

TOURISM CLIMATE INDEX IN TELAVI (EASTERN GEORGIA)

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Introduction

Information about different climatic and bioclimatic characteristics of known and potential health resort - tourism zones has significant importance for an increase in the effectiveness of their potential [4, 7, 8]. In particular, this is the so-called Tourism Climate Index (TCI), which is the bioclimatic characteristic of locality for the "average" tourism (mass tourism) [6].

TCI is a combination of seven parameters, three of which are independent and two in a bioclimatic combination:

$$TCI = 8 \cdot C_{ld} + 2 \cdot C_{la} + 4 \cdot R + 4 \cdot S + 2 \cdot W$$

Where C_{ld} is a daytime comfort index, consisting of the mean maximum air temperature ($^{\circ}C$) and the mean minimum relative humidity (%), C_{la} is the daily comfort index, consisting of the mean air temperature and the mean relative humidity, R is the precipitation (mm), S is the daily sunshine duration (h), and W is the mean wind speed (m/s).

In contrast to other climate indices, every contributing parameter is assessed. Because of a weighting factor (a value for TCI of 100), every factor can reach 5 points. TCI values ≥ 80 are excellent, while values between 60 and 79 are regarded as good to very good. Lower values (40 – 59) are acceptable, but values < 40 indicate bad or difficult conditions for understandable to mass tourism [6]. In south Caucasus countries, monthly value of TCI was calculated in Georgia, first for Tbilisi [5], then for Batumi, Anaklia, Kobuleti, Mukhuri, etc. [1, 3, 4]. The values of TCI for Yerevan (Armenia) and Baku (Azerbaijan) also were calculated [2].

This work is the beginning of a more detailed study of the indicated index of tourism in Georgia.

The area of studies, material and methods

The region of studies is Telavi town (distance from Tbilisi – 90 km), a historical area in eastern Georgia that is located in Kakheti (fig. 1). A visit to Telavi can be a fascinating experience because of its beautiful mountain landscapes, stunning regions, ancient world temples and monasteries, picturesque valleys and rivers and home to amber grapes that grows under the warmth of the sun. Telavi is not only famous as a tourism destination, but it is also locally recognized as Georgia’s centre for winemaking. A city that is located at 490 meters above sea level, Telavi is open to fresh and pure air because of this.

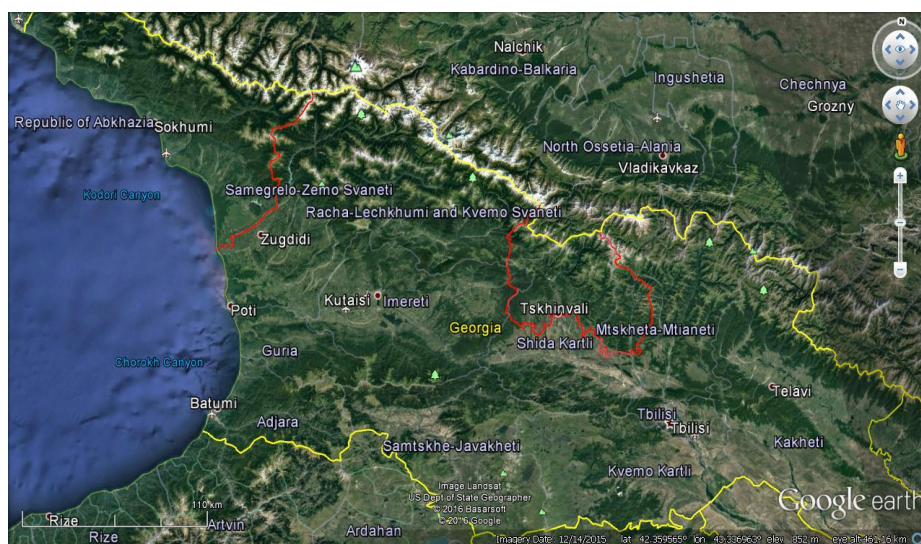


Fig. 1 Location Telavi town in Georgia

Telavi district is known not only as tourism zone, but also as locality with the therapeutic objects (Tetri Tsklebi, Orgvas-Abano, etc.) [8]. Therefore information about TCI for this locality will be useful for the more rational planning here of one form or another of mass tourism, and also of organization of the treatment of people in different seasons of year.

For the TCI calculation data of Hydrometeorological Service of Georgia was used (1961-2010).

Results and discussion

Information about TCI and TCI category in table 1 and fig. 2 are presented.

As it follows from table 1 the monthly values of TCI varied from 31 ("Unfavorable ", December) to 90 ("Ideal", June). On the average within this period of time the categories of TCI (fig. 2) varied from "Marginal" (December, January, February) to "Very Good" (May - September). Thus the climate of Telavi district is suitable for year-round mass tourism and leisure.

Table 1

Statistical characteristics of TCI in Telavi in 1961-2010

Month	Jan	Feb	Mar	Apr	May	Jun
average	47	47	52	60	73	75
min	37	37	37	40	54	55
max	55	60	71	89	87	90
Month	Jul	Aug	Sep	Oct	Nov	Dec
average	71	73	79	65	52	48
min	56	57	62	42	37	31
max	88	84	90	89	67	60

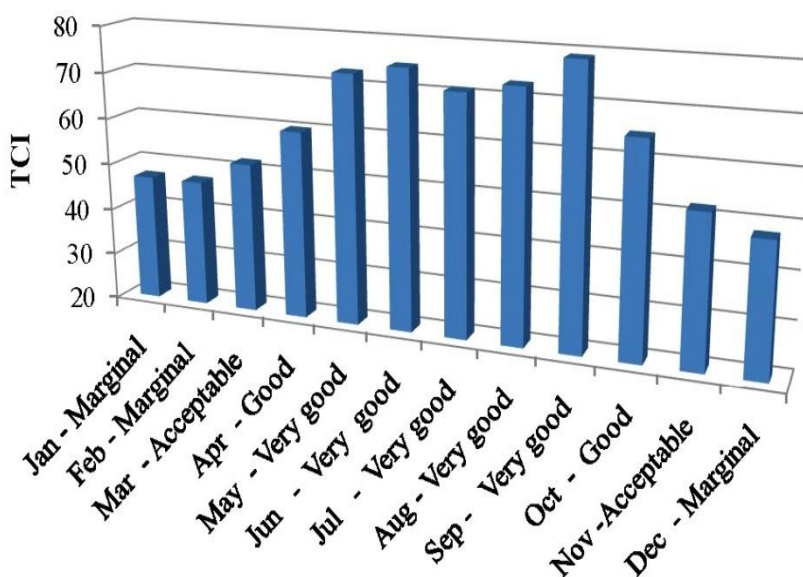


Fig. 2 Monthly average of TCI category in Telavi

On the average within this period of time the categories of TCI (fig. 2) varied from "Marginal" (December, January, February) to "Very Good" (May - September). Thus the climate of Telavi district is suitable for year-round mass tourism and leisure.

Conclusion

Climate has a great value for the tourism and recreation sector. In this work new data about such bioclimatic characteristic as “Tourism Climate Index” for Telavi town and its district (Eastern Georgia) is obtained. In the future a more detailed study of the climate resources of this location for the resort – tourism and treatment development is planned.

Key words:

Tourism Climate Index, health resort- tourism potential

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რეზიუმე

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მოყვანილია მონაცემები ქალაქ თელავში (აღმოსავლეთ საქართველო) ტურიზმის კლიმატური ინდექსის (ტკი) შესახებ, რომელიც სასარგებლოა ამ ადგილის საკურორტო-ტურისტული პოტენციალის განვითარებისთვის. ნაჩვენებია, რომ 1961-2010 წლებში ტკი-ს თვიური მონაცემები იცვლებოდა 31-დან (“არახელსაყრელი”, დეკემბერი) 90-დე (“იდეალური”, ივნისი). დროის ამ პერიოდისათვის ტკი –ს კატეგორიები იცვლებოდა საშუალოდ “მისაღები” –დან (დეკემბერი, იანვარი, თებერვალი) “მაღიან კარგი”-დე (მაისი, სექტემბერი). ეს ნიშნავს, რომ თელავის კლიმატი მთელი წლის განმავლობაში გამოსადეგია მასობრივი ტურიზმისა და დასვენებისათვის.

საკვანძო სიტყვები: ტურიზმის კლიმატური ინდექსი, კურორტის ტურისტული პოტენციალი.

SUMMARY

TOURISM CLIMATE INDEX IN TELAVI (EASTERN GEORGIA)

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The data about the Tourism Climate Index (TCI) in Telavi (Eastern Georgia) useful for the development of the health resort-tourism potential of this locality are cited. It is shown that in 1961-2010 the monthly values of TCI varied from 31 ("Unfavorable", December) to 90 ("Ideal", June). On the average within this period of time the categories of TCI varied from "Marginal" (December, January, February) to "Very Good" (May - September). This means that the climate of Telavi is suitable for year-round mass tourism and leisure.

Key words: Tourism Climate Index, health resort-tourism potential.

РЕЗЮМЕ

КЛИМАТИЧЕСКИЙ ИНДЕКС ТУРИЗМА В ТЕЛАВИ (ВОСТОЧНАЯ ГРУЗИЯ)

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Приводятся данные о климатическом индексе туризма (КИТ) в Телави (Восточная Грузия), полезном для развития курортно-туристического потенциала этой местности. Показано, что в 1961-2010 гг. месячные значения КИТ изменялись от 31 ("Неблагоприятный", декабрь) до 90 ("Идеальный", июнь). В среднем за этот период времени категории КИТ изменялись от "Приемлемый" (декабрь, январь, февраль) до "Очень хороший" (май - сентябрь). Это значит, что климат Телави пригоден для круглогодичного массового туризма и отдыха.

Ключевые слова: климатический индекс туризма, курортно-туристический потенциал