

THE IMPACT OF CLIMATE OVER TOURISM ACTIVITIES IN THE LAND OF BEIUȘ

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ABSTRACT. – **The impact of climate over tourism activities in the land of Beiuș.** The climate of a region always was a determining factor in choosing where we spend our holidays, weather influence on the health and psychological comfort of people is undeniable. For lands like Beiuș that inherited its name, we can say that the climate has always played an important role. Although local topoclimate, with continental influences crossed by the peaks, imprints frequent thermal inversions and is experienced in a negative way by the locals, it fails to influence tourists, given that their visits last no more than seven days. A prerequisite in shaping the tourist flow, the climate of Beiuș's land offers many possibilities to practice various forms of tourism. Both in the winter, when the peaks of snowy mountains awaits lovers of winter sports and in summer, when the mountain trails, and areal depression offers unforgettable views, the land of Beiuș is strongly imposed in terms of tourism in the west of Romania and not only.

Keywords: The Land of Beiuș, climate regime, topoclimate, forms of tourism

1. INTRODUCTION

The climate of a region is determined by the National Administration of Meteorology, which by providing recorded data made it possible to outline several local topoclimates in Romania, each characterized by certain basic elements.

In the process of classifying topoclimates several aspects are taken into account of regarding the landscape which emerges from the first definition of the term given to a Russian publication: „the climate of the contact zone of planetary covers over small considered areas, thus making it possible to analyze at local level the relationships between the physical phenomena in the atmosphere and the other components of the geographical complex or environment (firstly, landform and secondly water, vegetation etc. " (Micu et al. , 2015 after Mihăilescu, 1957).

We note that the notion of topoclimate refers to a limited region and is determined taking into account the links between geologic structure, the relief component, hydrological component, the blanket of vegetation to atmospheric elements recorded over time: the average values of temperatures and precipitation, winds characteristic cloudiness and other meteorological issues.

For the The Land of Beiuș, the topoclimate of the region is not hard to identify given that the landscape is not exactly varied. We can thus identify two main topoclimates: depression topoclimate and low mountains topoclimate, the low land topoclimate stands out through residential topoclimates, green space

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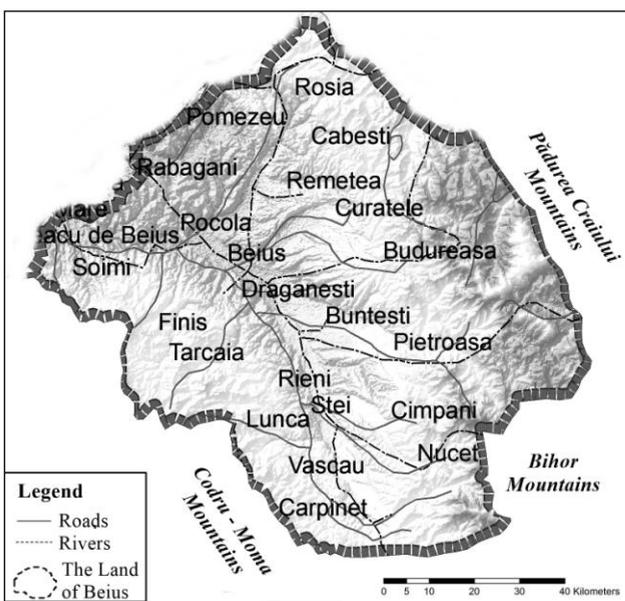
topoclimates or industrial topoclimates. Knowing them is a pawn in shaping the area as a tourist destination, knowing that every element of nature is reflected in people's desire to know whether or not a new place.

2. MATERIALS AND METHODS

The land of Beiuș is difficult to narrow out given that the region is shaped more by ethnographic aspects that need to be taken into account. However, over time, the researchers concluded that the country of Beiuș would be placed somewhere between the peaks, as a lowland area bordered by the Apuseni divisions (Fig.1): in the northern region Pădurea Craiului mountain group, Bihor and Vlădeasa to the east and the Codru Moma group to the south and south-east. (Cocean, 2011).

The geographical position of the area plays a very important role in establishing the local topoclimate, so the area between two regions, the lower one - depression, and the second high - mountain is responsible for installing frequent thermal inversions, when cold air remains stuck at the bottom of the depression and the warm air ascends to the peaks.

We also need to take into consideration climate elements that differ from



one region to another. Measurements are taken in the two stations: Beiuș and Ștei. Based on data recorded it was able to establish that the whole area of Beiuș's land falls in the temperate - continental with oceanic influences, moist and warm. (Indrieș, 2011).

It is known that the climate is a factor influencing all fields of activity. In this sense, we can say that the climate in the Land of Beiuș is essential in carrying out agricultural, industrial and not least tourism activities.

Fig. 1 Geographic limits of the Land of Beiuș

In assessing the impact that climate has on tourism and activities for recreation in the land of Beiuș I took as an indicator the average temperature recorded at two stations, precipitation and minimum and maximum cloud cover data to be interpreted, so that we can establish if the climate really has an impact on tourism.

3. RESULTS AND DISCUSSIONS

3.1. Statistic data

Starting from the existence of a long string of statistics (National Meteorological Administration - N.M.A. archive data, from weather stations and field data), it was possible to create the idea that the climate of the Land of Beiuș plays a key role in mapping the area as a tourist destination. The recorded data over time helps us determine the attractiveness of the region, which often is influenced by weather. Knowing the pshihologic impact that it has on the people's minds, we can say that the land of Beiuș annual climate regime is an advantage in choosing them as a destination.

Featuring the average annual temperature of 10°C: 10,5 °C in Beiuș and 9,9°C in Ștei (Table 1, Fig. 2) values of rainfall not exceeding 690 mm / year Beiuș or 660 mm / year in Ștei (Table 2, Figure 3) and a degree of cloudiness that is not very high, thermal inversions felt here and there, but that does not hinder tourism, the land of Beiuș can fetch tourist destinations that can be visited without problems both in the colder seasons and in those hot days.

Table 1. Mean temperature in the Land of Beiuș in the interval 1995 - 2015
(source: processed data from N.M.A. Archive)

Month Mean temp. °C	I	F	M	A	M	J	Ju.	A	S	O	N	D
Beiuș	-0,2	0	6	11,2	16,4	18,0	21,2	20,0	16,5	11,7	6,3	1,5
Ștei	-0,5	0,6	4,6	10,4	15,1	17,9	19,9	19,6	15,0	10,3	5,0	0,7

Regarding air temperatures we mention the extreme values recorded in the two weather stations in between 1995 - 2015. Thus, it is known that Beiuș's maximum was 32.6°C on the 22nd of August 2000, while the minimum - 20°C on the 1st of February 1999. The maximum in Ștei was recorded on the 28th of August 1996 (36.5°C) and minimum on the 18th of January 2004 (- 22.5°C). A defining factor for tourism activities in the land of Beiuș as it determines the amount of heat and light it is the duration of sunshine that reaches an average of 2056.1 hours in Beiuș and up to 2000.5 hours in Ștei, the lowest term of the brightness was in December when the cloud cover is higher due to the horizontal movement of western air masses .

Relative air moisture in the most part of the year averages between 77 % and 80 % as a result of the habitats location in the foothills.

Another important parameter is the average duration of snow, as it delimits the favorable period of snow cover for tourist activities in winter. At the foothills the average duration of snow cover is 70-80 days, with 180-190 days at medium altitude and over 200 days on the mountain peaks. Snow depth varies on average from 3 cm to 10 cm with maximums registered between December and January (Gaceu, 2005).

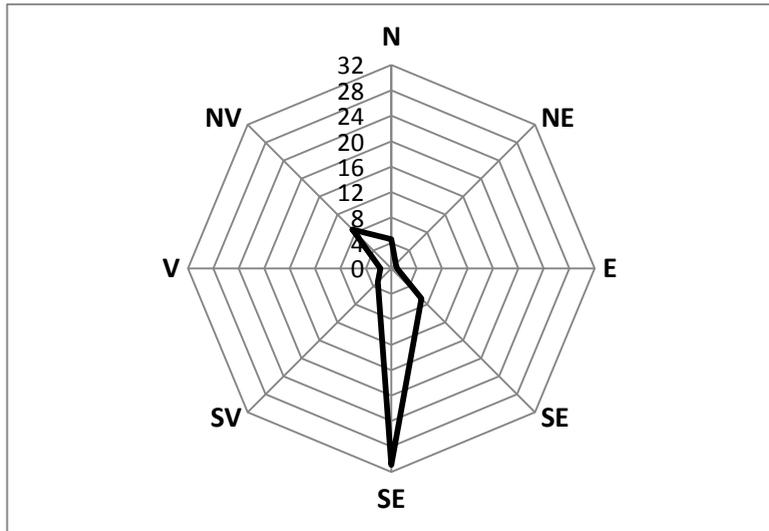


Fig. 4. The annual average frequency of the wind based on the cardinal points at the meteorological station in Ștei (%)
(after Filimon, L., 2012, p. 110)

3.2 Forms of tourism in the land of Beiuș depending on the season

One of the most dynamic components of the Land of Beiuș is tourism. It was developed over time, in parallel with the region's economy and society. The area has a number of tourism resources both natural and anthropogenic, causing them to become a "land" with high tourism potential.

Relating to the climate, the land of Beiuș has had a positive impact, contributing to the development of tourism in the region. The large number of sunny days in a month - between 18 and 20 registered at the meteorological station in Ștei and 20 days per month in Beiuș (N.M.A. Archive) outlined a destination that can be visited at any time of the year. The attractiveness of the site is given the diversity of tourism resources that have great value. The Apuseni Mountains border offers spectacular views both in summer and winter. Walks on the Yellow Keys, Sighiștel keys, cave exploration ("Urșilor" cave, Farcu cave, Meziad cave and the ones situated in Sighiștel Valley) or visiting the springs (Yellow spring, Călugăreni intermittent spring, Boiu spring) are activities that can take place by all those who want to know Beiuș land whatever weather there is. The Black Criș gorge is also an attractive element with high potential, whereas here you can practice extreme tourism (Fig.5), fishing or hunting. The area is visited especially in the days of spring - summer, when the river flow is higher, a fact which highlights the impact of climate on tourism activities.

Shelter topoclimate, specific to the areas of the mountain has curative effects. In this respect the resort Stâna de Vale is well known. Here climatic elements contribute to the attractiveness of the area as the abundance and the long

duration of snow from Stâna de Vale is maintained until late spring (Gaceu, 2005). This phenomenon allows winter sports a longer period of time compared to other mountain resorts. Also for winter sports it is known at the boundary of the Beiuș land and the resort Arieșeni, where, in addition to winter sports, you can practice a number of activities both in the cold season and the hot.



Fig. 5. Rafting on Crișul Pietros (Pietroasa)

Turning to the importance of climate on tourism in the Country of Beiuș we can say that it puts its mark on other natural elements of tourism. As it influences the rivers flowing regime and thus possibilities to practice various sports, the topoclimate in Beiuș country is important for the development of diverse vegetations associated with the region. Thus, because of climate shelter there are a number of meadow “islands” which can be exploited for hiking or for weekend tourism and the protected species of the province increase its attractiveness. Botanical wildlife parks (Molhașurile Izbuclor), caving (Borțig “pothole”) and the Apuseni Natural Park on which surface they all stretch awe have the responsibility to promote them while also preserving them through time.

Anthropic tourism resources are conditioned very little by weather, mostly indoors with good conditions for both summer and winter visitors. In any season, the country Beiușului has a number of religious buildings you can visit (24 wooden churches), each having a more impressive architecture or story than the next. Not to be neglected sometimes are the costumes that people worn on holidays or attending various cultural – artistic shows. In the spring, around Easter it is a pity not to visit Drăgoteni village, where women from all the country exhibit their creations painting red eggs with wax. In summer, the Virgin Mary holyday, the spring is a true celebration, the festival of folk music is not missed in any year. The best time is winter, with Christian holidays, inhabitants of the Land of Beiuș attaches particular importance to the preservation of old habits, which is why peoples homes are swamped of tourists eager to relive their childhood with Christmas cakes and mulled wine.

I therefore consider that tourism resources, relative to local topoclimate are favorable for conducting various activities in the Country of Beiuș being able to fit between tourist regions that can attract tourists throughout the year.

4. CONCLUSIONS

To conclude, we can say that the impact of climate change on tourism is evident in the Country of Beiuș, this territorial system causing a tinting of activities that may be performed depending on the season.

Data recorded over the twenty years demonstrate that the topoclimate in the land of Beiuș is relatively stable over time the region not having to deal with extreme climate conditions. From sunny days and warm summers where you can make a trip to the hem of the mountains to extreme sports or those in winter, the Country of Beiuș is a place that can be visited all season without facing the problem of not have something to offer to the tourists.

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