

EVALUATING THE ROLE OF SUSTAINABLE TOURISM IN REGIONAL DEVELOPMENT: EVIDENCE FROM ARMENIA

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Abstract. The paper presents the arguments and counterarguments within the scientific discussion on the issue of tourism role in regional development. Tourism has a crucial role for equal regional development. The Republic of Armenia has 10 regions, all of which are rich with touristic resources: historical-cultural monuments, churches and monasteries, nature, tasty cuisine and wine, hospitable people, nature, curable resources, mineral water, mountains, lakes, canyons, etc. Based on these resources, many types of tourism may be organized and developed in Armenia. The main purpose of the article is to find out the main touristic resources of Armenian 10 regions, find out the main obstacles of tourism development in regions, evaluate the role of tourism in the regions' social-economic development and to find out innovative solutions for sustainable tourism development in regions. Investigation of the topic in the paper is carried out in the following logical sequence: some literature sources are discussed, the main resources of regions in details are presented, the current situation of tourism in Armenia and the touristic infrastructures in Armenia are analyzed. The main methods used in the article are micro and macro analysis method, historical analysis, statistical methods, correlation analysis, SWOT analysis. The correlation analysis between the volume of tourism services, GDP, GDP per capita, as well as employment indicators is carried out for regions. In order to find out the main obstacles of tourism development in the regions of the RA, SWOT analysis was conducted, which shows the strengths, weaknesses, opportunities and threats of tourism development in regions. Based on the analysis, some recommendations are made towards elaborating sustainable tourism development plans for regions, increasing marketing and branding efficiency of regions, improving statistics, infrastructures, expanding touristic routes based on the existing touristic resources of regions, etc. Tourism may contribute to regional development, increase of employment and GDP in regions, decrease of poverty and migration rates. In these terms, local and regional authorities should take all the necessary steps for adopting sustainable tourism policies to regional development. This study may be useful for state, local and regional authorities for elaborating sustainable tourism development policies in regions and communities.

Keywords: tourism, touristic resources, marketing, branding, region, correlation, SWOT, Republic of Armenia.

JEL codes: L83, R58

1.Introduction

The equal social-economic development of regions is very important for the whole country. Tourism is one of the main priorities of the economy of the Republic of Armenia (RA). Armenia has 10 regions, which have many touristic resources, based on which many touristic routes may be organized.

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Now not all resources, monuments and destinations are included in existing routes.

The purpose of this paper is to explore the main touristic resources of Armenian 10 regions, find out the main obstacles of tourism development in regions, evaluate the role of tourism in the regions' social-economic development and to manage innovative solutions for developing sustainable tourism in regions.

The article is composed by the following logical sequence: at first literature sources explore the role of tourism in regions' social-economic development, as well as main touristic resources of Armenian 10 regions, then methodology describes main methods used for analysis. The discussion part presents the social-economic indicators of 10 regions of Armenia, some evaluations are done, and based on analyses the main obstacles of tourism development in regions are revealed and some suggestions are made.

2. Literature review

Many studies indicate the role of tourism in regional development.

In some places tourism is considered as a vehicle for regional development and for that policy initiatives are being launched (Rogerson, 2015).

Tourism addresses peripheral areas and spreads economic activity over the country (Giaoutzi & Nijkamp, 2006).

Tourism development in regions depends on the level of social, political and cultural capital, but at the same time tourism development can be undertaken in a way that contributes to the development of social, political and cultural capital in the region (Macbeth et al., 2004).

Tourist spending in regions contribute to the reduction of regional inequalities (Ribeiro et al., 2016).

Some studies show the high application of tourism in regional development, and, therefore, highlight the necessity of undertaking governmental measures and initiatives for enhancing tourism contribution to the regional development (Petrevska & Manasieva, 2012).

The tourism potential and resources of regions is a source for entrepreneurship which, in its turn may enhance regional development (Dana et al., 2014).

Promoting tourism development is an effective tool to achieve more balanced regional development (Zhike, 2019).

Some studies indicate the role of different types of tourism in regional development. For example, the countries, which have wine routes, may provide regional development through wine tourism (Correia & Brito, 2016). The regions, which have rich cultural and historical monuments, should use that fact for regional development (Gevorgyan & Tovmasyan, 2021). Agritourism is another key resource for regional development (Tovmasyan et al., 2020a, b).

Based on the existing resources of regions, new touristic routes should be initiated, which will lead to regional development (Avetisyan et al., 2021).

3. Data and methods

The aim of the article is to explore the main touristic resources of Armenian 10 regions, find out the main obstacles of sustainable tourism development in regions, evaluate the role of tourism in the regions' social-economic development for managing innovative solutions for developing tourism in regions.

The main methods used in the article were micro and macro analysis method, historical analysis, statistical methods, correlation analysis, SWOT analysis.

The micro and macro analysis methods were used for exploring tourism as a micro sphere of the economy, and also in macro level with the connection to social-economic and other macro coefficients (GDP, employment).

Historical analysis method was used for exploring the main touristic resources, their historical roots, meaning, significance in tourism.

Statistical methods used in the article enabled to do evaluations. Based on correlation analysis, the role of tourism was evaluated in regions' social-economic development. Correlation analysis was done between the volume of tourism services, GDP, GDP per capita, as well as employment indicators of regions.

SWOT analysis was done for all regions by exploring the main strengths, weaknesses, opportunities and threats of sustainable tourism development in regions. The factors presented in SWOT matrix are based on authors' evaluations, investigations, and represent the overall situation in all regions of Armenia.

4. Results

4.1. Exploring the main touristic resources of 10 regions of the Republic of Armenia.

Touristic resources of Ararat region. There are many touristic sites in Ararat region, for example Artashat, Dvin, Khor Virap, Kakavaberd, Khosrov forest, various dragon stones, etc.

Khosrov forest state reserve is a Specially Protected Area in the Ararat region of Armenia. The reserve is one of the oldest protected areas in the world, with a history of about 1700 years. It was founded in the 4th century (334-338) by the order of King Khosrov Kotak of Armenia, who gave the forest his name. 5th century historian Movses Khorenatsi writes about Khosrov's undertaking: "... Khosrov planted a forest near the Azat River, which is still named after him. He moves the palace above the forest, builds a man-made shelter on a hill" (Khorenatsi, 1983). This area became a state reserve in september 1958 and covers about 23,213.5 hectares at an altitude of 700 to 2800 m above sea level (Khanjyan, 2009).

Khor Virap Monastery is located near the village of Small Vedi, on the left bank of Araks River, on the site of the citadel of the historic city of Artashat. According to the IV century historian Agatangeghos, it was in this citadel that Gregory the Illuminator, a

preacher of Christianity, persecuted by Trdat III the Great, endured his sufferings for 14 years (Agatangeghos, 1983). The current monastic complex includes St. Grigor, S. Astvatsatsin churches, bell tower, fences with adjacent buildings. St. Gregory Church - built in 1662-1669, on the basis of the old church. Khor Virap has been a center of education since the 13th century. Until the XVIII century Khor Virap was the center of writing. Many manuscripts copied here are kept in Matenadaran after Mesrop Mashtots in Yerevan. The monastery complex was renovated and improved in 1960-1970.

The house-museum of Commander Vazgen Sargsyan is located in Ararat village of the region. Prominent poet Paruyr Sevak was born in the village Zangakatun (Sovetashen) of the region, where his house-museum is located.

Touristic resources of Armavir region. Armavir region is rich in unique historical monuments. The 5000-year-old (Bronze Age) foundry of Metsamor is a unique monument. The ruins of the Urartian city of Argishtikhinili are of great historical value. Next to them was the ex-capital of Armenia city Armavir. A little further west, at the confluence of the Araks and Akhuryan rivers, are the ruins of Yervandashat (the last capital of old Armenian Yervanduni Kingdom). The region is rich in historical and cultural values. Here is the residence of the Armenian Catholicos, St. Etchmiadzin Mother Cathedral with its Treasury (303-305) (The Armenian Church, n.d), St. Hripsime (618), St. Gayane (631) churches, Metsamor and Zvartnots Archaeological Museums, Zvartnots Cathedral (641-661), the old pagan center Bagaran, Musaler and Sardarapat memorials. These memorial complexes have a great historical and architectural value and are considered an important tourist resources of the region. It can be said with certainty that Armavir region is considered an important center of religious tourism.

Touristic resources of Aragatsotn region. Speaking about the tourism resources of Aragatsotn region, it should be noted that the region is rich in historical and cultural monuments achieved since ancient times, as well as resources contributing to scientific tourism. Thus, the proof of what is said is Cyclops' castles found in Aragatsot, 3-1st Millennium BC Residents (Gegharot), Urartian District Castles (Hnaberd, Tsaghkahovit), Kaghsi, Parpi's basiles (5th century), 5th century Church of Oshakan, Ohanavank (5-8 centuries), Mastara St. Hovhannes (6th century), St. Astvatsatsin in Ashtarak (7th century), Mughni St. George (14th century) etc. From a historical point of view, the pedigree tomb of the Arshakuni Kings of Aghdzh has its own role. Amberd, Kosh, Talin, Aparan are defensive and religious structures. The Byurakan Observatory has an exceptional scientific interest (Gevorgyan & Tovmasyan, 2021).

Touristic resources of Tavush region. Tavush region is located in the north-east of the Republic of Armenia. The region has rich tourist resources, on the basis of which a number of routes can be organized. There are many historical and cultural monuments in the territory of Tavush region, which occupies a relatively small area, some of which have been popular for a long time and serve as tourist attractions. Cyclopean castles of different periods, a medieval cave settlement in Lastiver, as well as early, middle and late medieval monasteries, small chapels, khachkars and tombstones have been found here.

Haghartsin Monastery, a famous cultural center of medieval Armenia, is located in the historical Dzorapor, later in the province called Kayan. In the sources, the monastery

is also called Khaghartsin (Avagyan & Janpoladyan, 1977). The monastery includes St. Grigor, Katoghike, Haghartsin Monastic School, St. Stepanos, St. Astvatsatsin churches, 2 vestibules, the refectory, the royal tomb, the cells of the clergy, places of worship, khachkars, auxiliary buildings.

Goshavank was one of the major cultural, educational centers of medieval Armenia. According to historical sources, Armenian-foreign languages (Greek, Latin), law, historiography, philosophy, rhetoric, music, writing, painting were taught here. The complex, having a significant historical, architectural and cultural value, complements the treasury of medieval Armenian architecture.

Makaravank medieval monastic complex is located 3 km south-west of Achajur village of Tavush region (Melik-Bakhshyan, 2009). The main church, according to the khachkar inscription, was built in 1205.

Jukhtak Monastery is located 3 km north-west of Dilijan. The monastery consists of two separate churches, the cemetery around Surb Astvatsatsin and Surb Grigor. Jukhtak Monastery was founded in the 11th-12th centuries (Ellaryan, 1980).

Touristic resources of Syunik region. Syunik region is located in the south-east of the Republic of Armenia. There is a significant tourist potential in Syunik region. The tourist potential of the region is presented in the rich, beautiful and healthy nature of Syunik, with forests, mountains, historical and cultural values, nature monuments and infrastructure. Syunik is rich in beautiful mountains. The second mountain peak of the Republic of Armenia, the Kaputjough (3904 m), as well as the mountain Khustup are located in the region. The region is rich in historical and cultural and nature monuments, attractions. Tatev monastery complex, Karahunj Observatory can play a significant and key role in the development of tourism in the region. Tatev Monastery is a prominent monument to medieval architecture, which includes Grigor Lusavorich, Poghos-Petros Church (11th century), the most remarkable monument (10th century) (Orbelyan, 1986).

Pine Park Reserve includes the largest Eastern pine park in the Caucasus. It was established in 1958 by the decision of the Board of Ministers of the Armenian SSR.

Hot water - Vorotan is one of the wonders of the nature of Armenia "Devil's Bridge". It is a natural roof hanging on the crazy current of water - about 150 meters wide and 200 meters long. The bridge is made up of limestone and travertine.

Shaki Waterfall is located in the Vorotan gorge, 3 km north-west of Sisian, on the left side of the thunderous shake. Height is 18 m. Shaki is the highest and beautiful waterfall in Armenia.

Touristic resources of Shirak region. Shirak region is located in the north-west of Armenia, the regional center is Gyumri city. It borders Turkey to the west, Georgia to the north, Lori region to the east, and Aragatsotn region to the south. Urartian cuneiform inscriptions, ruins of fortresses and castles of different times, traces of bridges and other antiquities can be found in different parts of the region. The ruins of Ani, the capital of Bagratuni Armenia, can be seen just a few kilometers beyond the state border in Turkey.

Gyumri has been a settlement since immemorial times. Archaeological monuments (from the III millennium BC to the late Middle Ages) have been discovered in the area.

The city tourism is developed here. The house-museums of Armenian poets Hovhannes Shiraz, Avetik Isahakyan, the museum of Armenian actor Mher Mkrtchyan, Black fortress, numerous churches and monuments are located in Gyumri.

The first church mentioned in Gyumri, Dprevank, was a structure of the Armenian architectural golden age, VII century.

Harichavank is a medieval church complex. It is one of the ancient medieval Armenian monasteries. The oldest building was built in the 7th century. It is St. Gregory Church. Adjacent to it are two-storey chapels built in the 13th century. The main church of the monastery was built by the order of Zakare and Ivane brothers in 1201.

Marmashen. The medieval monastery of Marmashen is located about 2 km north-west of the village of Marmashen, Shirak region, on the left bank of the Akhuryan River. It consists of two groups of buildings: Big and Small (or Upper). The main church of the monastery, Katoghike, according to the inscription on the southern wall, was built by Prince Vahram Pahlavuni in 988-1029. Marmashen Monastery was a famous religious and cultural center of Armenia, it is one of the valuable complexes of Armenian spiritual architecture. Marmashen was first mentioned by Armenian historians in the 10th century. Speaking about the joint Armenian-Georgian army against the Arab emir Mamlan, Stepanos Asoghik reports that after the victory, Vahram Pahlavuni and his son Grigor built the Marmashen monastery (Asoghik, 1885).

Touristic resources of Vayots Dzor region. Vayots Dzor region is located in the south-east of Armenia. It is the smallest region of Armenia in terms of territory. It borders Syunik region from the south, Ararat region from the west, Gegharkunik region from the north, Artsakh from the east. The territory of Vayots Dzor is divided by many rivers, streams and valleys, which make the nature here uniquely beautiful and diverse. The main water artery is the Arpa River, which is 92 km long in the region.

The abundance of churches and monasteries make Vayots Dzor a real religious-cultural area. The most famous here are Noravank, Gndevank, Shativank, Khachik Karkop monastery, Zorats monastery, Arates, Tsakhatskar, St. Herher. Zion Monastery, St. Areni Astvatsatsin, Martiros stone-carved church, Gomk khachkar-chapel, etc.

Gladzor University, which became the pan-Armenian center of science and enlightenment at that time, became very famous in the 13th and 14th centuries. The historical monuments of Vayots Dzor were built mostly in the 8-14th centuries. Famous architects are Momik, who was a sculptor, writer and miniature painter, Siranes, Mkhitar, Shnorhavor, Grigorik. Each monument has its own originality and charm. However, their crown and masterpiece is Noravank (architect was Momik in 1339), which is a wonderful and unique monastic complex surrounded by red rocks. The fame of Noravank was due to the fact that it was the tomb of the Orbelian ruling house, due to which it was built with magnificent churches, endowed with church relics, treasures, estates and other wealth (Matevosyan, 2017).

Castles and fortresses - fortresses were of great defensive importance for Vayots Dzor. The most famous of them are Smbataberd, Hrashkaber, Proshaber, Sulemaber, Weiss Fortress. Smbataberd is the best preserved. Some fortresses and castles, such as Azatek Fortress or Khachik Fortress, date back to 1st millennium BC, and many of them

were built during the reign of Proshyan and Orbelyan princes. The castles and fortresses are the real witnesses of the turbulent and heroic history of Vayots Dzor.

The three large caves, Magili, Mozrov, Arjeri (bear), are located in the area between Areni, Khachik, Gnishik-Agarakadzor villages.

In the small area of Vayots Dzor, more than 150 hot and cold mineral springs are coming from the ground. Each village has its own famous springs, to which magical power is attributed. Many of them are associated with mythical stories. However, the most famous of them, the studied "cure" is "Jermuk" mineral water. Jermuk is the "queen" not only of Vayots Dzor, but of all the waters of Armenia. In its chemical and physical composition, it is similar to the famous mineral waters of Karlovy Vary.

Wine tourism is a popular "modern" form of international tourism today. Vayots Dzor is the most important wine-growing region of Armenia, which is once again proved by the latest archeological excavations. "Areni" endemic type grapes grow here. It is a grape with a unique taste, from which immortal dry red wines are obtained - sweet, semi-sweet, bitter.

Touristic resources of Lori region. The RA Lori region is the third largest in the country (occupies 12.7% of the RA territory). It is located in the north of the Republic, borders the Republic of Georgia (110 km long), Shirak in the west, Tavush in the east, Kotayk and Aragatsotn in the south. Traces of human cultural activity in the Lori area date back to ancient times. This is evidenced by the results of archeological excavations, the valuable cultural monuments dating back to the 3rd-1st millennium BC. Construction life flourished in the Lori area, especially during the reign of the Kyurik branch of the Bagratuni (10th-12th centuries), when economic and commercial activity gained new momentum there. It was then that the monasteries of Haghpat and Sanahin expanded, and new ones were founded: Kobayr, Horomayr, Khorakert, and so on. Lore, Kulet, Akhtala, Kaytson, Gag and other fortresses are being built to protect the territory.

The monastery of Sanahin, the construction of which is attributed to the Armenian queen Khosrovauish (10th century), is one of the medieval Armenian monasteries, and played a significant role in the Armenian spiritual and cultural life. There was also a school, a Matenadaran, and the academy of Grigor Magistros Pahlavuni. The great singer Sayat Nova was one of the students of the care school. Armenian historian Kirakos Gandzaketsi considered the Sanahin monastery to be the most influential educational institution in Eastern Armenia (Gandzaketsi, 1961).

Haghpat monastery is a large cultural, scientific-educational center of medieval Armenia, a monastery complex. It is located in the south-eastern part of Haghpat village, Lori region, Armenia. Together with the Sanahin monastery complex, it is a UNESCO World Heritage Site (UNESCO World Heritage, 1996).

Astvatsatsin Church in Odzun is situated in the village of Odzun, Lori region. It belongs to the type of domed basilica churches. It is currently operating. It is included in the list of immovable historical and cultural monuments of Odzun. The church was named St. Astvatsatsin, St. Nshan, St. Hovhannes, Khachgond. The latter is connected with the name of the priest Khachgund buried in the churchyard, in whose memory in 1291 a khachkar decorated with an inscription was erected. Near the church is a

monument of the early Christian period, which is a magnificent monument marking the victory of Christianity in Armenia (Shakhkhan, 1983).

Touristic resources of Kotayk region. Kotayk region is located in the central part of the Republic of Armenia, at an altitude of about 900-2500 m above sea level. Kotayk is rich in historical and cultural structures. Here is the Cathedral of the Holy Mother of God of Alapars, St. Vardan Zoravar Church (5th century), Tukh Manuk Chapel-worship (2nd millennium BC), Aylaberd-Sangayar Fortress (Stone Age), Garni Fortress, pagan temple (I century) and single-nave church (IV century), Geghard monastery (XII-XIII centuries), Kecharis monastery, Mashtots Hayrapet church, etc.

Tsakhkadzor, the center of alpine skiing in Armenia, is located in Kotayk region. It is rich in hotels and is a popular resort in the region for winter sports enthusiasts. The cities of Aghveran, Arzni, Hankavan, Bjni are located in the region, which are centers of medical tourism in Armenia with numerous sanatoriums and hotels.

"Garni" Historical-Cultural Reserve is located 28 km east of the RA capital Yerevan. It occupies an area of 3.5 hectares (together with the protection zone - 5.1 hectares), includes a number of historical and cultural structures and cultural values - Garni Castle (III-II centuries BC), pagan temple (77 AD), mosaic floor bath, palace buildings and adjacent economic structures. On April 28, 2011 it became known that the Garni Historical and Cultural Complex was awarded the Melina Mercury UNESCO-Greece 2011 Prize. Alexander Sahinyan thinks that the Garni temple is a unique synthesis of Greco-Roman, general Hellenistic and local architectural-constructive art, that it is a monument of Armenian-Hellenistic culture (Sahinyan, 1983).

The Geghard Monastery was built in the early Middle Ages on a site that served as a sanctuary in pre-Christian times. One of these springs is still preserved inside the main porch of the monastery. According to the legend, the first church was founded at the beginning of the 4th century, when Christianity was declared the state religion in Armenia. Geghard Monastery is a UNESCO World Heritage Site and one of the sights of Armenia. The main monument created in the 13th century includes the main Katoghike church, the vestibule, the 2 rock-cut church, the chapel-tomb.

Touristic resources of Gegharkunik region. Gegharkunik region is located in the east of the RA territory. The region borders with Tavush (north), Kotayk and Ararat (west), Vayots Dzor (south), as well as Azerbaijan (east). Gegharkunik is the largest region by area; it occupies 18% of the territory of the Republic of Armenia. About 1/4 of the whole area is occupied by Lake Sevan. There are many volcanic cones in the area, of which Armaghavan and Ajdahak are especially famous, in the craters of which there are lakes of the same name. The landscape of Gegharkunik is rich in impressive churches. Outside the main road leading to the town of Kamo is the Hayrvank Church (9th-10th centuries). In the north-eastern part, on the shores of Lake Sevan, is Noraduz, which is famous in Armenia for its collection of khachkars, some of which date back to the 7th century.

Armenia has historically been at the center of international trade and military routes, including the famous Silk Road, which connected China with Europe. The caravanserai was open to merchants and travelers. The best preserved is Selim Caravanserai, which

was built in 1332.

The Sevan Peninsula is one of the ancient cradles of the Armenian people, one of the main places of pilgrimage. The monastic complex of Sevan was founded by Grigor A Enlightener in 305. The island was fortified in the Bronze Age. In 874, the daughter of King Ashot Bagratuni, Mariam, the wife of Prince Vasak Gabur of Syunik, built two churches here (Orbelyan, 1910), the Apostles' (little) and St. Astvatsatsin, which still function today. In 1990 the school of Sevan Monastery was opened here, which is honor of Catholicos Vazgen I. The peninsula is considered to be the main tourist attraction of Gegharkunik region with artificial forests, surrounding hotel complexes and service pavilions.

4.2.Social-economic description of the regions of the Republic of Armenia.

Before evaluating tourism role in regions, there is a need to describe briefly the main social-economic situation in Armenian regions.

Table 1. Territory, Population and Gross domestic product in regions of the RA

Place	Territory, km ²	Total population, 1000 persons	Unemployment rate	Gross domestic product (at market prices), mln. drams		Structure of gross domestic product %	
		2021	2020	2018	2019	2018	2019
REPUBLIC OF ARMENIA	29743	2963.3	18.2	6017035	6543321	100.0	100.0
YEREVAN CITY	223	1091.7	23.6	3257069	3820048	54.1	58.4
ARAGATSOTN	2756	124.5	10.0	190498	165502	3.2	2.5
ARARAT	2090	256.6	12.6	424079	452804	7.0	6.9
ARMAVIR	1231	264.0	12.6	380625	384781	6.3	5.9
GEGHARKUNIK	5352	227.3	9.7	234995	234571	3.9	3.6
LORI	3799	212.6	20.5	248216	229581	4.1	3.5
KOTAYK	2092	251.2	20.1	409454	413471	6.8	6.3
SHIRAK	2680	231.0	17.3	273716	268947	4.6	4.1
SYUNIK	4506	135.8	13.1	385943	370576	6.4	5.7
VAYOTS DZOR	2310	48.1	20.4	75717	69128	1.3	1.1
TAVUSH	2704	120.5	23.6	136719	133907	2.3	2.0

Source: Marzes and Yerevan city of the Republic of Armenia in figures (2021).

Note: Unemployment rate calculated as % of the labour force.

As seen from tab. 1, the capital and the largest city of Armenia, Yerevan has the highest structure of GDP in Armenia, then comes Ararat, Kotayk, Armavir, Syunik. By territory, Gegharkunik, and then Syunik are big, and by population, after Yerevan come Armavir, Ararat, Kotayk. Unemployment rate is high in Yerevan, Tavush, Lori, Vayots Dzor, Kotayk, Shirak.

Tab. 2 shows, that Syunik, Ararat and Kotayk have high percentage in the structure of industrial output, meanwhile, Armavir, Ararat and Gegharkunik have high percentage

in the structure of agricultural output of the country.

Table 2. Industrial and agricultural output of regions of the RA

Place	Structure of industrial output		Structure of gross agricultural output	
	2019	2020	2019	2020
REPUBLIC OF ARMENIA	100	100	100	100
YEREVAN CITY	37.7	34.4	-	-
ARAGATSOTN	2.2	2.1	9.3	9.9
ARARAT	14.2	14.3	14.9	15.0
ARMAVIR	5.2	5.8	20.9	21.7
GEGHARKUNIK	3.3	3.3	13.2	11.9
LORI	4.2	5.3	8.0	8.1
KOTAYK	10.5	12.1	8.3	8.8
SHIRAK	3.3	2.9	10.4	10.0
SYUNIK	16.6	17.1	6.9	6.6
VAYOTS DZOR	1.3	1.2	2.5	2.6
TAVUSH	1.5	1.5	4.4	4.3

Source: Marzes and Yerevan city of the Republic of Armenia in figures (2021)

4.3. Analysis of tourism sphere in the regions of Armenia.

Tourism has shown growth tendencies in recent years in Armenia (Tovmasyan, 2021). However, the growth of the sphere was disrupted because of the Covid-19 pandemic. According to the Statistical Committee of the RA, in 2019 1894377 tourists arrived in Armenia (increasing by 14.7% as compared to 2018) (The socio-economic situation in the RA, 2019 January-December). In 2020, the number of incoming tourist visits to Armenia was only 360338, decreasing by 81% compared to the previous year. In 2021 tourism sphere began recovering and 870308 incoming tourists visited Armenia (The socio-economic situation in the RA, 2022 January). The number of domestic tourists was 1045756 in 2020, and in 2021, during the pandemic and international restriction of travelling, the number of domestic tourists increased in Armenia by 52.6 % counting 1595826 tourists (The socio-economic situation in the RA, 2022 January).

Unfortunately, there is no detailed information and statistical data about the number of incoming and domestic tourists in the regions of Armenia.

According to the information provided by the Statistical Committee of the RA, in 2019 the number of hotel facilities was 769, the volume of services was 41794.1 million drams. In 2020 the number of hotel facilities was 847, and the volume of services decreased by 61%, which is due to the damage caused to the sector by the pandemic. In 2021 number of hotel facilities was 915, the volume of services increased two times compared to 2020, which means that the sphere is recovering after pandemic. The high number of hotel facilities are situated in capital Yerevan (tab. 3).

Table 3. Number of hotel facilities and volume of services in the RA, 2019-2021

Place	Accommodation organization *						Number of tourists who stayed at hotel facilities	
	2019		2020		2021		2019	2020
	quantity, unit	Volume, mln. AMD	quantity, unit	Volume, mln. AMD	quantity, unit	Volume, mln. AMD		
YEREVAN CITY	410	33772.2	480	11836.8	522	24187.1	489019	87429
ARAGATSOTN	7	87.7	7	40.0	8	169.7	13	-
ARARAT	8	80.4	8	64.3	10	99.5	11	-
ARMAVIR	15	41.7	16	30.1	18	67.9	-	-
GEGHARKUNIK	39	735.9	40	341.2	42	831.1	5662	22
LORI	30	354.6	30	204.9	31	570.8	1702	10
KOTAYK	91	3220.0	93	2001.3	101	3861.5	5778	2705
SHIRAK	33	576.9	33	290.9	34	392.4	11868	1824
SYUNIK	38	830.5	38	410.7	42	563.8	669	2788
VAYOTS DZOR	24	588.0	26	261.5	28	911.6	11008	1350
TAVUSH	74	1506.2	76	1004.2	79	1754.0	24559	1422
REPUBLIC OF ARMENIA	769	41794.1	847	16485.9	915	33409.4	550289	97550

Source: Information was provided by the Statistical Committee of the RA, in April, 2022. Marzes and Yerevan city of the Republic of Armenia in figures (2021). * Indicators do not include value added tax and other indirect (similar) taxes.

The number of hotel facilities is high in Kotayk and Tavush.

In 2020 the number of public catering facilities and the volume of their services decreased (by about 8 and 36%). In 2021, the number of public catering facilities and the volume of their services increased by about 15 and 52% compared to 2020. The number of public catering facilities are high in Yerevan, then in Kotayk, Ararat and Tavush (Tab. 4).

Table 4. Number of public catering facilities and the volume of services, 2019-2021

Place	Catering *					
	2019		2020		2021	
	quantity, unit	Volume, mln. AMD	quantity , unit	Volume, mln. AMD	quantity , unit	Volume, mln. AMD
YEREVAN CITY	1662	131108.8	1599	85160.8	1759	127295.5
ARAGATSOTN	35	760.6	30	479.4	36	562.4
ARARAT	132	1458.0	124	778.9	137	926.7
ARMAVIR	68	1032.9	49	568.3	72	1335.3
GEGHARKUNIK	53	917.2	40	817.2	56	1207.6
LORI	48	695.4	38	458.2	51	808.6
KOTAYK	144	9908.6	134	5682.8	152	9649.2
SHIRAK	115	2384.8	92	1245.6	121	2793.3
SYUNIK	77	978.3	62	510.1	81	809.7
VAYOTS DZOR	47	824.3	38	932.6	50	1150.5
TAVUSH	134	2394.4	115	1214.0	146	2159.6
REPUBLIC OF ARMENIA	2515	152463.3	2321	97847.9	2661	148698.4

Source: Information was provided by the Statistical Committee of the RA, in January, 2022. * Indicators do not include value added tax and other indirect (similar) taxes.

In terms of travel agency operators, it should be noted that their number in 2020 was 691 against 788 of previous year, and the volume of services decreased by 82%. In 2021, the number of travel agency operators and their volume of services increased by 7% and 46% compared to 2020. Again, the majority operates in Yerevan (Tab. 5).

So, it is obvious, that the touristic infrastructures are mainly located in Yerevan. In these terms, regions need more infrastructures for sustainable social-economic development.

A correlation analysis was performed to assess the impact of changes of the volumes of accommodation, catering services, and the volume of activities of travel agencies on the socio-economic development of the RA regions.

Table 5. Activities of travel agencies, tour operators, reservation and other services in the field of tourism, 2019-2021

Place	Activities of travel agencies, tour operators, reservation and other services in the field of tourism *					
	2019		2020		2021	
	quantity, unit	Volume, mln. AMD	quantity, unit	Volume, mln. AMD	quantity, unit	Volume, mln. AMD
YEREVAN CITY	662	35543.2	588	6373.0	619	9275.9
ARAGATSOTN	7	18.9	5	9.3	6	10.9
ARARAT	19	143.2	14	40.1	16	37.5
ARMAVIR	14	21.8	12	3.5	14	14.1
GEGHARKUNIK	8	64.3	7	6.7	8	11.8
LORI	16	76.9	12	2.8	17	20.1
KOTAYK	26	124.5	23	31.5	26	40.1
SHIRAK	18	101.0	15	7.4	18	26.4
SYUNIK	6	5.2	5	2.2	7	8.9
VAYOTS DZOR	5	10.8	4	5.4	5	9.9
TAVUSH	7	186.0	6	22.0	6	48.7
REPUBLIC OF ARMENIA	788	36295.8	691	6503.9	742	9504.3

* Indicators do not include value added tax and other indirect (similar) taxes.

Source: Information was provided by the Statistical Committee of the RA, in January, 2022.

5. Discussion

5.1. Evaluating the impact of tourism on the socio-economic development of the RA regions.

In order to assess the impact of tourism on the socio-economic development of the regions of the Republic of Armenia, correlation analysis between the volume of tourism services, GDP, GDP per capita, as well as employment indicators is carried out. The volume of tourism services includes the sum of the volume of activities of accommodation, catering and travel agencies. As the number of inbound and domestic tourists is not counted separately in the regions, the indicators of the above-mentioned services can be considered the only data characterizing tourism in the regions. Of course, there are tourists who stay in rented apartments, non-hotel facilities, or visit on their own without using the services of travel agencies, but there is no statistical data for the above-mentioned tourist expenses.

The source of the indicators of the volume of tourism services, GDP and employment is the information provided by the Statistical Committee of the Republic of Armenia for years 2009-2020. Separate indicators of the volume of services by regions are not available before 2009. As the variables are few and the time series are short, it is not

possible to estimate the impact of the volume of services on the economic development of the regions by other econometric methods. For the purpose of analysis, the time series were pre-processed by taking the first differences method. Tab. 6 presents the results of the correlation analysis.

Table 6. Correlation analysis between tourism services, GDP and employment indicators

Indicator Location	Pearson correlation coefficient R		
	Volume of tourism services - GDP	Volume of tourism services - GDP per capita	Volume of tourism services - number of employed
YEREVAN CITY	0,88	0,86	0,61
ARAGATSOTN	0,70	0,71	0,15
ARARAT	0,46	0,92	0,38
ARMAVIR	0,71	0,70	0,67
GEGHARKUNIK	0,50	0,53	0,50
LORI	0,30	0,33	-0,11
KOTAYK	0,65	0,66	-0,15
SHIRAK	0,66	0,70	0,18
SYUNIK	0,44	0,45	0,17
VAYOTS DZOR	0,37	0,42	-0,26
TAVUSH	0,41	0,43	0,09
REPUBLIC OF ARMENIA	0,88	0,88	0,42

Source: The analysis was performed by the authors with the help of SPSS software.

Tab. 6 shows that the correlation coefficient between tourism services and GDP is high in Yerevan, followed by Armavir, Aragatsotn, Shirak, Kotayk and Gegharkunik. The correlation coefficient between GDP per capita and tourism services is high in Ararat, Yerevan, Aragatsotn, Armavir, Shirak, Kotayk.

The correlation coefficient between the employment and the volume of tourism services is high in Armavir, Yerevan and Gegharkunik. It is noteworthy that in some regions, such as Lori, Kotayk, Vayots Dzor, it has a negative effect, which means there is no correlation between the change in the volume of tourism services and the change in the number of employed. In the above-mentioned regions, however, tourism is a developed and developing sector, and it is possible that the number of registered employees is low, which is the reason for the obtained result. On the other hand, there is no separate statistical data on the number of people employed in the different spheres of the economy, so, it is not clear how many people are employed in the tourism sector.

Thus, the analysis shows that tourism is essential for the socio-economic development of the regions and for the capital Yerevan. In order to develop tourism in

the regions, it is necessary to develop sustainable tourism development programs, through which it will be possible to increase the investment of tourism in employment, GDP. It is necessary to link the development of tourism with the increase of employment, that is, to contribute to the implementation of investments in the regions, the increase of jobs, the development of SMEs, which will increase the living standard of the population, the level of income (Tovmasyan, 2022).

5.2. SWOT analysis of tourism development in the regions of the RA.

In order to find out the main obstacles of tourism development in the regions of the RA, SWOT analysis was conducted, which shows the strengths, weaknesses, opportunities and threats of tourism development. SWOT analysis has into account: strengths, weaknesses, opportunities, and threats.

Table 7. SWOT analysis of tourism development of the regions of the RA

STRENGTHS	WEAKNESSES	OPPORTUNITIES	THREATS
Rich cultural-historical heritage in the regions	Not all destinations are included in existing touristic routes	Inclusion of different destinations in tourism routes	Poor condition of inter-regional roads
Religious sites, monasteries, churches in all regions	Statistical recording for regions is incomplete	Increase in the number of tourists due to marketing events	Rural poverty
Eco touristic assets	Lack of effective marketing and branding	Attracting grants for tourism purposes	Migration
National dishes of each region	Low number of hotel facilities in the regions	Opportunity to develop agritourism in villages	Shortage of drinking water in some villages
Rural life and hospitable attitude	Low number of catering places in the regions	Expansion of festivals in the regions based on existing resources	Deforestation
Sport-adventure tourism activities (mountains, canyons, gorges, zip-lines, lakes, rivers, etc.)	Lack of touristic information, tourism info centers in the regions	Development of new tourist routes based on existing resources	Environmental issues, pollution
Spa-resort zones and natural curable resources (mineral waters, favorable climate)	Insufficient number / absence of tourism road signs	Increasing the number of touristic organizations in the regions	Covid-19 pandemic
Agritourism assets	Absence / lack of inter-community transport in the regions	Development of tourism infrastructures in the regions	Seasonality

Source: The analysis was performed by the authors

6. Conclusion

Thus, based on the above-mentioned analysis, it is obvious, that Armenia has a great resource potential for tourism development. The resources should be used rationally in order to organize sustainable tourism in regions more effectively. Based on SWOT analysis, here are some suggestions.

✓ There are no clear statistical data on the number of inbound and domestic tourists in the regions. Estimates are sometimes given by the regional administrations, which, of course, is not accurate. Therefore, the improvement of statistics will increase the effectiveness of field research, as it will be possible to have some information about the age, gender, purpose of arrival, country of origin of incoming tourists. Based on this, it will be possible to clearly assess the demand for tourism services, which is essential for processing tourism development programs in the regions.

✓ One of the obstacles to the development of tourism in the regions is the poor condition of the roads, which hinders the inclusion of all communities in the tourist routes. The problem is also the underdevelopment of infrastructure, the small number of tourism infrastructure facilities in the regions, their unequal distribution, therefore, in this regard, there is a need to attract investments. In recent years, hotels and gastroyards have been established in the regions within the framework of various international grant programs. However, in order to stimulate private investment, it is necessary to provide certain tax-credit privileges, as a result of which tourism infrastructure facilities will be built in the regions, especially in rural communities, which will promote tourism development, socio-economic development of communities, job creation, poverty reduction, etc.

✓ One of the obstacles to the development of tourism in the regions is the lack of information boards on the roads. In this regard, it is very important to add information boards to the roads, through which people will easily and quickly find their way to tourist places.

✓ A factor hindering the development of tourism is the lack of tourist information offices in the regions, the lack of tourist maps of the regions, which should be solved as well.

✓ Currently, travel agencies include the most popular destinations in their travel packages. However, based on the existing historical, cultural, religious, gastronomic, natural and sanatorium resources in different regions, new and interesting routes can be developed, which will contribute to the development of both domestic and inbound tourism in regions. Also, more festivals may be organized in regions to attract more tourists.

✓ The next major issue is the lack of marketing. Social media advertising, influencer marketing should be used, every region should have its touristic brand, website, presenting the main tourism resources and attractions.

✓ Sustainable tourism development programs should be developed for regions which will contribute to solve the environmental, social, cultural, economic problems through tourism.

Thus, tourism may contribute to regional development, increase of employment and GDP in regions, decrease of poverty and migration rates. In these terms, local and regional authorities should take all the necessary steps for adopting tourism policies to regional development.

Sustainable tourism development should be connected with regional development. Regions should elaborate plans for sustainable tourism development and implement them with the collaboration of other stakeholders.

Further studies should be done towards exploring the opportunities and obstacles of sustainable tourism development in different regions more detailed for establishing touristic sites' management plans, sustainable tourism development programs, etc.

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