ԵՐԵՎԱՆԻ ՊԵՏԱԿԱՆ ՀԱՄԱԼՍԱՐՄՆԻ ԳԻՏԱԿԱՆ ՏԵՂԵԿԱԳԻՐ УЧЕНЬЕ ЗАПИСКИ ЕРЕВАНСКОГО ГОСУДАРСТВЕННОГО УНИВЕРСИТЕТА

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THE TOURISM-RECREATIONAL POTENTIAL OPPORTUNITIES OF KASAGH RIVER BASIN

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The main goal of the article is to expose the opportunities of the Kasagh River basin tourism-recreational resources. It is targeted to estimate the natural historic-cultural values of the basin. The service infrastructures have been studied and estimated. Besides, the role of ethnic minorities settled in Kasagh basin is very important in the context of tourism sector development.

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Introduction. Tourism in one of the main spheres of economic activities. The changes, regulations and investments conducted in this sphere for at least 15 years, have formed a certain infrastructure. According to 2019 data, the number of tourists was 1 652 000, which was only 10.5 per cent superior to the number of tourists in 2017 [1].

Tourism development is an essential push factor of socio-economic development of Armenia. The incoming tourism has taken the second place in the economy of Armenia after exporting mineral products and metal. It also provides with more than the half of the exporting services.

Leaving Armenia, foreign tourists take with them not only goods bought here, but also the impressions getting from services. Besides, tourists bring foreign currencies with them. The more money they spend in Armenia, the more they assist the stability of the currency.

It goes without saying that Kasagh River basin has a special place and significance in the framework of Armenian tourist destinations.

The Kasagh River valley and its nearby areas are rich in recreational resources: however their usage do not have purposeful direction and is not yet sufficient. The recreational capacities of the valley have been discovered and purposeful ways of their utilization have been described.

Materials and Methods. In the framework of the research several methods have been used. Particularly, making tables and diagrams was accomplished through

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mathematical and statistical methods. Besides, descriptive methods were used in several parts of the article (discussing recreational-tourism peculiarities of the upper and lower parts of Kasagh River basin).

Results and Discussion. The complex evaluation of Kasagh River basin recreational resource can be an example for other regions, even at a country (republic) level.

Kasagh River in one the main water arteria flowing through the central part of the Republic of Armenia. It has a length of 89 km. The river starts from the northeast of Pambak Mountains, nearby village Leranapar from the absolute height of 2400 m. It flows into Sevjur (Metsamor) River, between Aratashen and Apaga villages on the height of 835 m above the sea-level. Kasagh River elevation drop is more than 1565 m and the stream gradient is about 17.6 m/km. The catchment area is 1480 square/km, the average discharge is 6.75 m^3/s (Ashtarak observation point), and the average annual flow is 0.11 billion m^3 . The nourishment of Kasagh is snowrainy (76%) [2]. Kasagh is a left-side, second class tributary and with its main river Metsamor or Sevjur is a left-side first class tributary.

Kasagh River flows through Aragats, Aparan, Ashtarak and Vagharhapat Regions. Three rivers are considered to be Kasagh springs. The left one is called Karaghbyur. It originates from the southern slopes of the Pambak Mountain chain, having small waterfalls and gorge chains. The other springs-Duzkend and Tsaghakahovit originate from the northern slopes of Aragats Mountain. They flow near the village of Rya-Tazan (Aragats Region) and join with the right central spring. "Stone seas", mineral waters, cool springs and Alpine meadows (Alpine rugs) have a great tourist importance in the upper area of the basin. There are numerous tributaries in the upper stream area of Kasagh.

The river joins Aparan reservoir to the south. East of the village of Apna it turns to south, taking the right-side tributary Gegharot and entering the canyon. Here the river flow is very fast and abundant [3].

The relief conditions of the Kasagh River basin are favorable for climate—treatment (therapy), variety of organizing winter sports activities and holiday-making. The average annual air temperature is 3.30, the air humidity (moisture) is 75%, and precipitation is 535 *mm*. In winter the winter is freezing (average daily temperatures is from –12.5°C to –22.5°C). This kind of weather lasts from 10 to 12–14 days. The stable snow layer appears in the middle of December, remaining 134 days (from November to April). The waters of Kasagh have irrigative significance.

Out the village of Karbi the Ashtarak Canal runs. With these waters hundreds hectares of lands of the foothills are irrigated. The Aparan reservoir is built on the river 1820 m above the sea level. It has $91\ 000\ 000\ m^3$ volume and the surface is $735\ ha$ [4]. The reservoir has not only irrigative and water-regulating significance, but also regulating microclimate and having recreational-tourism significance: these capacities are not almost used.

From the relief point of view, the Kasagh River bed is divided into 3 parts: gorge, deep ravine and plain. From the upper parts to Ararat Valley (the village of Amberd in Vagharshapat Region, Armavir Marz), the river has made wonderful monuments of the nature with a great tourist significance: stone columns and

symphonies in Saghmosavan, Ohanavan, Karbi, Ahstarak, Oshakan and the little waterfalls in Tsilkar and Mirak.

From the right side Amberd tributary joins Kasagh River.

Amberd originates from the southern slope of Aragats, at the height of 3700 m. The length is 36 km and the catchment area is 141 km^2 . In the upper stream the river valley has a form of "V", in the middle and lower part has-a form of "U". The nourishment is mixed, generally if is snow-rainy and underground. The flood-time is at the end of spring and the beginning of summer. The annual average discharge is $1.05 \, m^3/s$. There are rest houses and camps, mineral spring sources and picturesque parks in the river valley. In the place where Amberd and Arkashen Rivers join (at the height of $2300 \, m$), Armenian medieval architectural monument of Amberd is situated (the caste and adjacent church) [2].

Besides of Amberd, Tegher and Arakshen are also well-known. Tehger is famous for its unique natural beauty. Here the famous monastic complex of XIII century with St. Astvatsatsin and St. Khach churches is constructed. On the other side of the valley Chgnavor with "Van Aghbyur" is located: a favorite place for young people and tourists. Between the rivers Tegher and Zorap the ancient settlement of Tegher is situated, which goes back to the bronze and early iron periods. The early settlement can become a tourist centre in the near future [5].

Arakshen is the left tributary of Amberd. In originates from the western bank of lake Kari on Mount Aragats: $4 \, km$ north-west of the village of Antarut it joins the main river. It is fed with the springs of Lake Kari. The form of the stream is irregular, it overflows in May–June. The length is $13 \, km$ [6].

Kasagh Valley is completely picturesque and famous for its canyons, ravines, small waterfalls with great angle of incidence. Here the valley has much unused tourist capacities.

Entering Ararat Valley, Kasagh River becomes shallow and the river bed dries often.

There are especially optimal conditions for climate-treatment (therapy) activities in Kasagh Valley. The summer weather conditions (sunshine duration, the clean air rich with oxygen) make an opportunity to organize climate-treatment from June to September. The presence of winds (2.0–2.8 m/s) is a limiting factor which influence is liquidated after some regulating measures: thus, climate-treatment (generally, solar-treatment) conditions are increasing and last from 18 to 20 days. Aparan reservoir is also a promoting factor of organizing summer climate treatment activities [4].

The winter weather limits organization of climate-treatment procedures and activities.

In Kasagh Valley and nearby areas there are not estimated reserves of mineral water which come to the surface through spring with a similar chemical composition with the waters of Narzan. Further studies are necessary to discover and estimate these supplies.

In the eastern part of Pambak Mountain range, the southern and western slopes of Tsaghkunyants Mountain range are covered with mountain-steppe landscapes, certain parts of Mount Arayi slopes are covered with artificial forests, being

considered as wonderful summer holiday areas. There are also freshwater and mineral springs (Ttujur) in this area.

The Kasagh River basin is famous for its historic-cultural heritage monuments which promotes the development of tourism and recreation. Particularly, Aparan basilica (V century), Eghipatrush Monastery (X–XIII centuries), Ashvatsnkal of Hartavan (XIII century), the famous Saghmosavank (XIII century) which has been also an educational center, Hovhannavank of Ohanavan (V–XIII centuries), the "town-museum" of Ashtarak with its churches, house-museums and bridges (XVII century).

Thre are stone bridges across River Kasagh in Ahstarak: the old one (1644) and two new bridges (1955, 2000), as well as the bridge near Oshakan (XVII century). In Kasagh Valley there are caves which have been used for defense purposes. Near the lower part of the upper stream of the Kasagh pagan art remains can be found: a pillared statue located on a stony hill [7].

On the bank of the Kasagh an especially unique location is Oshakan with the church named after Mesrop Mashtots, the creator of Armenian alphabet who is buried here. Adjacent to the church a religious school and a guest-house can be found.

Among the tourist-recreational capacities of the Kasagh basin the Yezidi ethnic minority group with its specific lifestyle, traditions, cuisine and agricultural specialization should be mentioned (especially, in the context of agrotourism development).

Among the different kinds of package holidays offered by the government, Aragasotn Region is presented with great tourism and recreational opportunities referring to Kasagh basin as well. The guest-houses, resorts, restaurants and restaurant complexes, entertainment and trade centers are contributing ti tourism and recreation development.

Based on relevant research activities as well as tourism statistical data, the tourism structure of Kasagh basin can be represented (Tab. 1).

Table 1
Tourism structure of Kasagh River basin

Types of tourism	Tourists or holiday-makers, number (person)	Specific weight among the general
Medical health	_	perspective
Cultural codnitive	180 000	55.1
Sports tourism	_	perspective
Pilgrimage and spiritual visit	140 000	42.9
Business	650	0.2
Holiday	800	0.3
Children recreation	300	0.08 perspective
Agro-tourism	100	0.38
Other kinds	3500	1.04
Altogether	325–350	100

As a result of the study we can classify the tourism and recreation based on travel purposes (Tab. 2).

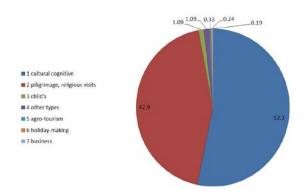
Table 2

Types of tourism according to purposes

Tourism and recreation	Types of tourism and recreation based
destinations	on travel purposes
Aparan	Holiday and Cognitive
The Aparan Reservoir	Children recreation, Holiday, Cognitive
Ashtarak–Saghmosavan	Holiday, Religions
Oshakan	Religions

In Kasagh basin agrotourism has begun to develop recently. The studies show that in a number of settlements (Kuchak, Jrambar, Artashavan, Saghmosavan, Ushi, Mughni, Oshakan) from 2 to 20 farms are busy with agro-tourism, hosting Armenian and foreign tourists every year.

The calculations and assessments have revealed the shares of different types of tourism and recreation: cultural and cognitive (52.2%), pilgrimage and religious visits (42.9%), holiday making (0.24%), business (0.19%), agrotourism (0.33%), childrens recreation (0.8%), and other types (1.09%) (see Figure).



The shares of different types of tourism and recreation.

Among tourism and recreation development opportunities of Kasagh River basin the service infrastructure (cultural, trade, entertainment, holiday zones, transport, e.t.c) has a great role.

In the study area two geological museums, three house-museums and two branches of national exhibitions are acting.

An important part of city tourist-recreational potential are 27 settlements, located in the valley. 18 settlements are located in the upper and middle stream and 9 in the lower part. 18 settlements are distributed among Aragatsm Aparan and Ahstarak regions, and 9 settlements in Vagharshapat (Ejmiatsin) region.

From tourist-recreational point of view, the settlements located in the upper and middle areas of the basin are especially famous because of unique natural conditions, man-made values, population lifestyle, customs and traditions. Particularly, the settlements of Tsilkar, Aparan, Jranbar, Saghmosavank, Mughni, Ahstarak and Oshakan should be described.

In terms of tourism development the village of Tsilkar is very special. It is situated near the Pambak Mountains, on the height of 2115 *m* above the sea level. The nature-climate conditions of the village, nearby mountains and caves, artificial water reservoir, the slopes covered with various types of flowers are favorable for summer holiday-making and ecotourism development.

The town of Aparan with its located near Mount Aragats, on Kasagh River. There are artificial forest areas, churches, the complex developed to Bash-Aparan heroic battle nearby, as well as service infrastructure which can promote tourism development. Aparan can also serve as a transit tourist center.

The village of Jrambar is an unique place on the south bank of Aparan reservoir which is rich in fish species. To the east of the village forest-covered Tsaghkunyats Mountains are located. South of the reservoir is Mount Arayi. Actually, the Kasagh Canyon (the depth is 600–650 *m*) with a great vegetation and flowers diversity, forest areas and bushes reminds about the Colorado Canyon in the USA. The Poghos-Petros basilica temple is being partly covered by the waters of the reservoir 3–4 months annually, reminding the city of Venice.

2 km from the village, on the right hillside of the canyon among the mountains the magnificent monastic complex of Ahsvatsankal is located, including the basilica church (V century) and medieval church. Below the picturesque ravine through which Kasagh River flows is located. "Arabkir" resort and "Aparan" rest house are situated here. The reservoir can become an ecotourism, water sports, fishing and resort-recreational tourism centre.

To the far North Saghmosavan with Artashavan can become centers of various types of tourism. After rennovation it can serve as a center of spiritual, scientific and cognitive tourism center. It can become an agrotourism center as well, based on fruit gardening in Artahsavan. Not far from here the complex of "Armenian Letters" is situated [8].

South of Artashavan the villages of Ohanavan and Karbi are located at Kasagh picturesque canyon, with monastic complexes, fruit-growing (especially, apple) activities and service infrastructures (restaurants, motels, rest zones), promoting development of different directions of tourism.

The villages of Moughni (which joined town Ahstarak) and Oshakan can become a suburban tourism zone. The churches and bridges of Moughni, Oshakan, Ashtarak, the grave of Mesrop Mashtots have already become favorite destinations for tourists who visit Armenia [9].

Republic of Armenia pays a special attention to recreational and agro tourism in the framework of tourism development programs. Therefore, it is very important to analyze the international experience, necessary infrastructure development and investment policies in the sphere of tourism. During the last decades a significant work has been accomplished. Near the historic and some natural monuments multilingual informative signboards are placed. Meanwhile, the roads leading to the monuments are being reconstructed, and the monuments and their surroundings are being renovated and improved (holiday pavilions, souvenir trade points, water supply and sewage systems, etc.) [10].

Conclusion. Kasagh River basin has a great potential for tourism and recreation development. In case of relevant investments it is possible to create a

complex system of recreational industry and international tourism, which will promote socio-industrial development of the Republic of Armenia. Taking into account the relief climate-treatment capacities of the basin, diversity of tourist resources and transport availability from Yerevan, in the region (Marz) of Aragatsotn the following recreational subzones can ve marked out:

- The upper part of Kasagh Valley (Aparan), including the valley up to the Aparan reservoir. The recreational directions of the subzone are summer climate-treatment, long-term and short-term mass holidays, winter sports;
- The middle part of the valley, including the Kasagh gorge in Ashtarak and nearby areas. The recreational direction includes short-term mass holidays;
- Amberd (Byurakan) subzone includes Amberd River basin, with long-term mass holiday-making, summer and winter climate-treatment, winter sports.

The regional recreational system center is suggested to be in the town of Ashtarak.

The inter-region recreational system includes the city of Yerevan, the regions of Ararat and Armavir with their favorable natural conditions (a flat relief, underground water resources, surface waters, fertile soil). The 58 % of the urban population of Armenia, the 49.5% of the urban settlements and 80-85% of the industrial objects are concentrated here.

Taking into account the recreational patterns, geographical location and limitation factors, it is an urgent task to create interregional recreational system of the Ararat Valley.

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ՔԱՍԱԽ ԳԵՏԻ ԱՎԱՉԱՆԻ ՉԲՈՍԱՇՐՋԱՅԻՆ ՌԵԿՐԵԱՑԻՈՆ ՆԵՐՈՒԺԻ ՀՆԱՐԱՎՈՐՈՒԹՅՈՒՆՆԵՐԸ

Ամփոփում

Հոդվածի նպատակն է վերլուծել Քասախ գետի ավազանի զբոսաշրջային ռեկրեացիոն ռեսուրսների հնարավորությունները։ Խնդիր է դրված գնահատել գետի ավազանում գտնվող բնական, պատմամշակութային արժեքները։ Հետազոտվել և գմահատվել է ավազանում տեղակայված բնական և պատմամշակութային արժեքների ու սպասարկման ենթակառուցվածքների նշանակությունը։ Կարևորվել է գետի ավազանում բնակվող ազգային փոքրամասնության դերը զբոսաշրջության առումով։

В. В. ГРИГОРЯН

ВОЗМОЖНОСТИ ТУРИСТИЧЕСКОГО И РЕКРЕАЦИОННОГО ПОТЕНЦИАЛА В БАССЕЙНЕ РЕКИ КАСАХ

Резюме

Целью данной статьи является анализ потенциала туристических рекреационных ресурсов в бассейне р. Касах. Задача — оценить природные, исторические и культурные ценности исследуемой территории. Исследованы и оценены значение природных, исторических и культурных ценностей, а также сфера услуг. Одной из главных задач с точки зрения туризма является выделение роли национальных меньшинств, проживающих в бассейне реки.