doi:10.5937/jaes14-9932

# DEVELOPMENT OF CLUSTER APPROACH IN TOURISM (RUSSIA CASE STUDY)

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The concept of tourism clustering is currently in the focus of tourism development on national and regional levels. The research is based on international academic literature review and the analysis of Russian experience. The paper analyses the dynamics of the tourism poten-tial of the partner regions joined into the cluster "Velikaya Volga" (The Big Volga), based on the expert opinion. There is a cost-benefit analysis of the tourism industry in the regions included into the tourism cluster using statistical data. The analysis-based diagrams show the differentiation of the Volga regions in terms of tourism potential use. Econometric approach allowed studying the dependence of tour-ism potential indicators on the tourism cluster "Velikaya Volga" revenue. The results of the research allow grouping the regions included in the cluster depending on the efficiency of their tourism potential implementation. The research also shows the significance of the com-parative evaluation of tourism cluster potential. The comparative method used for the cluster analysis allows enhancing the development of the regional tourism.

Key words: Cluster, Tourism development strategy, Tourism sector, Regional economy

#### INTRODUCTION

Tourism in the 20<sup>th</sup> century has become a unique phe-nomenon and an integral part of life of hundreds of mil-lions of people.

This marketable economic activity is one of the most popular among entrepreneurs. According to the esti-mates of the World Tourism Organization (UNWTO), the total annual revenue from the tourism industry will have reached 2 USD trillion by 2020 [04]. Other data suggest that tourism revenues long ago made up about 4 USD trillion [01].

The share of tourism industry in the Gross Domestic product of the Russian Federation is 2.5% including Tourism Multiplier Effect – 6.3%. Provided that there is an effective support from the state and a proper promo-tion of tourism opportunities the tourism share in the GDP of the RF may significantly increase. At the same time in the Travel and Tourism Competitiveness Index published as a result of the World Economic Forum in March 2015, Russia was ranked 45th out of 141 coun-tries, although the natural resources of our country are rated 34th and the objects of cultural heritage – 21<sup>th</sup> [08].

In order to effectively use the tourism and recreation capacity the Russian Federation adopted the Federal Target programme in 2011 "Development of domestic and incoming tourism in the Russian Federation for 2011-2018" with the special focus on creation and de-velopment of regional tourism clusters. The document states: " Cluster approach assumes geographic concentrations of enterprises and firms involved in production, promotion and sale of a tourist product and performing other activities within the same of adjacent tourism or recreational industry. Within the framework of establish-ing tourism and recreational research-based clusters, including the ones initiated by the state and private partnerships, the necessary and sufficient conditions for the fast development of tourism infrastructure and re-lated services will be created. Positive practices, obtained as a result of several pilot tourism and recreational clus-ters, are subject to implementation on the national level in the regions for the development of domestic and incoming tourism, thus, fostering rapid return of state and private investments" [08].

Paper number: 14(2016)1, 353, 61 - 67

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## **BACKGROUND**

It is necessary to consider the concept of a cluster. There are a lot of definitions of a cluster in literature and wide experience of the development of cluster economics in many countries of the world. According to M. Porter, who is considered to be the initiator of the cluster theory, "a cluster is a geographical proximate group of interconnected companies (suppliers, manufacturers, etc.) and associated institutions (educational institutions, state management authorities, infrastructure companies) in a particular field, linked by commonalities and externali-ties" [10].

M. Porter emphasizes that successful cluster progress requires application of sustainable development strate-gy. In his opinion, clusters represent a kind of new spa-tial organizational form of effort consolidation of dif-ferent stakeholders, meant to achieve the competitive advantage in economics. The aim of cluster policy is to create prospective opportunities for the development of the business and the region. Thus, every cluster contrib-utes to the long-term business development strategy for the period of 5-10 years [09].

As it is commonly known, Michael Porter suggested ap-plying the cluster theory in industry, however nowadays this theory is actively developed in terms of strategies for the regional tourism development. Tourism cluster is generated around so called "core" business, the business of tourist firms, creating a tourist product. These firms repurchase the services of other businesses: hotel and catering, transfer, sales, entertainment, etc.

Companies involved in business operations crease a tourism cluster. The key principle of the cluster ad-vantage: cooperation on the regional level allows to compete on the global level. Clustering may be initiated by both state and businesses. The efforts of the state are usually aimed at creating favourable conditions for the cluster development and promotion of relations in-side the cluster, rather than supporting separate busi-nesses or industries. Tourist companies have to operate under competition on the domestic and external mar-kets. It fosters cluster formation. It is common knowledge, that tourism industry uses associations as a form of cooperation, which is a prototype of a cluster [03].

According to A. Aleksandrova's research of internation-al tourism, cluster development in tourism

proved its efficiency [02]. The necessity to establish technological linkages (mainly business linkages) between enterprises and sectors of economy, involved in manufacturing and sale of the tourist product, is one of the characteristic features of tourism cluster evolvement. In other words, by these linkages we mean creating conditions for un-locking the tourism and recreational potential of the region. Tourism clusters are formed based on the key tourism and recreational resources of the region. In addition to enterprises and organizations, directly involved in production and delivery of tourist products and services, a tourism cluster can include representatives of the au-thorities, research institutions, educational institutions, professional associations, representatives of the com-munities, etc. to act as the participants of the tourism cluster. A tourism cluster may be established on the local (municipal) level, as well as on the regional level. Re-searchers note that cluster approach in tourism signifi-cantly contributes to the economic growth of the region [14]. In the field of tourism there are models, which are developed mainly for the enhancement of cluster com-petitiveness [12].

Innovative cluster models, including a lot of interlinked cooperation-based sectors have recently come into the focus of researchers' attention [06, 15]. Some examples of interregional tourism clusters can also be found in literature[07].

Nowadays the cluster-based approach to the regional development is better understood in Russia [13]. Organi-zational and conceptual principles of cluster formation are provided in the Concept of cluster policy in the Russian Federation, adopted by the government of the Russian Federation in 2008.

The development of tourist clusters in the region goes through several stages: from the idea, initiated by the local authorities or business representatives to the de-termination of the spatial strategic development, i.e. development of the complex programme of tourism development in the region.

N. Shabalina describes the following opportunities that appear in the region due to cluster approach in tourism:

- 1. the interests of all active participants of the tourism cluster are taken into account;
- sustainable social and economic development of the area;



- increase in the number of taxpayers and tax base;
- a tool for interaction with the business community;
- 5. grounds for the diversification of spatial develop-ment;
- 6. promotion of the economic boost in the region;
- intensification of initiatives aimed at stimulating the private sector of economy through the programmes of training and retraining of personnel);
- 8. creating infrastructure for R&D;
- cost reduction as a result of economy of scale, due to close cooperation between the manufacturers and con-sumers;
- 10. opportunities for more successful entry to the global market;
- 11. stimulating the increase in labour productivity and implementation of innovation;
- 12. for small and medium-size business the access to financial resources is facilitated;
- 13. effective promotion of regional initiatives onto the federal level;
- 14. strengthening cooperation between business representatives and research groups in finding solution for the problem tasks.

Simultaneously N.Shabalina defines the key issues of formation and development of tourism clusters:

- Deficiency of professional tourism staff, capable of understanding all the advantages and benefits of this form of cooperation;
- Reluctant attitude of authorities to innovations;
- Lack of strategic planning tourism practice based on state and private partnership;
- Problems with the regional infrastructure and transport accessibility to the regions of Russia;
- Rather long period of tourism cluster "launch" (aver-age 3 years)
- In Figure 1 we showed a generalized tourism cluster without dividing it into sectors in the region.

Thus, the development of cluster-based tourism in Rus-sia is rather important and timely issue.

#### STUDY AREA

The focus of our research are the regions, located in the central Russia and included into the project "Velikaya Volga" (The Great Volga). Nowadays, the Russian regions face the challenge of developing common principles for the tourist product promotion.

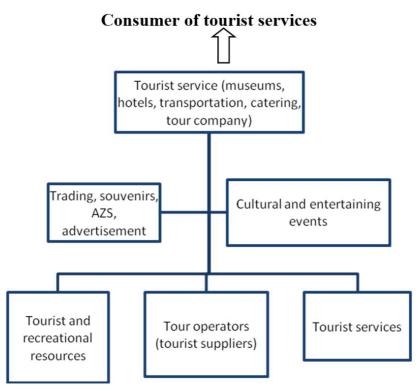


Figure 1: Generalized scheme of a tourism cluster



Tourists are mainly aware of Moscow and Saint Petersburg locations, included in the cluster the "Golden Ring of Russia", the "Silver Ring of Russia". International tourists are not aware of the potential of the new cluster evolved around the Volga River. A new recognizable brand and a new itinerary is developed based on the historical and cultur-al monuments of the Bronze Century (so called, "Bronze Ring"), rather than traditional for Russia church theme, extensively exploited in "Golden" and "Silver Rings".

"Velikaya Volga" cluster is a joint investment project in tourism and recreational sector of the Volga Region. The cluster is included into the Federal Target Programme "Development of domestic and incoming tourism in the Russian Federation for 2011-2018". Joining specially protected nature territories, located on the banks of the Volga and the Kama Rivers, into interregional cluster, acts as an additional incentive for the development of cruise tourism in the district. The information on the po-tential of a new Volga and Kama cluster is disseminated through the information space of the tourist companies in the Volga Region. The emerging cluster is still very young and the potential of the cluster, which includes eight subjects of the Russian Federation, is still to be unlocked. Interregional tourism cluster includes the fol-lowing partners: Samara Region, Nizhny Novgorod Re-gion, Ulyanovsk Region, Saratov Region, Penza Region, Chuvash Republic, Republic of Tatarstan and Mari El Republic [16]. First the Custer Agreement on Cooperation was officially announced in June 2011. The initia-tive was supported by the Federal Agency for Tourism by sponsoring a media tour around the cities of the clus-ter, which provided the grounds for implementation a number of business projects aimed at Volga tourism development. One of the projects includes producing printed promotional products, creating a single exhibition stand branded as "Velikaya Volga" (The Great Vol-ga River) at the "Intourmarket" exhibition.

#### **METHODS**

The novelty of the research is achieved by well-grounded comparative efficiency of tourism potential implementation in the regions included in the interregional cluster. The detailed methods are applicable to the efficiency comparison of several different clusters. The authors' method of evaluation of the tourism potential efficiency

assumes the following algorithm. The source data for the analysis of the tourism cluster comparative efficiency may be expert evaluation of the potential of the tourist area under research and statistical data, presented on the regional and national levels. Rus-sian rating agency "Expert RA" is one of the most au-thoritative rating agencies in Russia, which has consid-ered the regional tourism potential for the past decade. It is important to note one requirement used to evaluate tourism potential: this evaluation should be carried out based on the complex approach to the choice of factors, and with the application of the weighted average of the expert opinion. In this respect the method of tourism potential evaluation, carried out by the "Expert –RA" agency meets the above mentioned requirements [05]. What concerns statistical data in the field of tourism, necessary for the comparative evaluation, we can refer to the data, provided by the Russian Tourism Associa-tion and the Federal State Service of Statistics of the Russian Federation depending on the profit-making ca-pacity gained from the charged tourist services, hotel, catering, types of hotel rooms, number of arrivals and accommodations of national and international tourists. Data on the expenditure component in the field of tour-ism in the regions can be obtained from regional and republic target programmes of tourism development, published on the websites of the tourism ministries in the regions of the Russian Federation.

The regions undergoing analysis are rated based on their annual (monthly) indicators, taking into consideration revenues and expenditures. Different types of graphs and charts can be constructed based on the rating results. For example, graphs, showing the results of regions rating in terms of their tourism potential, graphs, showing the amount of revenue, obtained from the charged tourist services and objects in the regions. Thus, the axis of abscissas contains the values with the regional invest-ments, while the axis of the ordinates contains indicators corresponding to the target characteristics of the above described graphs. The overriding criteria of every graph efficiency may be indicators, characterizing the level of investment with the level of revenue or potential eco-nomic efficiency of tourism in the regions. This charac-teristics may be validated by fixing a line splitting all the rating results into two categories. The first category of tourist objects found above the threshold line



considered as meeting the expected outcomes, while the objects found below the line do not meet the expected outcomes, thus, need to be improved. The groups defined as a result of such analysis, may be classified as leading, average and low. Every group may have its own ways of efficiency enhancement.

In our research we analyzed the use of tourism potential based on the case study of one of the regions included in the cluster "Velikaya Volga" (The Great Volga). In compliance with the criteria, developed by "Expert-RA", four parameters should be considered in evaluating the tourism potential: 1) nature and recreational complex; 2) historical and cultural complex, 3) development of tourist accommodation network and 4) entertainment facilities. The first two act as a driving force, that fosters a tourist to visit a certain tourist destination, while the other two represent the conditions for keeping the tour-ists in the region and stimulate their financial contribu-tions. In the expert opinion the optimum combination and proportionate development of these two elements of tourism is capable of making this tourist destination attractive for visitors.

Table 1: Dynamics of the tourism potential in the regions, included into the "Velikaya Volga" cluster

	Tourism potential rank in compliance with "Expert-RA" evaluation							
Year	Republic of Tatarstan	Nizhny Novgorod Region	Samara Region	Saratov Region	Chuvash Republic	Penza Region	Ulyanovsk Region	Mari El Republic
2005	7	11	15	23	52	36	40	64
2006	6	12	21	26	54	38	44	66
2007	5	17	26	31	47	40	53	67
2008	6	15	29	31	48	43	50	69
2009	7	9	23	34	49	62	64	68
2010	6	10	21	25	41	55	54	71
2011	5	12	17	27	46	55	61	70
2012	6	12	16	26	46	54	63	70
2013	6	11	15	26	45	54	66	71

# **RESULTS**

The number of the subjects of the Russian Federation varied throughout the last decade from 88

in 2005 to 83 in 2013. In compliance with the estimate, provided by "Expert-RA" agency, the best indicators of the regions correspond to the lowest rank values. All through this decade the leading positions were taken by the same regions. The regions with the highest tourism potential are the following: Republic of Tatarstan, Nizhny Novgorod Region, Samara Region. The regions with the average tourism potential include Saratov Region and Chuvash Republic. The regions with the low tourism potential include Penza Region, Ulyanovsk region, Mari El Republic.

In our research we estimated the division of the subjects of the Volga region with regard to their tourism attrac-tion. Deterioration of the indicators in the last five years demonstrated the following regions: Saratov Region by three points, Mari El Republic – by seven points, Penza Region – by 18 points, and the highest loss demonstrat-ed Ulyanovsk Region – by 26 points in the tourism po-tential rank. (не раскрыта система оценки. Among the reasons are the deterioration in the conditions of the nature and recreation environment, lack of due atten-tion to historical and cultural complexes and to the development of tourism infrastructure.

For the past five years a few regions have improved their position, i.e. the Republic of Tatarstan – by 1 point, Chuvash Republic – by 7 points. The improvements in most cases take place due to the following factors: host-ing significant events with wide media coverage, creating new places for recreation and entertainment, develop-ment of accommodation network in the regions.

One of the most important indicators used for the evaluation of the cluster development is the profitability capacity of the region. The issue of timely access to the statistical tourism data has been frequently addressed. However, only recently, Russian Federal Agency for Tourism has published the summary statistics for the past 5 years [11]. In terms of the revenue gained from the provided charged services the leading position are taken by Nizhny Novgorod Region, the Republic of Ta-tarstan and Samara Region. The amount of the charged tourist services provided for the past five years is given in Table 2.

Our analysis showed, that a few regions included into the cluster have improved their revenue values. Thus, in 2012 significant improvements were noted in Nizhny Novgorod Region, Ulyanovsk Region (by 42%), Penza Region and Mari El Republic (by 33%), the Republic of Ta-



tarstan (by 28%). In 2013 significant growth rate of the charged services was noted in the following regions: Nizhny Novgorod Region (by 46%), Ulyanovsk Region (by 31%). A few regions demonstrated rather moderate growth rates in 2013. These include Samara Region (by 13%), Saratov Region (by 3%).

In our research we compared the tourism potential rank and the rank of profitability of the regions included in the cluster "Velikaya Volga".

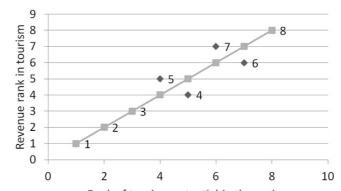
The position chart below distributes the regions into groups depending on the correlation between tourism profitability rank and the tourism potential of the region. In Figure 2 the regions are defined as follows: 1 – the Republic of Tatarstan; 2 – Nizhny Novgorod Region; 3 – Samara Region; 4 – Saratov Region; 5 – Chuvash Republic; 6 – Penza Region; 7 – Ulyanovsk Region; 8 – Mari El Republic

Table 2: Revenue gained from charged tourist services in the regions, included into the "Velikaya Volga" cluster, mln rubles

Region	2011	2012	2013
Nizhny Novgorod Region	2731	3866	5634
Republic of Tatarstan	1509	1932	2313
Samara Region	1447	1624	1832
Saratov Region	1474	1408	1453
Ulyanovsk Region	700	996	1305
Penza Region	446	590	719
Mari El Republic	431	573	700
Chuvash Republic	542	596	691

Table 3: Analysis of tourism potential use by the regions included into "Velikaya Volga" cluster

Volga regions	Tourism potential rank	Revenue rank
Republic of Tatarstan	1	1
Chuvash Republic	5	4
Nizhny Novgorod Region	2	2
Penza Region	6	7
Samara Region	3	3
Ulyanovsk Region	7	6
Mari El Republic	8	8
Saratov Region	4	5



Rank of tourism potential in the region
Figure 2: Use of tourism potential by the regions
included into "Velikaya Volga" cluster

The regions, located below the line do not use their tour-ism potential to its full capacity. These are Penza Region and Saratov Region, the rank values mismatch. This is one of the factors which hinders the tourist attraction of these regions, thus, requires a complex of activities to create more favorable conditions in these regions in order to attract investors and entrepreneurs. In Ulyanovsk Region and Chuvash Republic the profitability value is one point higher than the tourism potential level. In the Republic of Tatarstan, Mari El Republic, Nizhny Novgo-rod Region and Samara Region the ranks of tourism potential and revenue match, which means relatively high degree of tourism potential implementation in these regions.

#### CONCLUSION

Thus, the regions of the central Russia, included in our research, have featured positive dynamics in terms of tourism revenue in the recent years. Nevertheless, the following challenges have been identified: not all the regions make sufficient contributions in the tourism sec-tor. In this case the tourism potential is underused. The comparative evaluation of tourism potential efficiency in the partner regions, included into the cluster "Velikaya Volga" shows that interregional cluster exists due to the efforts and contributions of the leading regions, while the other regions do not contribute their creative, investment share into the cluster development.

Positive tendency in this respect is demonstrated by the Republic of Tatarstan, Samara Region and Nizhny Novgorod Region. Success of these regions on the tourism market is provided by well grounded programmes for tourism development. However, longterm development programmes do not guarantee unexpected success on the tourism market to the newcomer regions. In our



research this experience is demonstrated by Chuvash Republic and Ulyanovsk Region. It is advisable to stimulate the regions, which feature low contributions in tourism, to take into consideration the experience of the leading regions and realize their tourism potential to the full. We believe that comparative analysis of the tourism potential efficiency in the partner-regions included into the tourism cluster will allow activating regional tourism development and solving the problems identified.

## **ACKNOWLEDGEMENTS**

The article was published with the financial support from the Ministry of Education and Science of the Rus-sian Federation within the framework of state supported project № 26.1378.2014/K Sociocultural resources of modernization in the efficiency evaluation of the territo-ry development strategic programs in the context of domestic tourism.

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Paper sent to revision: 26.01.2016.

Paper ready for publication: 10.02.2016.