THE THEORETICAL ASPECTS OF FORMATION OF COMPETITIVE TERRITORY-RECREATION SYSTEMS

Assistant Professor Ph.D. **Vasyl F. KYFYAK**
Chernivtsi Trade-Economics Institute, Ukraine

Associate Professor Ph.D. **Alexandru NEDELEA**
"Stefan cel Mare" University Suceava

Abstract

The paper analyses the possibility of forming competitive territorial-recreation systems in space on the example of the Chernivtsi County, determines entertaining-tourist resources, selects the optimum tourist areas using the criterion of closeness of resources and comfort of their visit. T*he territorial recreation system is a spatial form of organization for recreation activity and determines the necessity of theoretical comprehension for functions of recreation and tourism, determination of socio-economic maintenance for recreation services and their specifics, mechanisms of accounting for recreation and tourist factors in the process of forming and realization of public regional policy in modern conditions.*

Kew words: Chernivtsi, recreation systems, tourism areas, Ukraine.

JEL Classification: L 83, R 12.

1. INTRODUCTION

The regions of Ukraine are characterized by essential territorial differences: geographical position, presence of boarders, provision of resources, demographical situation, and wide originality of specialization and structure of manufacturing, which are caused by natural, economical, social and historical conditions. Due to this basis the internal territorial division of labor is developed, and original natural-economic formations are made, which are characterized by certain specialization.

Every region of Ukraine differs according to its social and territorial qualities and has to develop according to the strategy of development of productive forces, which is derived from national aims and possibilities and resources of corresponding territory.

1.1. The general point of the problem

The process of moving the Chernivtsi region to the economical independence and its admission as full one element of national economical system is in dynamical progress, but can be delayed for many years. There exist many reasons for this:

The region has the smallest territory and inhibition in Ukraine, as well as a low level of developed market infrastructure, the absence of manufacturing high-tech products, and some other objective and subjective causes.

The main role in this process is played by the choice of such economical model and development of such branches of economy of the region, which have high provision of resources that make manufacturing products on national and international markets.

1.2. Analysis of temporary investigations and publications

The scientists and manufacturers have been interested for a long time in the question of optimal allocation of products and service manufacturing and in augmentation of effective economical organization of space, but the first essential works in this branch appeared in XIX century, for instance, the papers of I.Tyunen. German scientists A. Veber, A. Lesh, V. Kristaller, and an American W. Izard described some time later, in the first decade of the XX century, the basis of space economy theory. General and the most substantial method in the theories of these scientists is the severe abstracting of space, its selection from the big variety of other factors, which influence the economy. In spite of clear defects, an advantage of such interpretation is that it enables the analysis of the role of spatial constituent in the complex of conditions and factors of economic development.

The founders of theory of spatial economy (in the USA it is called "regional science") examined economic space as ideally even surface with evenly located ménages and settlements. In such way it was easier to find out spatial peculiarities and define them according to the methods of geometry.

The theory of "concentric rings" of Tyunen describes the exposure of influence of city-market on agricultural specialization of adjoining territory which is characterized by identical fertility for the whole district. A city is located in the center of the territory, and space is shown as a circle. The farther the farms which are in a middle of a circle are from the center, the bigger transport charges they hold. It influences the general charges of farmers, but in relation to every culture they differ. For every kind of agricultural manufacturing there exists a threshold, exceeding of which makes it unprofitable; it depends on the distance to the center.

By empiric calculations I. Tyunen explained the presence of zones in agricultural manufacturing

depending on the distance to the center (according to the economic situation in the beginning of the XIX century). He selected six areas, which were located in concentric rings around a city-market: vegetable cultures and milk stock raising - the nearest to the center area, then - forestry (in those times it was very profitable), corn cultures, green crops, three-field crop rotation, extensive stock-raising. Most substantial in the theory of Tyunen was introduction in the economic analysis of the concept of distance.

A.Veber went farther, offering the theory of "standards". If we want to examine the location of sources of raw material and users of products in the certain places of manufacturing, it is possible to find a point in space, where the charges on transportation will be minim. Such point A. Veber considered an optimum place for the location of manufacturing. With presence of two points of raw material and one point of consumption he built a triangle inside of which an initial point was determined.

The studies in the thirtieth years of the XX century were created by the German scientists of V. Krastaller and A. Lesh. In spite of some disagreements, their looks on spatial particularities of placing were very close. V. Krastaller pulled out the theory of "central places". A central place is a city which provides the surrounding space the goods and services. A. Lesh developed this idea and created the general theory of spatial economy.

An initial point in thoughts of Kristaller and Lesh was a hexagon as ideal barn of organization of manufacturing. Essence of such position consists in next. On a perfect plain with the even division of sources of raw materials and population, the form of market which gravitates to the single center, there will be a circle (because distance from a center to the farthest points which get the influence is identical according to such terms). Other center forms other circle, the third — another and so on. However the circles are not an ideal form of filling of economic space, because, adjoining to each other, they create unfilled space. The hexagons entered in a circle are far better "packages". The users of products can be variously disposed in relation to a center.

Lesh took a farm for a center, the owner of which makes beer not only for him but also for other farms. The scale increasing of manufacturing lowers charges on unit of goods, and remoteness of goods increases them. Co-operation of these constituents determines the radius of transportations and, consequently, the area of hexagon. Other farms can be on the tops of hexagons, or on sides, or inside of them. Then Lesh examines a case, when the area of the sale center is increased. He builds the system of hexagons of bigger sizes which cover all the space of country (region) gradually. He determines the distance between competitive centers according to a formula: to build a web of hexagons logically and with taking into account the manufacturing of different products, then every user will be provided with all types of goods.

Kristaller built a system of hexagons on principle of determination of central cities grades — depending on their sizes and functional settings. In the center of the system he put the most multifunctional city; then are selected the centers of the first, second, third and other orders. Thus, Kristaller created the hierarchy of central places after their functional value and degree of influence on surrounding space. With every stage the area of influence becomes three times bigger in relation to previous; the population of center depends on it.

Taking for basis the theories of A. Tyunen, A. Veber, A. Lesh, B. Kristaller, in the middle of 70th of XX century the research workers under the direction of Professor V. Preobrazhenskiy designed the principle model of the territorial recreation system. It was also developed in M.Mironenko and I.Tverdohlib scientists' papers. In their works, Ukrainian scientists, T. Tkachenko, V. Kravtsiv, P. Gudz, V. Yevdokymenko, V. Pila, O. Chmur, D. Stechenko offer different theories in relation to the formation of the competitive territorial recreation systems. For example, T. Tkachenko, in his work *"Steady development of tourism: theory, methodology, business realities"*, asserts that "modern economic, social and ecological processes pull out requirements to subsequent development of methodological principles in relation to forming, functioning and development of the system of recreation and providing of its balance.

For successful introduction of these requirements there is a necessity to use the theory of the socio-economic systems that allows to get to know deeper the essence and particularities of complex recreation-economic formation, organizational, economic, and social links between his constituents, to find the effective methods of exposure of particularities of their functioning and development" (Tkachenko, 2006). V. Yevdokymenko considers the territorial recreation system as the "spatial form of organization for recreation activity" (Yevdokymenko, 1996). He determines the necessity of theoretical comprehension of functions for recreation and tourism, determination of socio-economic maintenance for recreation services and their specifics, mechanisms of accounting for recreation and tourist factors in the process of forming and realization of public regional policy in modern conditions.

2. FORMULATION OF AIMS AND TASKS OF THE ARTICLE

There are plenty of different theories of economic development and forming of competitiveness. But as world practice shows, the most effective (in the conditions of the Chernivtsi region) are the theory of spatial economy, theory of the economic division, theory of program and aim directions of development, cluster theory of economic development and others.

One of such theories of the economy growing there is the theory of branch economic division, which can be a base for forming of theory of development, of recreation and tourism in space and creation of the competitive territorial recreation systems. In its basis lays the territory with the high concentration of natural recreation resources and manufacturing of tourism and recreation services, which are characterized by specific local particularities, their structure, problems and prospects of development, their territorial organization and position in the system of industrial economic complex. M. Porter paid a regard to a fact that the most competitive firms of one industry usually are unsystematically spared in different countries, but concentrated in one region ore country.

And this is not by chance. In fact one or a few firms achieve competitiveness on international market, diffuse their influence on the nearest surroundings: suppliers, users and competitors. Success of surrounding in its turn positively influences the subsequent growth of competitiveness of the given enterprise, or a group of enterprises.

Consequently the primary objective of the article is distribution of the theory of development of tourism and recreation sphere in space (the whole region), determination of optimum recreation and tourism areas according the closeness of resources and easiness of their visit by users and forming of the competitive territorial recreation systems.

3. EXPOSITION OF BASIC MATERIAL

All of Ukraine areas are characterized by substantial territorial differences, in particular, by large originality of specialization and structure of manufacturing, which are conditioned by natural, economic, social, historical terms. On this objective basis, the domestic territorial division of labor is developed and original naturally economic formations, which are characterized by certain specialization, are formed.

In the modern economic system two very difficult related and at the same time contradictory processes show up - globalization and regionalism, which draw changes in socio-economic constituents and carry out substantial influence on transformation of space. New spatial formations, which own new qualities, relative integrity and maneuverability, are created.

In our case the biggest interest is caused by space of the Chernivtsi area as geographically integral territorial part of economic complex of country and which can have its own manufacturing specialization, intensive internal and international economic relations.

Examining the Chernivtsi area as a particular space, which has an advantageous geopolitical and geographical location and plenty of natural and anthropogenic recreation resources, prominent sights of culture, history, architecture, it is possible to see and scientifically ground active development of sphere of recreation and tourism.

Offered spatial development of recreation and tourism sphere is proposed to consideration in two measures: as development in the limited space in particular administrative scopes of area (region) and as development and expansion of space through manufacturing and realization of recreational services outside an area or a country, and also from positions of local tourists, which visiting new recreational and tourist objects in other regions and abroad constantly change space and extend it.

Consider the territory of the Chernivtsi area as a certain space, where the tourism and recreation are made and offered to realization. It is known that the basis of territorial organization of tourism and recreation activity is a presence of recreational resources on this territory and some enterprises which influence the manufacturing and realization of tourism and recreation products, have technological relations that are formed on the basis of the territory concentration of the ramified net of the specialized suppliers, tourism operators and agencies.

Talking about recreational resources, man can distinguish such groups of them: natural, historic and cultural, and socio-economic.

Natural recreational resources form:

-climate conditions, which must supply the stay comfort of a tourist;

-landscape, that supply the organization of feet, mountain-skier, water and other types of rest;

-water resources – seas, rivers, lakes, rates and other hydrological possibilities, which are suitable for making healthy, bathing, rest, walks on water, water types of sport etc.;

-balneological resources - mud, salts, the sources of mineral waters, which are suitable for treatment, prophylaxis of different diseases;

-forest territories, their age and specific composition, possibility of use for making healthy and rest;

-landscape complexes, which must or not promote hinder the organization and conducting of recreational activity.

Historical and cultural recreational resources form sights of culture, history, architecture, folk art, customs, ceremonies that are inherent to a certain

region and is its property, differ in its uniqueness, have a cognitive value and can be used for satisfaction of spiritual necessities of people.

Socio-economic recreational resources from the first sight are second-rate in territorial organization of tourism. But exactly they form the material and technical base of perspective territory. The economic parameters of products of recreational activity depend on the variety of recreational resource, its location, transport availability, technology of the use and ecological characteristics, condition of recreational environment.

Thus, providing of natural, historical and cultural recreational resources with material and technical base must stimulate the development of recreation complex of a region. However, such supposition does not always prove to be correct.

Temporary researches and conceptions at the beginning of the 90th of last century were based exceptionally on this approach and did not give a positive result. The plan of alteration of entertaining complex on the base of cave Popelyushka can serve as an example (nearby s. Podvirne in Novoselytsya district of the Chernivtsi area). It was developed based on scientific researches, where an important medical aspect of the use of air of cave and use of balneological properties of waters of the system "Cinderella" appeared (Korzhyk, 2007).

Here it was planned to build a tourist complex for 500 places with the infrastructure of the highest category, what is specified in development Conception of international tourism in the Chernivtsi area and development Program of tourism in Ukraine for the year 2005. According to these documents, building of large tourist complexes was planned in Khotyn, on the mountain pass of Nimchich (Vyzhnytsya district) and some others.

The scale of these and other projects resulted in such a volume, that they were not finished, as considerable investments were needed for this purpose. They were developing practically without conducting of marketing researches, analysis of locality, being based mainly on emotional approach, not taking into account complications of transitional period and basic market principles. At the same time, foreign investors with local power tried to attract specified on the remoteness from the places of other recreational resources and the isolation from local tourism and recreation centers.

According to this, it is necessary to mention that competitiveness of the region, exactly as well as its attractiveness for potential visitors' increases at the condition of bigger concentration of recreational resources on its territory. The presence of two and the more types of resources on certain territory at other even terms will play a deciding role at the choice of optimum place for trip by a consumer. Only in case of exceptionally important value of certain resource for a tourist (concrete medical effect), he will give up a trip to locality, which is more provided with tourism and recreation potential.

Taking into account this factor, as well as that the territory of the conditioned space in theory is divided in "three recreational districts with different specialization, level of utilization, prospects of development, their value for the economic complex of the area and Ukraine in general" (Kyfyak, 2007), there was made a research directed to a search of optimum tourism and recreation areas on the territory of the Chernivtsi region after a criterion of closeness of resources and possibility for them to be visited by tourists.

For determination of these areas, we utilized the method of construction of recreational potentials maps (Shkola, Hrygoriv, Kyfyak, 1997).

Let I be that on territory T there are placed m objects of tourism and recreation (OTR), each is characterized by certain set of qualities. We consider that OTR_i is characterized by only one meaning $\pi_i, i = \overline{1,m}$ - coefficient of recreational attractiveness (by recreational potential), which can be got by expert estimations. For determining the places of optimum (quasi-optimum) location of tourist complexes on territory T, the map of this territory is covered by a rectangle $P = [a,b] \times [c,d]$.

Obviously, that the rectangle P contains the space (territory) T ($T \subset P$). The rectangle P is broken up by a net $\Delta = \Delta_x \times \Delta_y$, where:

$$\Delta_x = \bigcup_{k=0}^{N} \{x_k\}; \quad (1)$$

$$\Delta_y = \bigcup_{l=0}^{M} \{y_l\}; \quad (2)$$

$$x_k = x_o + kh_x, \ k = \overline{0,N}; \quad (3)$$

$$y_l = y_0 + lh_y, \ l = \overline{0,M}; \quad (4)$$

$$h_x = \frac{b-a}{N}; (5)$$

$$h_y = \frac{d-c}{M}. (6)$$

For every knot of net a recreational potential P_{kl} is determined. We propose the following method of determination of potential: let on territory T to exist only one OTR with π potential. If a knot is in a direct closeness from this OTR, then recreational potential $P_{kl} = \pi$. Moving away from this OTR, the recreational potential decreases. Speed of decrease of potential must be determined by potential of this OTR. The bigger is the potential, the slower it decreases removing from OTR. ORT with a large potential will engage the tourists from a bigger territory, unlike

OTR with a small potential. We took into account this dependence by the function of division:

$$F_{kl}(r_{kl}) = 1 - e^{-\frac{(N-\pi)r_{kl}^2}{\sigma^2}} \quad (7)$$

Where:

r_{kl} – distance between the knot of the web Δ_{kl} and OTR;

σ – medium quadratic rejection which determines the form of the function (a quantel of order ½ determines an "optimum distance" when the potential of OTR decreases in double);

π – rating estimation of recreational potential of OTR;

N – maximum value of rating (at $m=N$ all tourists will visit the object of tourism).

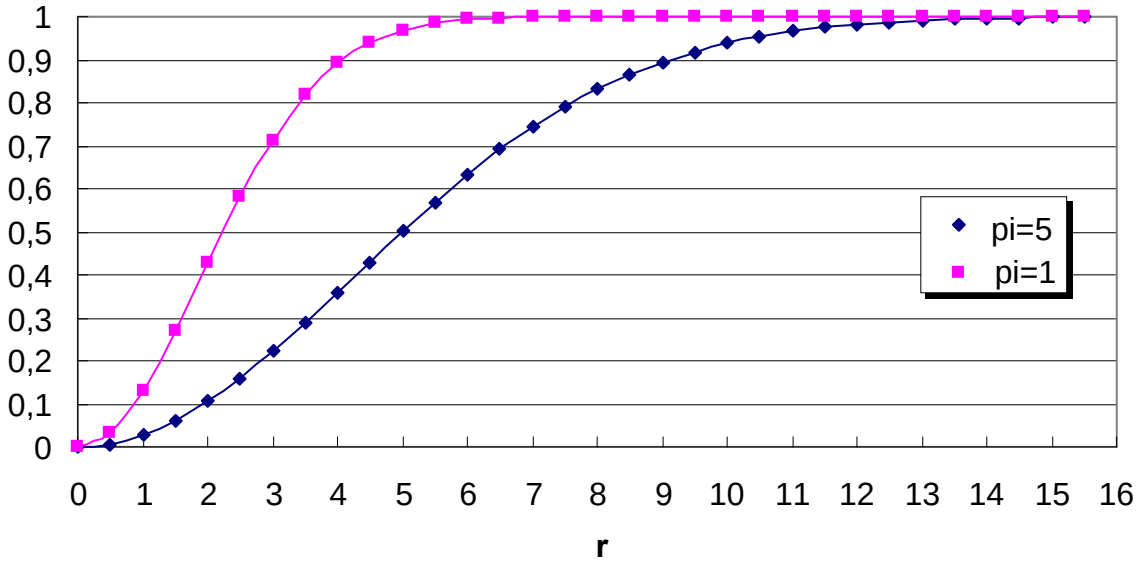

Figure 1. The function of division for "optimal" distance of 5km and maximal expert evaluation OTR "6"

The function of division determines the refuse probability of holiday-maker from the visit of certain OTR depending on distance between OTR and tourist center. We can see on the picture that in the case OTR is situated in a direct closeness from a tourist complex, it will be visited by practically all holiday-makers, not depending on recreational potential of this object $F(r) \xrightarrow[r\to 0]{} 0$. At the distance of 5 km OTR with the rating estimation of "5" will be visited by a half of visitors $F(5\,км) = 0{,}5$. At the same time OTR with the rating estimation of "1" will be refused by 97% of holiday-makers.

Then the recreational potential of a knot Δ_{kl} is:

$$P_{kl} = \pi \times (1 - F_{kl}(r_{kl})) = \pi \times e^{-\frac{(N-\pi)r_{kl}^2}{\sigma^2}} \quad (8)$$

If territory T contains a few OTR, then recreational potential P_{kl} is determined as a sum of potentials of separate OTR:

$$P_{kl} = \sum_{i=1}^{m} \left(\pi_i \times e^{-\frac{(N-\pi_i)r_{kl,i}^2}{\sigma^2}} \right) \quad (9)$$

The strategy of optimum places choice of tourist complexes location is the following: tourist complexes must be located in such places, where recreational potential is maximal.

The questioning of tourists of different socially-age groups enabled to find out twelve group of factors which have a major value for development of tourism on certain territories (Kyfyak, 2005). For conducting of research the first two groups of tourism and recreation resources were examined, as such which have most demand from the side of users – natural, cultural and historical.

For research, there were selected 25 natural and 92 cultural and historical OTR, placed on territories of the Chernivtsi area, which are inscribed in the State register of national cultural property. In the process of research the geographical places of location of the chosen resources with exactness ±2 km on the basis of settlements, where (or near-by) they are placed in. Attachment to the place-names, on our discretion, facilitates an operation and orientation of information in space, what it is important for potential investors. We notice that some inhabited points, such as Chernivtsi, Vyzhnytsya, Khotyn and some others include few different types of resources. That is why the meaningfulness (information fullness and health

utility) of certain territories for the development of recreation market was estimated by the method of expert estimations on a five-point scale.

The "optimum distance" (7) for tourists was decided to be 5km, the distance which can be overcame without a transport vehicle during 1 hour.

On Figure 2. total natural recreational and history-cultural potential is represented as lines, the centers of which specify on the natural recreational and cultural and historical objects of national value in the Chernivtsi area, and also on operating tourist recreational complexes as circular lines.

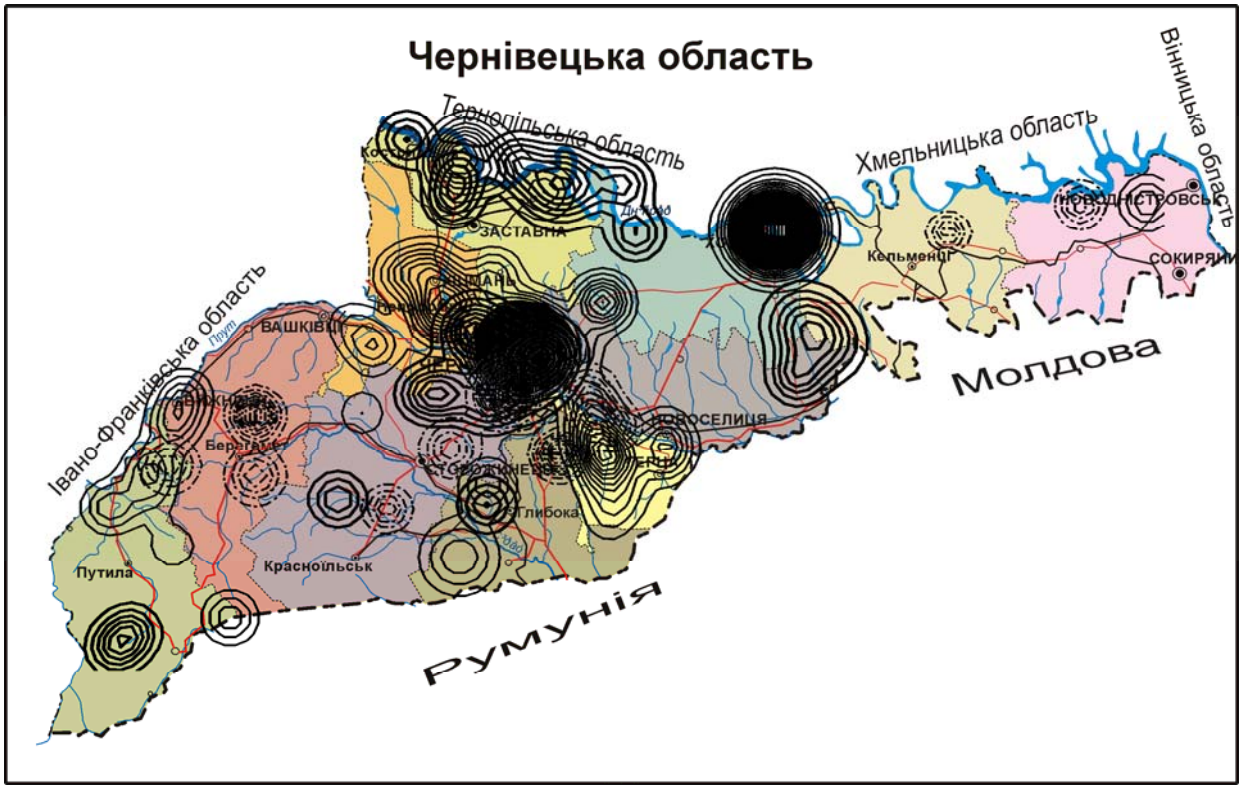

Figure 2. Map of the Chernivtsi area with expected total recreational and history-cultural potential at "optimum distance" of 5km (9)

The lines determine the identical level of potential of territory and specify on the centers of the optimum placing of tourist objects.

The picture proves that places of most concentration of OTR are in Chernivtsi, Vyzhnytsya, Khotyn, Putyla, Kostryzhivka village, Zastavna district and some other. At the same time, circular lines mark the recreational complexes, distance from which to the natural recreational objects exceed 100 km, what considerably complicates their visit and use, and determines the wrong place of territory choice for location of recreation and tourism complex.

Consequently, in accordance with the map shown on Figure 2, a tourist that is in the places of the most lines concentration will be able to visit more OTR, as distance between them is minimum (for this territory). At the same time, large activity of tourists at optimum distance of 5 km does not require in these districts the intensive local transport connection. The territories that have extremes of recreational potential develop autonomously, what results in the limited availability and incomplete use of present OTR. This reduces economic efficiency of the use of recreational potential of certain territories.

4. CONCLUSIONS

The researches, offered in this work, enable to determine territories that must become the priority in forming of effective use strategy of the region potential. The described algorithm can be programmatic realized practically in any territorial terms, what surely has the substantial applied value.

In such way, the spatial specific of natural and resource base placing in the Chernivtsi region does not require the unified, but the territorial differentiated approach to planning of prospects of its use.

And if territory of the Chernivtsi area corresponds in general the requirements of territorial recreational system of national value, than three recreational districts have different specialization, different level of use, are visited by the different categories of holiday-makers, and consequently are a basis for forming of the territorial recreational systems of regional and local value (Kyfyak, 2007).

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