

Climatic Features of the Resort

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ABSTRACT

The article considers the resort climatic resources of Imereti. The main climatic characteristics of the Resorts are determined and a map of the resorts and resort areas of Imereti is developed. The thermal characteristics of summer and winter are given in accordance with the classification of Kaygorodov. The spa and curative factors of the main resorts are considered. The physicochemical properties of water, their composition and medicinal properties are indicated. In article resort climatic resources of Imereti are considered. The attention that in the world isn't a lot of places where in rather small territory so many various landscapes are located is focused: from damp subtropics, to the Alpine mountain meadows. It is proved that a relief of mountain landscapes, the coast of the Black Sea, Mineral water and climate – a natural basis of development of resort economy of the region.

Keywords: *Imereti; climate; spa resort; spa climatic resort; national; local; Tskaltubo; Sairme.*

Introduction.

Nature generously endowed Georgia. There are not many places around the world where a relatively small area has so many diverse landscapes - from humid subtropics to alpine meadows. Georgia is a resort country. The relief of mountain landscapes, the Black Sea coast, mineral waters form the basis of a wide resort construction. The basis of the resort factor is its air (climate). Due to the confluence of mountain and sea air, climatic conditions are distinguished by high spa-healing properties and are used for general healing and treatment of various diseases [1,3,5,9,10, etc.].

Due to the unusually diverse climatic and balneological resources of different origin and medical use, more than 100 resorts function in Georgia [1,11-21]. Almost all types of mineral waters are found in Georgia. There are about 2000 sources. The richness of mineral waters and their diversity makes it possible to rehabilitation, as well as the treatment and prevention of cardiovascular and nervous ailments, diseases of the digestive and endocrine systems, musculoskeletal system [1].

The most common are carbon dioxide mineral waters. These waters are used to treat the gastrointestinal tract, liver, and some urological, neurological, and other diseases. Georgian resort resources are redistributed in its various regions, including Imereti [2,3]. Imereti is located in the central part of Georgia (in Western Georgia) at a distance of several tens of kilometers from the Black Sea. Imereti region is rich in resort-climatic resources. Resorts and resort areas are located in different areas of the region. Each of the resorts has its own specialization and features of functioning. This article systematizes the resorts of Imereti.

Brief description of problem statement.

Fig. 1 shows a map of the location of resorts and resort areas of Imereti, which shows that Imereti is a fairly rich region with both resort and climatic resources and resort territories. This creates a sustainable basis for tourism development.

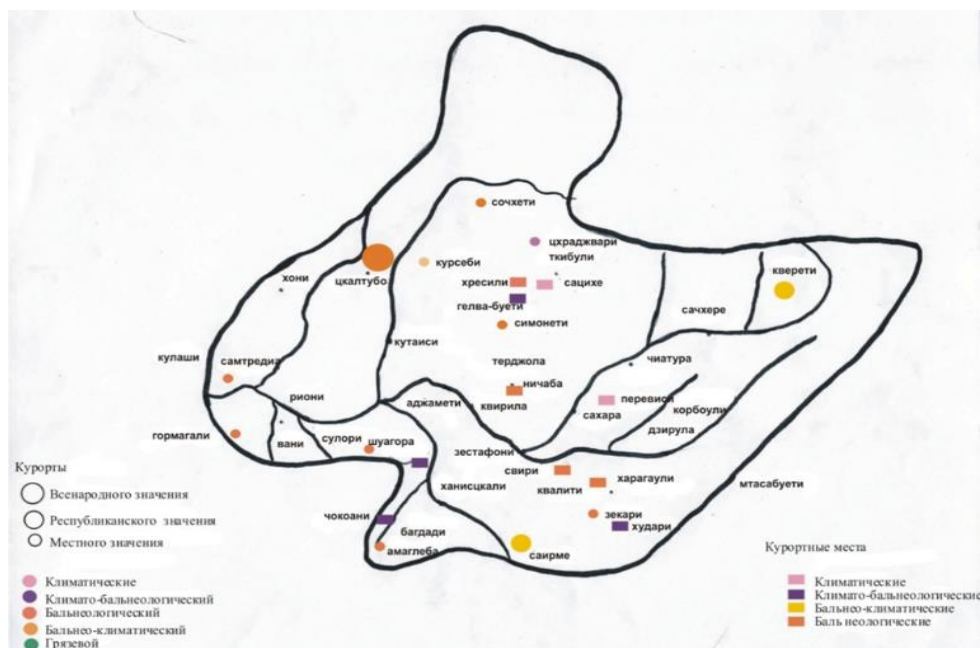


Fig. 1. Resort resources of Imereti.

Table 1 presents a list of Imereti resorts with their status (international, state, local), altitude, profile (balneological, climatic) and basic climate characteristics.

Table 1. Climatic characteristics of the resorts of Imereti [11].

Resorts (status)	Height, a.s.l, m	Profile	Air temperature, °C			Absolute humidity		Mean annual humidity	Precipitation, mm			Wind, m/s
			Jan	Jul	Year	Jan	Jul		Year	Warm	Cold	
Tskaltubo (international)	120	B	5,3	23,3	73	6,4	22,2	4,7	1818	987	831	1,6
Samtredia (local)	25	B	4,7	23,2	76	6,6	22,3	4,7	1526	746	780	2,8
Gormagala (local)	200	B	4,7	23,2	74	6,5	22,2	4,6	1526	746	780	4,3
Sairme (state)	950	C-B	-0,3	17,4	80	4,8	16,9	3,9	1165	543	629	1,1
Zekari (local)	650	B	1,5	19,0	77	4,5	16,0	4,0	1157	550	608	1,2
Sulori (local)	200	B	3,0	22,0	74	6,5	21,0	4,0	1350	650	700	2,5
Coursevi (local)	350	B-C	2,6	21,0	72	5,4	19,2	4,5	2137	1183	954	2,8
Simoneti (state significance)	300	B	2,5	22,5	73	6,1	20,5	4,2	1185	620	565	2,2
Quereti (local)	750	B-C	0,4	22,3	76	5,6	18,8	4,2	904	454	450	1,8
Nunisi (local)	920	B	-0,3	19,0	75	4,8	17,5	4,3	1185	680	505	2,0
Note	E: Balneological; C-B: Climatic- Balneological; B-C: Balneo-Climatic											

To characterize the thermal conditions of summer and winter in the resorts, Kaigorodov [8], developed the classification presented in Table 2. This classification was successfully used at the Institute of Balneology and Physiotherapy of Georgia in the medical-climatic classification of resorts [8]. In characterizing the climatic resources of resorts in the Imereti region, we are also based on this classification.

In accordance with tables 1 and 2, we can conclude that in the resorts of Imereti, winters are mostly mild and moderately mild, and summers are warm and very warm.

Table 2. Thermal characteristics of winter and summer according to Kaygorodov [8].

Winter	Temperature gradation, °C	Summer	Temperature gradation, °C
Tough	-38 -31	Moderately cool	10 – 14
Very cold	-31-24	Moderately warm	14 – 18
Cold	-24 -17	Warm	18 – 22
Moderately cold	-17-10	Very warm	22 – 26
Moderately warm	-10 -3	Roast	26 – 30
Soft	3 -4	Very hot	30 – 34
Very soft	4 -10		

Consider the main healing factors of resorts

Tskaltubo is a spa resort in Imereti Region, in west-central Georgia. Tskaltubo holds the status of balneological resort. It is famous for its radon-carbonate mineral springs, whose natural temperature enables the water to be used without preliminary heating. The resort's focus is on balneotherapy for circulatory, nervous, musculo-skeletal, gynaecological and skin diseases. Tskaltubo is a resort of international importance which, functions since 1926. It is rich in unique healing radon-, nitrogen-, chloride-hydrocarbonate-sulfate water, which has fairly stable physico-chemical properties. Mineral water, with a temperature of 33-35 °C, is used for baths, inhalations and sprays.

Treatment at the resort is indicated for diseases of the musculoskeletal system, neurological, cardiovascular and gynecological diseases. The healing season lasts all year round, which, first of all, is facilitated by the climatic conditions of Tskhaltubo. The healing factor is also the microclimate of karst caves, which has a good effect on the treatment of hypertension, bronchial asthma, neurosis and other diseases.

Sairme is a balneo-climatic resort of national importance. It is located in Baghdad district, 25 km southwest of the district center and 55 km south of Kutaisi, on the northern slope of the Meskhet ridge, at an altitude of 950 m above sea level in the Tsablaritskali gorge. The surrounding slopes are covered with deciduous and coniferous forests. The average annual temperature is + 8,5 °C. Winter is warm and not snowy. The average January temperature is -10 C. Summer is moderately warm and moderately humid. The average temperature in August is +17 °C. The average annual rainfall exceeds 900 mm. The average annual humidity is 75-80%. In summer, mountain-valley winds are frequent, which provides sufficient ventilation.

Zekari is a local balneological resort located in Baghdad district, 35 km from the regional center, on the northern slope of the Adzhara-Imereti ridge, at an altitude of 750-780 m above sea level, in the gorge of the Hanitskali River. Therapeutic indicators: chronic arthritis, gynecological diseases, cardiovascular diseases, nephritis and functional diseases of the nervous system.

Kvereti is a low-mountain balneoclimatic resort of local importance in the Sachkhere district. Located at an altitude of 550 m above sea level. It is characterized by moderately warm and mild winters (average January temperature + 2-3 °C), and warm, moderately humid summers (average July temperature 20 °C). The amount of average annual precipitation is 1100-1200 mm. The main therapeutic factor of the resort is low-hydrogen sulfide mineral water, the temperature of which is 16 °C. The diseases of the peripheral nervous system, joints and gynecological diseases are treated. It functions during the whole year.

Nunisi is a balneo-climatic resort of local importance. Located 25 km from the railway, in the Kharagaul district at an altitude of 920 m above sea level. The healing factor's mineral water with weakly mineralized warm sulfur and its temperature is 27-28 °C and mountain air. It is recommended for the treatment of the following diseases - skin (neurodermatitis, eczema, psoriasis), motor organs, peripheral nervous systems, anemia. The season lasts from May to October.

Samtredia is a local balneological resort. Located in the city of Samtredia. Therapeutic indicators: diseases of the musculoskeletal systems, diseases of the chronically peripheral nervous system, skin ailments (lesions) and hypertension.

Amagleba is a balneological resort. Located near the Van district off the left bank of the Rioni River. Insulated mineral waters contain sodium, chlorine, carbon dioxide and flint. Therapeutic indicators: chronic arthritis.

Sulori is a local balneological resort. Located on the slopes of Adjar-Meskheti ridge, 10 km from Vani. Sulori mineral waters are similar in chemical composition and physical properties to Tskaltubo mineral waters.

At the same time, bromine salt was found in the chemical composition of the resort's water, which has a calming effect on the nervous system. Its best properties are natural radioactivity and natural temperature.

Simoneti is a balneological resort of national importance. Located in Terjol district. Mineral hot water is characteristic. Therapeutic indicators: diseases of the musculoskeletal system, chronic acute arthritis, metabolic disorders, cardiovascular diseases.

Kursebi is a balneological resort. Located 23 km from Tkibuli. The main healing factor of the resort is highly mineralized hydrogen sulfide mineral water, which is used for medicinal purposes in bath of Vani.

Conclusion

Thus, Georgia, however, has not yet fully tapped its potential to promote sustainable tourism in promising regions, such as Imereti, or transform the economy through investment in tourism and agriculture supply chains for both export and import substitution. There is also a need for skills development in order to provide the skilled labor needed for a growing economy and increased productivity. The proposed tourism development vision for the region envisages developing Imereti as a high quality geo-tourism destination throughout the year through attracting domestic and international tourists.

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კურორტების კლიმატური თავისებურებანი

ნ. ბერძენიშვილი

რეზიუმე

სტატიაში განხილულია იმერეთის საკურორტო კლიმატური რესურსები. განსაზღვრულია კურორტების ძირითადი კლიმატური მახასიათებლები და შემუშავებულია იმერეთის კურორტებისა და საკურორტო ზონების რუკა. ზაფხულისა და ზამთრის თერმული მახასიათებლები მოცემულია კაიგოროდოვის კლასიფიკაციის მიხედვით. განიხილება ძირითადი კურორტების სპა და სამკურნალო ფაქტორები. მითითებულია წყლის ფიზიკურ-ქიმიური თვისებები, მათი შემადგენლობა და სამკურნალო თვისებები. სტატიაში განხილულია იმერეთის საკურორტო კლიმატური რესურსები. ყურადღება გამახვილებულია იმაზე, რომ მსოფლიოში არც თუ ისე ბევრი ადგილია, სადაც საკმაოდ მცირე ტერიტორიაზეა განლაგებული ამდენი სხვადასხვა პეიზაჟი: ნესტიანი სუბტროპიკებიდან, ალპური მთის მდელოებამდე. დადასტურებულია, რომ მთის ლანდშაფტების რელიეფი, შავი ზღვის სანაპირო, მინერალური წყალი და კლიმატი რეგიონის საკურორტო მეურნეობის განვითარების ბუნებრივი საფუძველია.

Климатические особенности курорта

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Резюме

В статье рассмотрены курортные климатические ресурсы Имерети. Определены основные климатические характеристики курортов и разработана картосхема курортов и курортных местностей Имерети. Дана термическая характеристика лета и зимы в соответствии с классификацией Кайгородова. Рассмотрены курортные и лечебные факторы главных курортов. Указаны физико-химические свойства вод, их состав и лечебные свойства. Природа щедро одарила Грузию. Во всём мире не так много мест, где сравнительно на небольшой территории расположено столько разнообразных ландшафтов – от влажных субтропиков до альпийских высокогорных лугов. Рельеф горных ландшафтов, побережье Чёрного моря, минеральные воды формируют основу широкого курортного строительства.