WORLDLY KNOWLEDGE
INTERNATIONAL JOURNAL OF SCIENTIFIC RESEARCHERS
ISSN : 3030-332X IMPACT FACTOR (Research bib) – 7,293

ECOTOURISM OPPORTUNITIES IN FERGHANA REGION

Mo‘minov Doniyor G‘ulomovich,
Usmonova Yulduz Abdukamol qizi
Kokand state pedagogical institute

ANNOTATSIYA: Farg‘ona viloyati ekoturistik resurs turlarini o‘rganish, uning tabiiy geografik jihatlarini ochib berish hamda ularni ekoturizmga yaroqliligini baholash masalalari yoritilgan. Ekoturizm tushunchasi va dunyo davlatlari tajribasi, Farg‘ona viloyati ekoturizm imkoniyatlarini tahlil qilish, Farg‘ona viloyatidagi ekoturistik resurslar izohlangan.
Tayanch so‘zlar:ekologiya, geoekologiya, bioekologiya, urboekologiya, amaliy ekologiya, demoekologiya, inson ekologiyasi, ijtimoiy ekologiya, iqtisodiy ekologiya, umumiy ekologiya, turizm, rekreatsiya, tabiiy landshaft, antropogen landshaft, tabiiy resurslar, demografik sig‘im.
АННОТАЦИЯ:В статье заключается изучении типов эко туристских ресурсов Ферганской области, выявлении ее природно-географических аспектов и оценке их пригодности для экотуризма. Изучены понятие экотуризма и опыт стран мира, проанализированы возможности экотуризма в Ферганской области, оценены и картированы ресурсы экотуризма в Ферганской области.
Ключевые слова: экология, геоэкология, биоэкология, урбоэкология, прикладная экология, демоэкология, экология человека, социальная экология, экономическая экология, общая экология, туризм, рекреация, природный ландшафт, антропогенный ландшафт, природные ресурсы, демографический потенциал.

ANNOTATION: Purpose of the study.It consists of studying the types of eco-tourism resources in the Fergana region, identifying its natural and geographical aspects, and assessing their suitability for ecotourism. The concept of ecotourism and the experience of countries around the world were studied, the possibilities of ecotourism in the Fergana region were analyzed, and ecotourism resources in the Fergana region were assessed and mapped.
Keywords:ecology, geoecology, bio ecology, urban ecology, applied ecology, demoecology, human ecology, social ecology, economic ecology, general ecology, tourism, recreation, natural landscape, anthropogenic landscape, natural resources, demographic potential.

Qatronbashi, Haidarkon, Nazar, Kyzilgaza, Almalik, Ispisar, and Belmazor of the Oloy range in the Fergana region. The slopes of the Turkestan Ridge include Kampirqoq, Guzan, Burgan, Kyzilsuv, Kulantog, Suratboshi, Aktash, Kyzilkiyok. The height of these mountains is 900-2800 meters. The highest point in the territory of the Fergana region is Sarikkamish Pass (2817 m) in Sokh district. Lowlands developed in the Sokh and Shakhimardan river valleys, as well as in the valleys between Haydarkon and Yordon-Shakhimardon mountains. At the altitude of 1200-2000 m in the mountain region, there are semi-desert and mountain steppe, and at the altitude of 2000-2800 m, there are juniper forests. Archazors grow mainly on the mountain slopes near the Yordon and Shakhimardan valleys. The geocomplexes of the mountain region have undergone weak changes and are characterized by a large number of unique and interesting nature creations.

The area is 6.8 thousand km2. It includes 15 districts (Baghdad, Beshariq, Buvayda, Dangara, Yozyovon, Altiariq, Okhunboboyev, Rishton, Sokh, Tashlok, Uchkoprik, Fergana, Furqat, Uzbekistan, Kuva), 9 cities (Beshariq, Margilon, Rishton, Fergana, Yaipan, Kuva, Kuvasoy, Koqon, Hamza), there are 10 towns (Baghdad, Dangara, Dostlik, Yozyovon, Muqimi, Altiariq, Toshloq, Chimyon, Shorsuv, New Margilon) (2015). The center is the city of Fergana.

It should be noted that more than 15 of the 865 tourist organizations operating in our country are operating in our region. According to experts, there are enough favorable conditions for the development of tourism and ecotourism in our region. Historical monuments in the famous cities of Kokan and Margilon, shrines and shrines of great scholars, objects of cultural heritage, archeology and architecture, and natural

monuments can be included among such important factors. The interest in the flora and fauna protected in the natural area of the "Nature Monument" located in the central Fergana deserts is growing more and more in our country and internationally.

Currently, 376 tourist objects are registered in the territory of the Fergana region. Among them are 117 archaeological monuments, 139 architectural monuments, 88 attractions, and 32 monumental monuments.

The unique nature and climate of the Sokh, Fergana, and Beshariq districts, Shahimardan, and Central Fergana regions indicate the great potential of our region in the field of ecotourism. The structure of the territory and landscapes of our Boisi region is very diverse and unique. The variety of climatic conditions has led to the formation of plain desert, hilly, mountain-steppe, and high mountain-forest landscapes in the regions of our region. Attractive natural landscapes, unique species of animals and plants, interesting cultural and historical monuments, ethnography, and customs of our people, which are not found in any other region of the world, are favorable opportunities for the development of ecotourism.

In terms of natural conditions, the Fergana region is suitable for organizing all forms of ecological tourism. Because in this area, along with the areas strongly changed by man, you can see rare creatures in their natural state.

For example, the tourist route "Syr Darya River Orchards" includes orchards on the left bank of the river for 58 km. These groves are characterized by colorful flora and fauna. In turn, there are natural monuments such as protected forests, Sarikamish hunting, Beshariq and Dangara fisheries, Gumkhana, and Qairaqqum in this area.

A close acquaintance with the forests on the shores and islands of the Syr Darya River, the restoration of natural forests, and the reproduction of rare species (green, medicinal plants) is a great pleasure for foreign tourists. Today, large-scale efforts are being made in the area for beekeeping, preservation of the fauna of forests and water bodies, and breeding of rare fish species. Natural conditions have been created for the breeding of pheasants, wild boars, Bukhara deer, reed cats, sable, badger, waterfowl, carp, shovel noses, fat fish, and others.

The total area of the "Central Fergana" natural monument is 142.5 hectares, 122 hectares are covered with forests, 14 hectares are lowlands between the sands, where reeds, sedges, and sedges grow, and 6.5 hectares are salt marshes. The Fergana cypress lizard, Strauch's toad, goat eel, Rostock, boar, okilan, and cormailon included in the "Red Book" are protected in the area. The rich flora and fauna here can be effectively used for scientific, educational, aesthetic, and tourism purposes.

The mountain region includes the southern edges of Beshariq, the Uzbekistan districts of the Fergana region, Sokh district, and the surrounding areas of Shahimardon and Yordon villages of Fergana district. These areas occupy the slopes of the low and moderately high mountains and valleys between the mountains in the northern foothills of the Aloy-Turkestan mountains. The mountains of Aloy-Turkestan are distinguished by a wealth of interesting landforms. Denudational and accumulative landforms such as narrow river valleys, slopes of various shapes, kars, caves, and moraines can be found in these mountain ranges.

Qatronbashi, Haydarkon, Nazar, Kyzilgaza, Almalik, Ispisar, and Belmozor of the Oloy range in the Fergana region; The slopes of the Turkestan ridge include Kampirqoq, Guzon, Burgan, Qizilsuv, Kulantog, Suratboshi, Aktash, and Qizilkiyoq branches. Below we present the classification of some tourist places in the Fergana region.

Shorsuv hills as a tourist object include the low mountains in the southern part of Uzbekistan and Beshariq districts, the protection zones of the Achchiksuv (Shorsuv) river, and the Shorsuv reservoir. Oronomic objects such as Kyziltov (Kyzilbel), Gultatov, Koktov, and Damyogdi cave can be found in this area. Shorsuv hills and low mountains in the south of the region are relatively weakly changed landscapes as a result of anthropogenic influence. The dryness of the climate here (80-100 mm), weak development of river networks, and large skeletal and stony formation of weathering products led to the formation of interesting and unique landforms.

Kampirqoq is the most interesting complex of tourist objects. This complex is located on Campirqok Mountain, a southwestern extension of Guzon Mountain (Beshariq district). On the southern slope of the mountain, among the 160–180-million-year-old layers of the Jurassic period, there are many fossilized plant

remains, dinosaur vertebrae, and two types of lung-breathing fish. The use of such unique finds for scientific, educational, and touristic purposes can be a source of great income in the future.

Kopchigai Valley is located in the cross valleys of the rivers crossing the hills. From the east to the west of the region, Kuvasoy (Moyan-Korachatir), Akbarabadsoy (Karamkol), Margilonsoy (Kirguli), Fayziobodsoy and Oltiariksoy (Kopchigay), the Sokh river (Chongara and Sekitma) cross the hills, forming picturesque "kopchigay", that is, narrow and deep valleys. did, for example, the "Scenic Kopchigai Valley of the Sokh River" was formed when the Sokh River crossed the Sekitma anticlinal structure. Small geocomplexes with their characteristics were formed here. In this part of the river, a steep-sloped, narrow, and deep, transverse valley, which occurs only on the upper terrace, is developed. These valleys are important in establishing recreation centers and studying the tectonic structure and activity of their territory.

On the right bank of the Sokh River valley, on the northern slope of the Ghaznov anticline complicated by tectonic faults, there is the Aktuproq cave (length 150 m, width 10-40 m), formed by the karst phenomenon in gypsum layers. These observed features indicate that the Ghaznov anticline is involved in new tectonic movements. The monument can be used for scientific, educational, and tourist purposes.

28 caves and caves in the Sokh Oasis (Selungur, Eshma, Obishir, Sur, Bel, Zim, Ovikambar, Bogishim, etc.) were registered. The cultural layer in the Obishir caves is well preserved.

Devayron cave is located 4 km northwest of Devayron village, in a dome-shaped rock made of Paleozoic (Lower Devonian) limestones. Its total length is 103 m, mouth width is 1.5 m, and average width is 3.6 m. Some places of the cave expand up to 6 meters. The total area is 370 m2, the volume is 1488 m3. A spring was formed at the foot of the rock 10 m below the mouth of the cave. A moss cover is observed near it. Devayron cave is the largest karst cave in the Fergana region. It can be used for scientific, educational, recreational, and tourism purposes.

The Sokh Gorge is located in the deep and narrow valley of the Sokh, which stretches from the state border between the republics of Uzbekistan and Kyrgyzstan to the north to the villages of Sarikand and Qizilkiyaq. In the valley, between the villages of Karatokai and Tayan, the number and relative height of the river terraces changes. For example, if three terraces are observed in the village of Karatokai, the river valley narrows by 3-4 m in some places. These features are explained by the activity of new tectonic movements.

Obshirsoy caves are located in the northeast of Sokh, at the foot of the southern slope of Haydarkon mountain, which is made of Paleozoic limestones and shales. It consists of more than 5 groups of caves. Caves were formed mainly by the karst phenomenon and partially by anthropogenic factors. Their width is 8-26 m, height is 10-12 m. Mesolithic, i.e., archeological objects from the Middle Stone Age: stone, step knives, drills, bits, scrapers, etc. were found in the caves. They were inhabited by ancient people.

Aktuproq cave - on the right bank of the Sokh river valley, on the northern slope of the Gaznov anticline, complicated by tectonic faults, was formed by the karst phenomenon in the gypsum layers. Its length is 150 m, width is 10-40 m. The cave can be used for scientific, educational, travel, and health purposes for recreationists and tourists.

Chashma Spring is located in Sokh district, its structure is circular, its diameter is 20 meters, and its cross-section is 7-8 meters. The area of the spring pool is more than 50 m2, the depth is 2-4 meters. The spring water is very clear and airy, and it is very tasty. It was formed in the valley of Kolizardaksoy, which is the left tributary of Obshirsoy.

Shakhimardon region is one of the favorite vacation spots of the residents of our republic, as well as foreign tourists. But nowadays, under the influence of irregular recreation, various constructions, and economic activities, the nature of Shakhimardon is losing its unique natural features. There are good opportunities to use its nature for health improvement, recreation, tourism, and other purposes.

"Satkak springs" (about 10) are located in the ancient riverbed on the northeastern edge of Satkak hill in Fergana district, and there are groups of 5 hot springs. The spring waters are dark in color, clear, and delicious. They originate from the formation of underground waters by the hills of Kopchugay and Satkak.

Willow, poplar, and other decorative trees planted around the springs created a unique microclimate in this place. Even on hot summer days, the cool and clean air of the spring area, and healing waters bring peace to

the human body. There are teahouses, rest areas, and a shrine to visit. The shrine is crowded with people throughout the year. It was recommended to protect Satkak Springs as a hydrological monument.

"Arsif springs" are located on the northern steep slope of the Arsif anticlinal hill, which is composed of Sokh conglomerates. Complicated by shifts. Most of the springs are observed in places close to the landslide. The water soaked on the surface of the hill rose through the cracks at the foot of the northern slope of the hill and formed many springs.

On the northern slope moistened by spring waters, a thick cover of willow, poplar, cypress, sycamore, larch, apricot, nametag, zirk, hawthorn, as well as reeds, sedges, sedges, yantak, Elgin, yakin, and other moisture-loving plants was formed in swampy areas. The hydrological monument can be used for scientific, recreational, tourism, cultural-educational, aesthetic, and health purposes.

Monuments related to natural water bodies, ecotourist objects, and areas in hilly geocomplexes of our region are also unique. 21 hot springs in Uzbek district, 2 hot springs in Uchkoprik and Rishton districts, century-old cypress and eastern sycamore (Altiariq district), lake-spring (Tashloq district), sands of Akbarabad (Kuva district) are under state protection. Orchards were established in the Adiriyan plains of Beshariq, Uzbekistan, Rishton, Altiariq, Kuva, and Fergana districts. Natural monuments such as Zilha Sands, Sarikorgan Hill, Kitkontepa, Saur Bulak, Yomonjar Gorges, ancient pistachio groves, and Akbilol Cave will further expand the list of ecotourism objects of our region.

It is important not to forget that ecotourism is important as it creates new jobs and improves the standard of living of the population, and most importantly, it brings a lot of income, along with promoting the good qualities of our historical and cultural heritage and national mentality to the world.

REFERENCES:

1. Nigmatov A., Shomuratova N. Ekologik turizm — yangi fan sohasi // Ekologiya xabarnomasi, 2003. 6-son. 14—17-b.
2. Nigmatov A., Shomurotova N. O‘zbekistonni ekoturistik rayonlashtirish tajribasi. Ekologiya xabarnomasi. j.№2, —Toshkent. 2007. 46-54-b.
3. Mominov Daniyor Gulomovich. USE OF TOPONOMIC DATA IN GEOGRAPHY LESSONS. Eur. Chem. Bull. 2023,12(Special Issue 1, Part-B), 1896-1901. Article History: Received: 01.02.2023.
4. Mominov Daniyor Gulomovich. GEOECOLOGICAL BASIS OF SOUTH FERGANA NATURE PROTECTION AND RATIONAL USE OF NATURAL RESOURCES. International Journal of Early Childhood Special Education (INT-JECSE) DOI:10.9756/INTJECSE/V14I8.18 ISSN: 1308-5581 Vol 14, Issue 08 2022.
5. Mo‘minov D.G‘. Qo‘ziboeva O.M. SUG‘ORILADIGAN YERLARDAN FOYDALANISh VA LANDShAFT-MELIORATIV BAHOLASh (ANDIJON VILOYaI MISOLIDA). «Ekonomika i sotsium» Vыpusk №1(104) 2 chast (yanvar, 2023). Sayt: http://www.iupr.ru. ISSN 2225-1545. UDK 004.02:004.5:004.9. (Mominov D.G. Koziboeva O.M. USE OF IRRIGATED LANDS AND LANDSCAPE-MELIORATIVE ASSESSMENT (ANDIJAN REGION AS AN EXAMPLE). "Economics and society" Vypusk #1(104) 2 chapters (January, 2023). Website: http://www.iupr.ru. ISSN 2225-1545. UDK 004.02:004.5:004.9).
6. Muminov Daniyor Gulomovich. SOME CONSIDERATIONS ON THE ECOLOGICAL STATUS OF LAND RESOURCES GALAAXY. INTERNATIONAL INTERDISCIPLINARY. RESEARCH JOURNAL (GIIRJ). Volume 10, Issue 12, December, 2022. ISSN: 2347-6915 SJIF Impact Factor: 7.718.
7. Mo'minov Doniyor G'ulomovich. GEOECOLOGICAL MAPPING OF LAND RESOURCES. Web of Scientist: International Scientific Research Journal. VOLUME 3, ISSUE 3 , MARCH-2022. ISSN: 2776-0979 Impact Factor: 7.565.
8. Mo‘minov Doniyor G‘ulomovich. Geoekologik muammolarni bartaraf etishda agrodemografik bosimni hisobga olish. Academic research in educational sciences. volume 2 | ISSUE 3 | 2021 ISSN: 2181-1385 Scientific Journal Impact Factor (SJIF) 2021: 5.723. (Mominov Daniyor Gulomovich. Considering agrodemographic pressure in solving geoecological problems. Academic research in

educational sciences. volume 2 | ISSUE 3 | 2021 ISSN: 2181-1385 Scientific Journal Impact Factor (SJIF) 2021: 5.723).
9. Muminov Doniyor Gulomovich. Some issues of socio-economic geographical study of rural areas. TJG - Tematics journal of Geography. Vol-5-Issue-1-2021. ISSN – 2277-2995. http:thematics journals. in UIF 2020= 6.722 IFS 2020 = 7.652.
10. Д.Ғ.Мўминов. Улучшение геоэколого-хозяйственного состояния сельской местности путём оптимизации агродемографического давления. “Илм сарчашмалари”. Урганч давлар университетининг илмий-назарий, методик журнали. 2022-4. (D.G.Mўminov. Improving the geo-ecological and economic condition of rural areas by optimizing agro-demographic pressure. “Ilm sarchashmalari.” Urganch davlar universityining ilmiy-nazariy, journal methods. 2022-4).

worldyknowledge.uz