

Piterski, Dmitri; Rattchina, Marina

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The development of Russian peripheral region. Ecological and geopolitical problems of the region of Caucasian spa resorts

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DR. DMITRI PITERSKI

with the participation of Marina Rattchina

Leipzig University, Germany

dpiterski@web.de

THE DEVELOPMENT OF RUSSIAN PERIPHERAL REGION. ECOLOGICAL AND GEOPOLITICAL PROBLEMS OF THE REGION OF CAUCASIAN SPA RESORTS.

Paper prepared for the 43st Congress of the ERSA, Jyväskylä, Finland, 27th-30th August 2003

Abstract

The paper deals with one of the most important tourist regions of modern Russia - the region of Caucasian spa resorts. This region is now one of the most important tourist regions of Russia. Before the collapse of the USSR 7% of the total number of health facilities of this country was situated there. In this context economic-geographical and ecological as well as geopolitical problems and points of view are considered. The favourable natural recreation conditions, their concentration in a relatively limited territory, the considerable potential of health-resorts and the efficiency of therapeutic treatment provide good prospects for the further development of a health-resort complex among Caucasian spa towns. But this region also faces numerous problems which could affect its future development. The ecological situation of the region is of special interest from the economic-geographical point of view. Over the last 30 years before the beginning of 1990s the total population of the region has considerably increased, because of the development of non-resort activities. During this period the industrial zones in the spa resorts and other towns of the region have also expanded considerably. The industrialisation of this region has initiated a conflict of interests between economic growth, resort and dwelling development and acceptable living conditions. The bad ecological situation in the region of the Caucasian spa resorts was partly a result of the peculiarities of the regional planning system of the Soviet Union and Russia, namely of the poor track record of the realisation of regional and urban planning. Recent scientific and planning studies suggest a complex of environmental protection measures, which will provide opportunities for the stabilisation of the ecological situation and for the restoration of the region of Caucasian spa resorts region in the future. In this event the region of the Caucasian spa resorts could then be held up as a model of environmental protection among resort and

recreation areas. Although the region of the Caucasian spa resorts does not directly border on the former Soviet Republics, it is located now in the periphery of modern Russia and directly in the centre of the northern Caucasus, where the political situation in a series of former autonomous subjects of the Russian Federation, especially in the Chechen Republic is rather pronouncedly incalculable and explosive. For the present, the implementation of the new health-resort concept will only be possible with capital investment (domestic and foreign) and modern technology from abroad. The evaluated development potential of some spa towns of the region of the Caucasian spa resorts is high enough. But the limitation factor for the actual prospects of development of these spa resorts and for their investment attractiveness in this case is the unstable geo-political situation in the Northern Caucasus and the corresponding bad investment climate in this part of Russia.

Key words: spa resorts, ecological and geopolitical problems, development, Russia.

Geographical position and some key characteristics of Caucasian spa resorts

The region of Caucasian spa resorts is one of the oldest tourist regions of Russia. The official date of birth of these famous Russian resorts is 1803, although their modern recreation function has been developing since the 18th century¹.

The region of Caucasian spa resorts is situated in the northern foothills of the Caucasus, not far from Elbrus. This region takes in a surface area of about 3,900 km² within the peripheral Stavropol region of the Russian Federation. In the region of these Caucasian spa resorts live nowadays over 700, 000 people, which corresponds to a 27% share of the Stavropol region².

The future development prospects of the region of Caucasian spa resorts are connected with the rich reserves of different mineral waters (8-12 cubic metres per day) and mud (1.7 million cubic metres). A few hundred springs exist, more than 130 springs are officially recognized, from which over 100 are being exploited³.

Four famous resorts are situated in the region. They are: Kislovodsk (cardiovascular diseases, nervous diseases, bronchial asthma), Yessentuki (gastric diseases), Pyatigorsk (gastric diseases, bone diseases, nervous diseases) and Zheleznovodsk (gastric diseases, internal

diseases)⁴. The total recreation potential at the beginning of the 1990s was more than 45,000 places in rehabilitation and health facilities and about 2,500 in tourist hotels⁵.

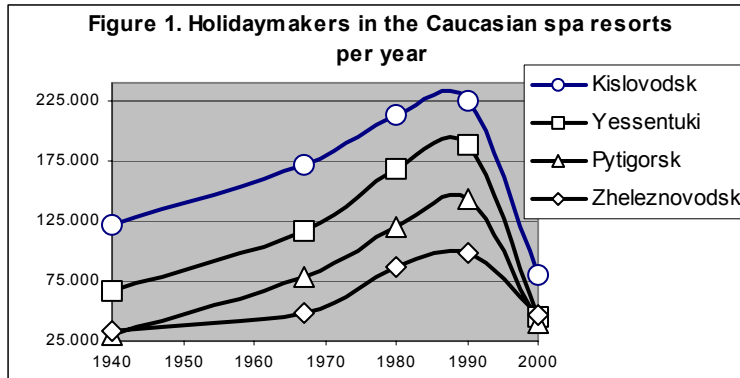
The growth of the recreational potential of health resorts in the region of Caucasian spa resorts was very considerable. Especially after the year 1920, emphasis was placed on planning and expanding primarily the health resorts Kislovodsk and Yessentuki for the treatment of a large number of health resort patients. Before the Second World War, more than two-thirds of the Sanatorium spots were concentrated in both of those spa towns. Only since the beginning of the 1960s have the other health resorts of the region become strongly expanded⁶. In the middle of the 1980s 7% of the total amount of health facilities of the USSR were situated in the region of Caucasian spa resorts⁷.

The largest resort of the region is Kislovodsk with over 35% of the regions recreation potential in rehabilitation and health facilities and holidaymakers at the beginning of the 2000s⁸. The main climatic and therapeutic characteristic of Kislovodsk are its pure, dry air and lack of mists, plenty of sunlight all the year round, the first opened in 1903 in Russia unique *terrainkur*⁹ (the 80 km long route for therapeutic walking) and the therapeutic *narzan* mineral water. As mentioned above the resort's main function is the prevention of cardiovascular ailments and nervous diseases, some of the most common human diseases today¹⁰. The resort of Kislovodsk is also well known because of its 1,2000 hectares mountain park, which was laid out in 1823. The chemical composition of the mineral water is similar to the West Bohemian baths (Czech Republic) as well as in the Vogtland (Germany) health resorts of Bad Elster and Bad Brambach.

The favourable natural recreation conditions, their concentration in a relatively limited territory, the considerable potential of health-resorts and the recognised high efficiency of the therapeutic treatment provide good perspectives for the further development of the Caucasian spa resorts. But this region also faces numerous problems which will adversely affect its development perspective: pollution from industrial establishments, a critical ecological situation, resort hotels below international standards, an uncertain geopolitical context and recent socio-economic problems.

Owing to such problems the total number of holidaymakers in the rehabilitation and health facilities in the Caucasian spa resorts has fallen during the 1990s and comprises at present

about 3.5 times less compared with the beginning of the 1990s¹¹. Till the end of the 1980s growth of holidaymakers had been noticed in the Caucasian spa resorts. The *figure 1* shows the collapse of this index from the beginning of the 1990s according to official statistics.



Ecological situation of the region of Caucasian spa resorts

According to the official information, more than 10% of the cities in Russia are in a poor ecological shape¹². One also needs to take into consideration that among Russian regions and cities that suffer from severe ecological conditions there are not only the industrial and agricultural districts and centres (which would be understandable), but also some recreational regions. The region of the Caucasian spa resorts is a good example in this case, which will be discussed in a more detail below¹³.

The ecological situation of the region is of special interest from the geographic point of view. The region of Caucasian spa resorts is a multifunctional city agglomeration with about 550,000 urban dwellers and the population density along the Mineralnye Vody - Kislovodsk city axis is about 950 inhabitants per sq. km. It is notable, that these figures are comparable with those of many city agglomerations of non-resort regions in Russia. Besides four health-resorts six more towns are situated in the region. Among them are the traffic centre of Mineralnye Vody with its international airport, and the industrial town of Lermontov the former military production centre. The agriculture of the region has mainly concentrated on specialisation to support the resorts.

Over the last 30 years till the beginning of the 1990s the total population of the region has increased considerably, because of the non-resort activities of the area. During this period the

industrial zones in the spa resorts and other towns of the region have also grown considerably to their area of more than 1800 hectares at the beginning of the 1990s). The largest city and the most important industrial centre of the Caucasian spa resorts is Pyatigorsk with 190,000 urban dwellers¹⁴. Presently, the industrial significance of the Caucasian spa resorts, as well as those of Pyatigorsk within the backdrop of the Russian economic crisis has sunk. With reference to the industrial potential, Pyatigorsk, in the region of Stavropol, finds itself today in 4th place, after the administrative centre Stavropol, and Nevinnomyssk and Georgiyevsk as well.

More than 1300 potential sources of environmental pollution are situated in the region. The pollution from some of the industrial and agricultural enterprises of the region is very high. Examples of the most significant sources of pollution include the machine-building plants and chemical factories in Pyatigorsk and Lermontov and the poultry farms in Yessentukil¹⁵. The industrialisation of this region has created important conflicts of interest between economic growth, resort development and acceptable living conditions. High levels of pollution led to a situation that it is now impossible to use all the mineral water resources in the region for medicinal purposes without an expensive purification. The ecological crises in this region has started to develop since the early 1960s and by 1990s reached a critical level, as stated in the State Report on the Environmental Conditions in Russia¹⁶.

It is important to emphasise, that the bad ecological situation in the region of Caucasian spa resorts is partly a result of the peculiarities of the regional planning system of the Soviet Union and Russia, notably the low degree in the realisation of regional and urban planning. Caucasian Spa Resorts provide a good example of this situation. At a planning stage, there were all necessary regional and city plans designed for this region, as well as for its various resorts. However, during realisation of the master plans of health-resorts since 1970 there were some hundred violations of these documents revealed. As a result, this region with its unique natural and climatic conditions, as well as resources, has changed into a zone of unsystematically built sections, which include industrial, transport, agricultural and other enterprises. These are mixed with residential and resort areas.

The bad track record in the realisation of regional schemes or master plans for cities does not reduce the importance of regional and urban planning in the former Soviet Union, as well in

Russia, in principle. For all that, the system of regional and urban planning in this country is still worthy of note.

In addition to such stages of regional and urban planning as general (master) plans it is necessary to mention the Regional Territorial Complex Schemes of Environmental Protection in different regions, for instance in the Baikal region or in the region of Caucasian spa resorts¹⁷. This planning stage is of special interest from the geographical point of view. The system of environmental protection covers technical, technological, organisational and planning measures and suggests that a complex set of environmental protection measures should be implemented to provide opportunities for the stabilisation of the ecological situation and for the restoration of the Caucasian spa resorts region in the future. The most important planning proposal coming from these studies is the introduction of a special regional regime for the using the region's natural conditions and resources (the territory, mineral waters and mud, and natural climatic conditions), as well as the organisation of an appropriate environmental monitoring system.

Geopolitical situation in the new periphery of Russia

It is a matter of common knowledge, that the most important resorts of the former Soviet Union were all in the peripheral southern part of the country mainly in the North Caucasus on the flanks of the great Caucasus mountains and in the Crimea (the Ukraine). The region of Caucasian spa resorts was during the Soviet period and is now one of the largest and most important recreation regions of Russia although as mentioned above an uncertain geopolitical context is adversely affecting the development perspective of the Caucasian Mineral Waters region.

Besides that it is generally known that the borders between the Union Republics during the Soviet period were formal in principle. At present, it is far from being the case. The geopolitical situation of the Russian regions and cities has changed after the collapse of the USSR. As a result, many of the regions and cities in Russia have lost their central position and are located in what have now become outlying peripheral districts of the country. Changed geographical position of these regions and cities have resulted in medium- and long-term changes in their economic and spatial relations and, at the same time, have brought further

changes to the functional profile of these cities and their inner city structures. A special case within the border regions of Russia are the border areas of the Caucasian countries, where the political situation is extremely unstable. In contrast to the Russian-Ukrainian border where the installation of a state border controls hindered the development of relations on societal, economic and interpersonal levels, but did not halt it altogether, intercommunications across the Russian-Georgian border have been virtually stopped with the introduction of a strict border control system.

Although the region of the Caucasian spa resorts does not directly border on the former Soviet Republics (Georgia, Azerbaijan), it is located directly in the centre of the northern Caucasus, where the political situation in a series of former autonomous subjects of the Russian Federation, especially in the Chechen Republic, which unilaterally declared its political independence from Russia or in the North Ossetian Republic, is not just unstable, rather pronouncedly incalculable and explosive. According to the report of Ministry of Defence losses in killed and wounded of Russian federal forces in Chechen Republic during the period from 1.10.1999 till 23.12.2002 were over 20.000 of soldiers and officers¹⁸. A prospect to become an enormous military hospital as it was during the Second World War is negative for the resort image of the Caucasian spa towns.. Some Russian researchers believe that not the Northern Caucasus but the rivers Terek and Kuban are the actual state borders of contemporary Russia today¹⁹.

When one make estimates of development perspectives of the Caucasian spa resorts region, forecasts of future migration processes are of paramount importance. These forecasts were incorporated into Russia's recent major documents on regional planning, in the General Scheme for the Settlement Systems of Russia that plans establishment special areas for settlement of immigrants in European parts of Russia, in Siberia and in the Far East²⁰. According to the General Scheme this include not only refugees (or the so-called "involuntary immigrants"), but also economic immigrants. It is important to note that in the conditions of negative natural growth on the population in-migration has become the main source of re-population of Russia, particularly of its urban growth. Like the Northern Caucasus in general the Stavropol region is one of the main acceptors of immigrants. All the spa towns and the whole Caucasian spa resorts region are involved into this process.

A further potential for conflict results from the fact that a portion of the deposits of mineral resources, on which, for example, the curing treatment of the health resort of Kislovodsk is based, located in the territory of the Karachai-Circassian Republic; the same thing holds true for the deposits in therapeutic mud and for the largest part of the potable water resources, which are found in the area of the Kabardin-Balkar Republic.

The region of Caucasian spa resorts could be held up as a model for environmental protection among resort and recreation areas elsewhere and not only in Russia. Nevertheless, there is an important "but" to be taken into account. For the present, the implementation of the new health-resort concept will only be possible with capital investments (domestic and foreign) and modern technology from abroad. A limiting factor in this case is the unstable geo-political situation in the northern Caucasus and the correspondingly bad investment climate in this part of Russia.

Conclusion

Resort towns form a special group of cities. With the collapse of the Soviet Union, the burdens on those resort areas that remained a part of Russia, as for example, the region of the Caucasian spa resorts, are growing. These regions face many similar problems, which are of great importance to the development of the settlement systems of the country. Among them are the grave ecological and peripheral geopolitical situations. The development potential of Russian resorts (Pyatigorsk, Kislovodsk etc.) is relatively high, although it is not clear to what extent the development concept for the rest and recreation areas, established during the Soviet reign, can be converted under the new market conditions²¹.

The further development of one of the largest health resorts of Russia has the chance also because of a favourable combination of natural resource potential as well as spa know-how to be used as a recognised bath region, with European standards, and will, thereby, be determined by, apart from further factors and especially the economic and ecological situation, similar as at the beginning of the inclusion of the area into the Russian Empire 200 years ago, influenced to a considerable extent by the political situation on the present southern borders of the state of Russia and the developing political-economical situation in the Northern Caucasus.

Because of the scope and dynamics of the subject-matter only an author's view point but not a comprehensive analysis of the problem can be presented, the situation in the Russian Northern Caucasus requires, in principle, a continually monitoring as well as an subsequent investigation and evaluation.

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¹ VEDENIN, Y.A. & SAVEL'YEVA V.V. (eds) 1985 Problems of the use of recreation resources in the Caucasian Mineral Waters region, Moscow (in Russian)

² GOSKOMSTAT ROSSII (2002) Size of the population of the Russian Federation by cities, worker's settlements and rayons on 1 January 2002, Moscow (in Russian)

³ VEDENIN, Y.A. & SAVEL'YEVA V.V. (eds) 1985 Problems of the use of recreation resources in the Caucasian Mineral Waters region, Moscow (in Russian); VARTANYAN, G.S. & PLOTNIKOVA, R.I. (1993) Estimation of the prospects for the development of the mineral waters resources of the Caucasian Mineral Waters region, *Razvedka i okhrana nedr*, 11, 29-32 (in Russian); GIPROGOR (1991) *Territorial complex scheme of environmental protection of the region of Caucasian spa resorts*, Moscow (in Russian)

⁴ Kislovodsk is translated as „sour water“ in Russian, Pyatigorsk as „five mountains“ since one can see five peaks from the centre of this spa town and Zhelesnovodsk as „iron water“.

⁵ GIPROGOR (1991) *Territorial complex scheme of environmental protection of the region of Caucasian spa resorts*, Moscow (in Russian)

⁶ PITERSKI, D. & BRADE, I. (2000) The development of spa resorts – ecological and geopolitical problems: the region of Caucasian spa resorts, Russia, *Tourism Sustainability and territorial organisation*, 415-423

⁷ VEDENIN, Y.A. & SAVEL'YEVA V.V. (eds) 1985 Problems of the use of recreation resources in the Caucasian Mineral Waters region, Moscow (in Russian)

⁸ STAVROPOL REGION AND ITS RAYONS, Stavropol, 2002 (in Russian)

⁹ from French *terrain* and German *kur*.

¹⁰ Still in 1903, at the All-Russia Congress of Balneologists, Kislovodsk was recognised as a health resort for the treatment of cardiovascular diseases.

¹¹ GIPROGOR (1991) *Territorial complex scheme of environmental protection of the region of Caucasian spa resorts*, Moscow (in Russian); STAVROPOL REGION AND ITS RAYONS, Stavropol, 2002 (in Russian)

¹² PITERSKI, D. & BRADE, I. (1999) City development in contemporary Russia: regional, physical and urban planning under new societal conditions, *Russian and Euro-Asian Bulletin*, Vol. 8, No. 8, Melbourne

¹³ STATE REPORT ON THE ENVIRONMENTAL CONDITIONS IN RUSSIAN FEDERATION, *Zeleny mir 24 (1997) – 4 (1998)* (in Russian); WOROBJOW, R. & PITERSKI, D. (1997) Umweltbelastungen in europäischen Städten und Regionen der Russischen Föderation, *Europa Regional 3*, 38-51; PITERSKI, D. & BRADE, I. (2000) The development of spa resorts – ecological and geopolitical problems: the region of Caucasian spa resorts, Russia, *Tourism Sustainability and territorial organisation*, 415-423

¹⁴ The industrial specialisation of Pyatigorsk is machinebuilding, production of building materials, light and food industry, that of Kislovodsk is light, food and woodworking industry, that of Yessentuki and of Zheleznovodsk is light and food industry. The industrial specialisation of the traffic centre of Mineralnye Vody with its international airport is machinebuilding, production of building materials, light and food industry.

¹⁵ GIPROGOR (1991) *Territorial complex scheme of environmental protection of the region of Caucasian spa resorts*, Moscow (in Russian)

¹⁶ STATE REPORT ON THE ENVIRONMENTAL CONDITIONS IN RUSSIAN FEDERATION, *Zeleny mir 24 (1997) – 4 (1998)* (in Russian)

¹⁷ GIPROGOR (1991) *Territorial complex scheme of environmental protection of the region of Caucasian spa resorts*, Moscow (in Russian)

¹⁸ IZWESTIYA No. 29/18.02.2003 (in Russian)

¹⁹ ZHITIN, D.V. (1994) Geopolitic in Russia – 400 years ago and today, *Izvestiya RGO 126/6*, 31-37 (in Russian)

²⁰ General Scheme for the Settlement Systems in the Territory of the Russian Federation. Fundamental Regulations, *Gradostroitel'naya programma vozrozhdeniya Rossii, 1995*, 46-127. Moscow (in Russian).

²¹ PITERSKI, D. a.o. (2002) Das Entwicklungspotential der russischen Städte in der zweiten Hälfte der 1990er Jahre – Ein Vergleich nach Städtetypen, I. Brade (ed.) *Die Städte Russlands im Wandel*, 106-128