %.

Поступила: 23.03.2022

Одобрена: 31.03.2022

Принята к публикации: 22.11.2022

Просьба ссылаться на эту статью в русскоязычных источниках следующим образом: Bulatova, E.K. Sustainable architectural tourist and recreation environment in a cluster development concept / E.K. Bulatova // Вестник Пермского национального исследовательского политехнического университета. Прикладная экология. Урбанистика. – 2022. – № 3. – С. 5–14. DOI: 10.15593/2409-5125/2022.3.01

Please cite this article in English as: Bulatova E. Sustainable architectural tourist and recreation environment in a cluster development concept. *PNRPU Bulletin. Applied ecology. Urban development*, 2022, no. 3, pp. 5-14. DOI: 10.15593/2409-5125/2022.3.01