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# TOURISTIC AND RECREATIONAL POTENTIAL OF MAKHUNTSETI WATERFALL: APPLICATION AND PERSPECTIVES (GEORGIA)

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## ABSTRACT

Social-economic development of mountain regions mostly depends on maximum usage of existing resources, which constitutes of urgent issues of contemporaneity. In line with all this the special significance is granted to application of touristic and recreational resources in Georgia, which constitutes the priority trend for sustainable economic development of mountain regions. The work has studied the basic touristic and recreational properties of Makhuntseti Waterfall of Mountainous Adjara and its place in tourism business development in the region. There is grounded the priority of natural-geographic and social-economic conditions necessary to establish Makhuntseti as a resort. Besides, under complex, unstable natural conditions and in terms of limited resources - the supremacy of tourism among business areas is determined and its further perspectives are established.

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**Introduction.** Mountainous Adjara is one of the regions of Georgia with limited land resources, where ecological condition worsens because of geodynamic processes activated as a result of anthropogenic load on environment. Coming out of this, it is desirable to develop the field via application of such resources, which will minimize the issues related to environment and will promote economic increase. It is important to use touristic and recreational resources in this direction, which presents a quite urgent topic. The subject's urgency is also increased by fact that Makhuntseti Waterfall possesses quite important touristic and recreational potential that is not used at all yet. The main goal of the study is to evaluate the touristic and recreational potential of Makhuntseti Waterfall and set the possibilities to establish a resort venue on its basis. Besides, one of the aim of study is to determine the tourism's role in the priorities of economic development of the region and its further development's basic trends. In order to achieve the aim set, it is necessary to solve the following tasks:

- Evaluate the Makhuntseti Waterfall's touristic and recreational resource potential and its main characteristics;
- Find out the dynamics' originalities of quantitative indicators of Makhuntseti Waterfall's visitors and tourists;
- Study touristic and recreational resources of the territories adjacent to Makhuntseti Waterfall and their common usage perspectives;
- Determine the touristic flow potential of territory to be studied and local population's attitude towards the tourism development;
- Define the tourism's place relating to local business fields and shape its priorities;

- Substantiate the natural-geographic and social-economic conditions existed in Makhuntseti for resort object's establishment, shape its role in assimilation of touristic and recreational resources of mountainous Adjara and in increase of regional economy.

The study object is the Makhuntseti Waterfall existing in Keda Municipality of Autonomous Republic of Adjara, which is situated 30km away from Batumi - a biggest touristic city in the Western Georgia and on the territory adjacent to Batumi-Akhalsikhe highway.

**Literature overview and study methods.** Touristic and recreational resources of mountainous Adjara is not thoroughly studied, though there are some specific studied held in this direction (Putkaradze and Gorgiladze, 2016; Putkaradze and Abuseridze, 2019), but specifically Makhuntseti Waterfall's touristic and recreational potential is not complexly studied. In order to reach the study goals, theoretical works in line with tourism development (Abuselidze and Devadze, 2018; Birzhakov, 2008; Metreveli, M. 2008) were applied.

Tourism development is related to natural and social-economic factors. Coming out of this, its complete study needs complex approach and application of different methods of study. In line with sustainable tourism development, together with qualitative and quantitative methods, more and more popular become sociological studies and case studies. Besides, for analytical study it is important to apply observation, in-depth interview and data modeling via using geographic information systems (GIS) and computer simulation methods (Lu & Nepal, 2009). By application of method of evaluation of touristic and recreational resources of the territory to be studied and the method of touristic flow potential (Birzhakov, 2008; Metreveli, 2008) and by foreseeing the rational nature management principles, the touristic and recreational resource potential of Makhuntseti Waterfall was evaluated and tourism's further development perspectives were determined. According to balanced theory method (Cooper, 2008) the business development of the territory to be studied is discussed not through connection with some particular field, but according to each field's connection with each other, since that the existing fields' development perspectives were established. By application of coordination failure theory (Cooper, 2008), some specific fields' perspectives were determined and with priorities of tourism business development the study region's social-economic development ways were set. Besides, statistical, comparative, field observation, space-time analysis and other methods were applied during the study.

**Results and discussion.** Social-economic development of Georgia is greatly depended on involvement of country's natural-resource potential into business turnover, which constitutes the quite urgent topic. Besides, the subject's urgency is increased by fact that application of existing natural, especially touristic and recreational resources is not related to huge finances, but dividends acquired are quite high. From another side, application of natural resources allows to economically reanimate the regions lagged behind and ensure their sustainable development. In this line, quite big potential possesses touristic and recreational resource of Makhuntseti Waterfall situated in Keda Municipality, which presents one of large center to attract an international visitors in mountainous Adjara and there are all significant properties to establish a new resort on its basis.

Makhuntseti Waterfall is located in Keda Municipality, 30 km away from Batumi City and 300m distance from Batumi-Akhalsikhe Highway, which has very favorable terms in line with accessibility of tourists. The main honor of Waterfall's touristic and recreational resource is that it is located in beautiful natural environment, where unity of relief and flora creates exotic natural landscape. A river flow falls from 50m height, the drips of which break by sunrays and create the show similar to rainbow (see pic. 1). Besides, even in big heat there are comfortable thermal conditions near the waterfall, where in narrow ravine of adjacent territory there are a plenty of picnic places for visitors and there also is the best term for arranging a catering (food) object. The significant of recreational object is increased because 300-800 m away of it, there are an extreme tourism (rafting) place and from waterfall's origin until the left bank of Riv. Atcharistskali, it is arranged a 500m zip line; here we have XII century arched bridge, a very interesting hydropower premise (with water tunnel through the rock), souvenirs of local entrepreneurs, ecologically pure honey and other. Actually, the study territory constitutes a complex touristic and recreational resource the potential of which is not completely used yet.



*Fig. 1. Makhuntseti Waterfall*

The application of Makhuntseti Waterfall and its touristic and recreational resources as well for local purposes had been performed in early times, but its international significance in independent Georgia commences since XXI century and it is one of the important visitors` place in Adjara during of recent years (see table 1).

Table 1. Dynamics of visitors and tourists in Makhuntseti in 2000-2021 years

	Years				
	2000	2010	2015	2019	2021
Visitor	15550	85750	115850	145150	120350
Tourist	30	80	115	250	350

Source: table is drawn on the basis of data of Department of Tourism of Autonomous Republic of Adjara and the field research materials.

According the data brought in (Table 1), it is obvious that interest of visitors towards Makhuntseti Waterfall gradually increases. Actually, it is one of the significant touristic and recreational resource not only in mountainous Adjara, but in Western Georgia, which possess a huge potential to establish a resort on its base. In order to completely evaluate the study object`s touristic and recreational resource, it is necessary to found out the touristic flow potential, which implies that maximum load, which can be withstood by some particular touristic object without serious damage of local resources, negative impact and rise of social-economic problems in the population (Birzhakov, 2008; Metreveli, 2008). One of basic form of flow potential is ecological flow potential, which implies tourists` visit level, the excess of which leads us to worsened ecological condition; the reason of this might be visitors` impact and functioning of touristic infrastructure as well (Birzhakov, 2008; Metreveli, 2008). According to Department of Tourism of Autonomous Republic of Adjara, in 2019

(before covid-19 pandemic) the number of waterfall visitors was 145150 (130000 international visitor and 15150 local visitor). There is no official statistical accounting data regarding the visitors, but according to our study, the most of them had been visiting the waterfall from May until September, but the peak period comes on July-August, while approximately 65% or 94350 people visit it. Besides, there should be mentioned that most of these tourists represent those which visit Batumi Sea during the summer, which visit the object during of non-swimming period, at 12-17hours. According the data brought here, we can determine that during the peak period (July-August), an average number of visitors equals to 1573. If we foresee that circumstance that 1/3 visitors or 477 of them are directly situated on the territory of waterfall and in average, they stay for 30 minutes, then number of visitors being here at a time equals to 48. As of the fact, that the waterfall is located in the narrow ravine and the territory from where the visitors observe the waterfall - its area is limited and equals to only 300 sq. m. If we discuss the circumstance that one visitor for his / her convenience in average needs 2 sq. m area, then we will guess that the waterfall can be viewed only 150 visitors at the same time. Therefore, now the waterfall's touristic flow potential is used by 32% in average. If we discuss a second form of touristic flow - social flow potential of tourism, then in this line, according to sociological inquiry (questioning), the following was determined: 73 out of 76 questioned, or 96.1% of them has a good impressions on recreational resource and will share the mentioned with others as well. For determination of local social flow potential, if what do local population think of tourists - 36 out of 38 questioned, or 96.9% considers the tourism development as positive event.

The study makes obvious that touristic flow potential of touristic and recreational resources of the study territory is quite high and its usage indicator is only 32%. Coming out of this, there exist quite high potential for mentioned resources` usage, for complete usage of which it is necessary to implement an effective marketing and management. In this line, the main direction should be to turn the visitors into Makhuntseti tourists. For this purpose, firstly it is necessary to transform the visitors` place into resort, the realization of which there are quite significant properties, among which the following can be mentioned: 1. It has best geographical location; it is very easily accessed by tourists from Batumi City - the main resort of the region and it is not related to huge expenses; 2. It has diverse natural (including extreme and anthropogenic) touristic and recreational resources; 3. The resort's micro-climate is known for its comfortable thermal conditions during the summer period (cool wind and low relative humidity), especially during the nighttime; 4. The resort might became the favorable place for wine tourism, extreme tourism (rafting, zip line), cognitive tourism, tourism in the village, fishing tourism and development of other types of tourism in mountainous Adjaria; 5. It does not need an additional significant expenses for touristic infrastructure and internal accessibility; 6. By study of local social flow potential of tourism, it is determined that local population welcome establishment of resort and implementation of changes in business structure in direction of tourism; 7. In case of resort`s establishment, the possibilities to use the touristic and recreational resources of mountainous Adjaria will be increased and it will enhance region`s social-economic development.

For assimilation of touristic and recreational resources of the territory to be studied one of the important circumstance is that we have all the terms upon the existing settlement base to establish the resort venue. The precondition to create the resort are not only the named factors, but also the following circumstances as well: Makhuntseti`s touristic infrastructure gradually increases and amount of tourists are increasing (80 in 2010 and 350 in 2021). Besides, one of important circumstance to form the resort is that 10km away from Makhuntseti "Adjarian Wine House" is located, on the basis of which the wine tourism is developed and the mentioned object has 120 thousand annual visitors in average. Actually, we have all condition to establish a new resort on the basis of touristic and recreational resources of Makhuntseti and adjacent territories.

By analyzing the named factors, there is found out that in Makhuntseti we have all the conditions necessary for resort`s establishment. Meanwhile, the development of this field also constitutes one of the parts of state project on perspective social-economic development of mountainous Adjaria. Besides, prioritizing the tourism development is conditioned due fact, that for the cause of lack of land resources and low development of industry fields - there are no significant terms to enhance the regional economy. If we discuss the topic according the balanced method (Cooper, 2008), the fields of business existing in the region are somewhat developed separately from each other and according to this - they are unable to perform a significant contributions in economy`s development. Coming out of the mentioned, the advantage in regional economy`s development should be given to coordination failure theory (Cooper,

2008), which implies the development of region`s economy by developing the tourism on the basis of application of existing touristic and recreational resources.

The topic studied by us actually presents the continue of the studies (Abuselidze and Devadze, 2018a; 2018b; Abuselidze and Johann, 2017; Abuselidze and Devadze, 2021; Dornier et al, 2018; Milijic et al, 2017; Milicevic et al, 2021; Richins, 2016; Salukvadze et al, 2019) held in direction of sustainable economic development of mountain regions of the world, which is based on determination of tourism priorities and setting up its perspectives into business`s field structure on the basis of touristic and recreational resources` rational usage.

**Conclusion.** As a result of the study, there was found out that touristic and recreational resource of Makhuntseti Waterfall has complex properties, the potential of which is not completely used yet and there are huge opportunities for international tourism`s development. Economic-geographical location of Makhuntseti, quite increasing dynamics of the visitors, diversity of touristic and recreational resources of an adjacent territories and establishment of touristic infrastructure creates all the conditions to form a new touristic object on its base. On the basis of Makhuntseti resort, the perspectives of touristic and recreational resource usage of mountainous Adjara will be significantly increased and under the unstable environmental conditions, the region`s sustainable economic development will largely improve. Accordingly, assimilation of touristic and recreational resources existing on the study territory will largely depend on realization of social-economic development concept of the mountainous regions of the country

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