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Analysys of attractiveness of the caucasian mineral water resorts, prospects of increase in tourist flow to the region

Summary. The aim of the current research was to describe and analyze use of medical and health resources of the Caucasian Mineral Water region based on statistic data. Among the research results is identification of the main problems of primary wellness tourism in the Caucasian Mineral Water region as well as suggestions on increase of tourist flow to the region.

Key words: Caucasian Mineral Water, tourist flow, balneotherapeutic health resort, primary wellness tourism, health resort complex

Introduction
Health resorts and tourism are among the most significant resources that provides financial sustainability and social development in Stavropol region.

No other place in the world can match Stavropol region for the variety of resort resources, especially when it comes to mineral springs. Here locates the region of Caucasian Mineral Waters that includes the following resorts: Pyatigorsk, Kislovodsk, Essentuki, Zheleznovodsk, Mineralnye Vody. Each resort city has its own unique role: treatment of organs of digestion, nervous system, heart-vascular system, supporting-motor apparatus, skin, respiration organs and others. The Caucasian Mineral Water region is currently the biggest health resort complex in Russia, due to the huge variety of natural resources and medical services.

The purpose of the research is to assess the region of Caucasian Mineral Waters as a resort area, the priority directions for development of the region and evaluate the prospects of increasing the tourist flow to CMW.

Research methodology
Such practices as system analysis and logical generalization were used in the process writing this paper to explore the region of the Caucasian Mineral Waters as one of the biggest health resort complex in Russia. Analysis of statistical information was used to monitoring of the status of the region today, forecasting method was used to assess the prospects for the development of CMW, as well as the development of methods aimed at increasing the tourist traffic to the region.
Results of the research

Services come 17% of the total amount of health resort and therapeutic to the Caucasian Mineral Water region in 2016\(^1\). Each year the tourist flow to the region increases, dynamics of tourist flow in the Caucasian Mineral Water region in January–August 2016 and 2017 shown in Figure 1.

**Figure 1.** Dynamics of tourist flow in the Caucasian Mineral Water region in January–August 2016 and 2017 [thousand people]

Source: drawn up by the author.

As we have studied the tourist flow dynamics in the Caucasian Mineral Water region in January–August 2016 and 2017 (Figure 1), we can notice a positive trend in tourist number that come to the region.

Thus, 65382 people had visited the Caucasian Mineral Water region by the beginning of 2017. That is 4.5% more than the same indicator in 2016. The number of tourists in August 2017 was equal to 98 083 people and exceeded the indicator in August 2016 by 6.5\(^2\).

Over the last 5 years the number of tourists in health resort institutions of the Caucasian Mineral Water region has increased by 23.7%, from 753 thousand people in 2011 to 931.1 thousand people in 2016 (Figure 2).

About 40% of people that are treated in the Caucasian Mineral Water region are Russian citizens from Stavropol region and other parts of the country. The rest 60% are foreign tourists mainly coming from the neighboring countries (Azerbaijan, Armenia, Uzbekistan, Belarus, Ukraine).

However, despite ever-increasing number of tourists in health resorts of the Caucasian Mineral Water region that has been observed there since 2010, there is a number

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Figure 2. Dynamics of the number of tourists in health resort institutions of the Caucasian Mineral Water region in 1991–2015 [thousand people]
Source: drawn up by the author.
of problems in the area of primary wellness tourism development. In particular, all the resort cities of the region stand behind the world resorts in the level of quality of resort and tourism infrastructure. Moreover, many Russians prefer such European health resorts as Karlovy Vary (Czech Republic), Bad Ragaz (Switzerland), Bad Steben (Germany) over the national ones. Here is the detailed description of the Caucasian Mineral Water region and some European resorts (Table 1).

Table 1. Comparative analysis of the Caucasian Mineral Water region and European resorts

<table>
<thead>
<tr>
<th>Name of a resort</th>
<th>Caucasian Mineral Water</th>
<th>Karlovy Vary</th>
<th>Bad Ragaz</th>
<th>Bad Steben</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of mineral springs</td>
<td>130</td>
<td>80</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Number of diseases that can be treated</td>
<td>15</td>
<td>9</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Average cost of accommodation (per night in a four stars hotel), rouble</td>
<td>5 000</td>
<td>9 100</td>
<td>28 000</td>
<td>15 000</td>
</tr>
<tr>
<td>Average cost of treatment</td>
<td>Included in the cost of accommodation</td>
<td>Included in the cost of accommodation</td>
<td>Included in the cost of accommodation</td>
<td>Included in the cost of accommodation</td>
</tr>
<tr>
<td>Service level (1 to 10)</td>
<td>4</td>
<td>8</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>Number of tourists in 2016 (thousand people)</td>
<td>960</td>
<td>1 118</td>
<td>1 236</td>
<td>1 422</td>
</tr>
</tbody>
</table>

Source: drawn up by the author.

Data in the Table 1 highlights that the number of springs in Caucasian Mineral Waters is much higher than in the renowned European balneological and spa resorts. It is also obvious that the springs in Caucasian Mineral Waters excel European resorts at curative properties. Besides the cost of accommodation in the region is almost half the price of accommodation in Czech Republic, it is also three times less expensive than accommodation in Germany. Staying in Switzerland would cost you six times as much as accommodation in the Caucasian Mineral Water region, however despite this fact the tourist flow to the region is significantly lower than to the above-mentioned European resorts. First, the reason is obsolescence of the material resources in the most health and leisure institutions in the Caucasian Mineral Water region. The level of tourist satisfaction with current infrastructure (treatment, transport, leisure) does not meet increasing demands of the region visitors.

Another important issue that has negative impact on the resort development is low service level. Tourists consider four stars hotel in the region and in Europe differently for a number of reasons. Among them is lack of professionals that could provide higher

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service level, insufficient number of additional services provided in a hotel. Besides, the resorts of the Caucasian Mineral Water region are not recognized by Russian people with high income as they are not considered to be prestigious tourist direction\textsuperscript{4}.

It should be noted, that beside foreign “competitors” Caucasian Mineral Waters have also national ones. First, it is city resort Eupatoria, Saki, Yalta located in the Crimea, various resorts of Krasnodar region (mineral springs in Bolshaya Anapa, Goryachyi Kluch, mud volcanoes on Tamanskyi peninsula) and of the oldest Russian balneotherapeutic health resorts – Marcial Waters in Karelia. Table 2 below presents the results of comparison study of the resorts of Caucasian Mineral Waters and several other Russian balneological resorts.

\textbf{Table 2. Comparative analysis of the Caucasian Mineral Water region and Russian resorts}

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Caucasian Mineral Water</th>
<th>Eupatoria</th>
<th>Marcial Waters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of mineral springs</td>
<td>130</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Number of diseases that can be treated</td>
<td>15</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Average cost of accommodation (per night in a four stars hotel), rouble</td>
<td>5000</td>
<td>6000</td>
<td>9500</td>
</tr>
<tr>
<td>Average cost of treatment</td>
<td>Included in the cost of accommodation</td>
<td>Included in the cost of accommodation</td>
<td>Included in the cost of accommodation</td>
</tr>
<tr>
<td>Service level (1 to 10)</td>
<td>4</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Number of tourists in 2016 (thousand people)</td>
<td>960</td>
<td>1114</td>
<td>825</td>
</tr>
</tbody>
</table>

Source: drawn up by the author.

The performed research revealed that the number of mineral springs in the Caucasian Mineral Water region exceeds resort city of Eupatoria (Crimea republic), and Marcial Water resort (Republic of Karelia). The range of diseases that could be treated in the Caucasian Mineral Water region is also much bigger comparing to other Russian resorts. The service level of the Caucasian resort is lower than in other Russian resorts. The cost of accommodation in Karelia is twice as high as in the Caucasian Mineral Water region, however the tourist flow to Marcial Waters is only 14% less than to the Caucasian spas. Eupatoria is also considered to be more expensive resort, but number of tourists there is 16% higher than in the Caucasian resorts.

However, the demand for tourist and sanatorium-resort services is currently increasing and it cannot be satisfied with present capacity offered by the Caucasian Mineral Water region. Over 100 mineral springs of 13 types and medicinal clay from Tambukan lake compose unique balneological facilities of Caucasian Mineral Waters. Total mineral

water supply is equal to 16.4 thousand m$^3$ per day$^5$. The region possesses one of the best medicinal clay deposits in Russia, its discharge is about 900 thousand m$^3$. Together with picturesque landscapes and curative climate these natural resources create highly advantageous conditions for the development of Caucasian Mineral Water resorts.

Many common diseases are efficiently treated in the Caucasian Mineral Water region. This is the most important national social function of Caucasian spa resorts. Each of them has its own treatment specialization. Diseases of blood circulation, respiratory apparatus and nervous system are treated in Kislovodsk; digestive tract, liver, biliary tracts and metabolic disorder can be treated in Essentuki; supporting-motor apparatus, nervous system, digestive apparatus, skin diseases and gynecological disorders – in Pyatigorsk; digestive organs, kidneys, urinary tract and metabolic disorder – in Zheleznovodsk$^6$.

**Conclusion**

Resorts of the Caucasian Mineral Water region have all the prerequisites for further development. The capacity of regional sanatorium-resort and tourist complex does not satisfy the demand of medical and tourist services. Therapeutic facilities operate at over 100% capacity in peak season$^7$. In the meantime, regional natural and resource potential allows increasing resort capacity by 1.5–2 times. Thus, there is no doubt in region’s possibilities of the further development.

Special attention is focused on Caucasian spa resorts development. This is due to implementation of the Federal target program “Development of domestic and inbound tourism in the Russian Federation (2011–2018)” approved by a decision of the Government of the Russian Federation no 644 on August 2$^{nd}$, 2011. One of the key elements in the program is cluster approach, which implies that all organizations involved in development, production, promotion and sale of tourism product should be located within certain area. The program also implies development of “Eco-resort Caucasian Mineral Waters” tourism and recreation cluster in Stavropol region$^8$.

Besides, Dmitry Medvedev, the Prime Minister of the Russian Federation, held the government committee session on social and economic development of North Caucasus Federal District in Essentuki in March 2017. Among the discussed issues was tourism development in the Northern Caucasus region. Dmitry Medvedev called medical cluster in Caucasus Mineral Waters as a key tourism project, he also mentioned bad condition of its infrastructure. According to the Prime Minister it is necessary to improve current

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$^8$ Federal law dated February 23$^{th}$, 1995 N 26-FZ “On natural medical resources, health-related areas and resorts” (with amendments dated August 22$^{nd}$, 2008).
infrastructure, i.e. both service and treatment facilities. This can make the Caucasian Mineral Water region a source for medical tourism development (there is no such sphere in Russia now) and put the region to the international tourist market.

Table 3 presents development possibilities and prospects for the Caucasian Mineral Water region.

### Table 3. Priority areas in the development of the Caucasian Mineral Water region

<table>
<thead>
<tr>
<th>Main steps</th>
<th>New way of presentation and increase in current infrastructure operation</th>
<th>Building and development of new accommodation and infrastructure facilities</th>
<th>Acknowledgment of the Caucasian Mineral Water region as UNESCO world heritage site</th>
</tr>
</thead>
</table>
| Growth areas | – new way of the region presentation  
– renovation of old hotel rooms and medical equipment  
– events intended for various markets  
– increase in service level  
– development of new tourist and health improving routes and programs | – search for new areas for building accommodation and treatment sites  
– building new accommodation according to a city development plan  
– preparation of documentation for unesco  
– introduction of new spa methods and programs and wellness programs, inviting stars of healthy living | – active promotion of the region on the international level  
– introduction of new medical programs, treatment, rehabilitation and health improvement methods meeting international standards  
– organization of international scientific conferences in the region and various events in other regions |

Source: drawn up by the author.

Implementation of the above-mentioned trends in tourist and sanatorium-resort complex in the Caucasian Mineral Water region would be impossible without sufficient legal framework for the development strategy, i.e. preparation of package of regional and local laws and regulations aimed at tourist and sanatorium-resort complex development in the region.\(^9\)

Long-term and adequate resort development also requires improvements in environmental setting in the region. This includes renewal and strict compliance with environmental measures that should be aimed at integration of the unique resort experience of the region with modern world trends, sensible expansion and renovation of tourist infrastructure. In order to keep the status of specially protected ecological and resort Russian region in Caucasian Mineral Waters it is necessary to develop efficient national town-planning activities policy, investment strategy, solve issues of distribution of productive forces and promote organic agriculture. In order to preserve curative mineral

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\(^9\) S.A. Matyash, K.I. Shaporova: Problems and prospects of primary wellness tourism development in Russia. Current issues of science: from theory to practice: proceedings of the 1\(^{st}\) Russian scientific conference (Moscow, August 31\(^{st}\), 2015), Moscow 2015, p. 61–64.
resources it is necessary to expand system for monitoring resource quality (national system of observation wells) and extraction volume (daily extraction should not exceed approved reserves)\textsuperscript{10}. In order to limit business activities in the region it is necessary to develop scientifically ground regulations, adopt single technical plan for deposit development. These are indispensible conditions for preservation and rational use of natural curative resources and sustainable development of medical and health complex in the Caucasian Mineral Water region. Caucasian Mineral Waters are the largest resort region in Russian, the unique one for its various balneological resources in Eurasia.

References

Federal law dated February 23\textsuperscript{th}, 1995 N 26-FZ “On natural medical resources, health-related areas and resorts “ (with amendments dated August 22\textsuperscript{nd}, 2008).
Matyash S.A., Shaporova K.I.: Problems and prospects of primary wellness tourism development in Russia, Current issues of science: from theory to practice: proceedings of the 1\textsuperscript{st} Russian scientific conference (August 31\textsuperscript{st}), Moscow 2015.

\textsuperscript{10} V.S. Orlova, A.A. Shcherbakova: Prospects of primary wellness tourism development in the region, Problems of area development, Vologda 2014, 4(72), p. 34–45.