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CRITERIA FOR EVALUATING RECREATION AND TOURISM POTENTIAL OF FERGANA REGION

Abstract. *The article analyzes the need for a comprehensive assessment of the natural, historical, economic and ecological potential of the region in the development of recreation and tourism. Recreational and touristic potential of the nature of Fergana region were studied and to develop proposals and recommendations for its use, methods of assessing the touristic and recreational potential of the region have been improved based on the use of GIS, taking into account regional characteristics. Recreational-touristic potential of Fergana region was evaluated based on 117 indicators based on 6 blocks (natural factors, historical-cultural factors, socio-economic factors, touristic factors, ecological situation and negative factors). The role and importance of each administrative-territorial unit in the recreational-touristic potential of Fergana region was determined. On the basis of the thematic and comprehensive evaluation of the recreation-touristic potential of Fergana region, the private (natural, historical-cultural, economic-social) and general typology (highest, high, medium, low) of the administrative units of the region was distinguished. With the help of this evaluation method, the results of the recreational-touristic potential determined by the specific potential of each typology can be used in the development of promising programs aimed at the development of the sector.*

Key words: *tourism, recreation, recreation and touristic potential, balance method, factors of assessment, recreational-tourist routes, recreational-touristic cluster.*

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КРИТЕРИИ ОЦЕНКИ РЕКРЕАЦИОННО-ТУРИСТИЧЕСКОГО ПОТЕНЦИАЛА ФЕРГАНСКОЙ ОБЛАСТИ

Аннотация. *В статье обосновывается необходимость комплексной оценки природного, историко-экономического и экологического потенциала региона для развития рекреации и туризма. Изучены рекреационно-туристский потенциал природы Ферганской области и разработаны предложения и рекомендации по его использованию, усовершенствована методика оценки туристско-рекреационного потенциала региона на основе использования ГИС с учетом региональных особенностей. Рекреационно-туристический потенциал Ферганской области оценивался по 117 показателям на основе 6 блоков (природные факторы, историко-культурные факторы, социально-экономические факторы, туристские факторы, экологическая ситуация и негативные факторы). Определены роль и место каждой административно-территориальной единицы в рекреационно-туристском потенциале Ферганской области. На основе компонентной и комплексной оценки рекреационно-туристского потенциала Ферганской области определена частная (природная, историко-культурная, социально-экономическая) и общая классификация административных единиц Ферганской области по величине рекреационно-туристского потенциала. Полученные таким образом оценки рекреационно-туристского потенциала территорий могут быть использованы при разработке перспективных региональных программ по развитию отрасли.*

Ключевые слова: *туризм, рекреация, рекреационно-туристического потенциал, балансовый метод, факторы оценки, рекреационно-туристские маршруты, рекреационно-туристический кластер.*

Introduction and problem statement. In the world, recreational-tourist activity is one of the leading and rapidly developing sectors in terms of economic development and creation of new jobs. According to the World Tourism Organization (UNWTO) and the World Council on Travel and Tourism (WCTT), the number of jobs in the tourism sector will reach 350 million by 2025. This is 70 million more than in 2015 [6, 16].

It is important to raise the economic and social potential of the regions through the development of recreation and tourism. For this, research is needed to develop the geographical basis of using the natural, historical, economic and social opportunities of the regions for the purpose of recreation and tourism. In order to effectively organize recreation and tourism, it is necessary to evaluate the territory separately in terms of complex and components. Factors can be divided into strong and weak according to the nature of defining and creating recreational and touristic opportunities of the region.

Today, special attention is paid to scientific research on the use of recreational-touristic resources and the recreational-touristic potential of the region, as well as territorial organization, creation of prospective programs for the development of recreation and tourism based on a comprehensive assessment. In this regard, it is important to assess the natural and economic-social geographic conditions for the purpose of recreation and tourism, to determine its types, zoning, and to develop measures to increase and develop recreational and touristic opportunities.

Recreation and touristic potential (RTP) is a combination of recreation and tourism resources, their territorial structures, and conditions that help meet the tourism and recreation needs of tourists. The assessment of recreational-touristic potential is the initial stage of the research and shows the main features (strengths and weaknesses) of the area. This creates an opportunity to realistically assess tourism in the region and develop effective recommendations (Fig. 1).

Study of the problem. It is possible to ensure the effective development of recreational and touristic activities by planning and designing recreation and tourism in the recreational-tourist area. Researchers have different approaches to the analysis of the definitions of the recreational-tourist object and the area. Today, concepts such as recreational-touristic resource, recreational-touristic potential are widely used in geographical research of recreation and tourism [4, 5, 9-11, 14, 17].

Evaluation of RTP is carried out mainly in 4 directions: medical-biological (physiological), psychological-aesthetic, technological and economic. In this study, an assessment method that summarizes the above directions was chosen. Based on the geographical nature of the research, attention was paid to natural factors. However, other indicators were also studied to expand the possibilities of using the evaluation results in practice [4].

A resource-based approach to the study of the geographical essence of recreation and tourism has been put forward by many researchers and its scientific and methodological foundations have been developed. In turn, it should be said that the level of development of tourism and recreation depends on the diversity of resources.

M.A.Sarancha believes that the recreational and touristic potential of the area is a set of opportunities necessary for the organization of recreation and health restoration activities [13].

One of the most effective methods in recreational-tourist evaluation of natural complexes is the integrated complex evaluation method, which was used in the researches of Y.A.Vedenin, N.N.Mirishnichenko based on this method [4].

Canadian researcher D.Getz notes the existence of more than 150 tourism models, and the author himself divides the models into groups: theoretical, models of tourism planning and management processes, and forecasting models of tourism development, etc [3].

The levels of territorial organization were stated by M.V.Gudkovskikh to consist of touristic-recreational area, touristic-recreational district, recreation and tourism system, cluster and route [4, 12].

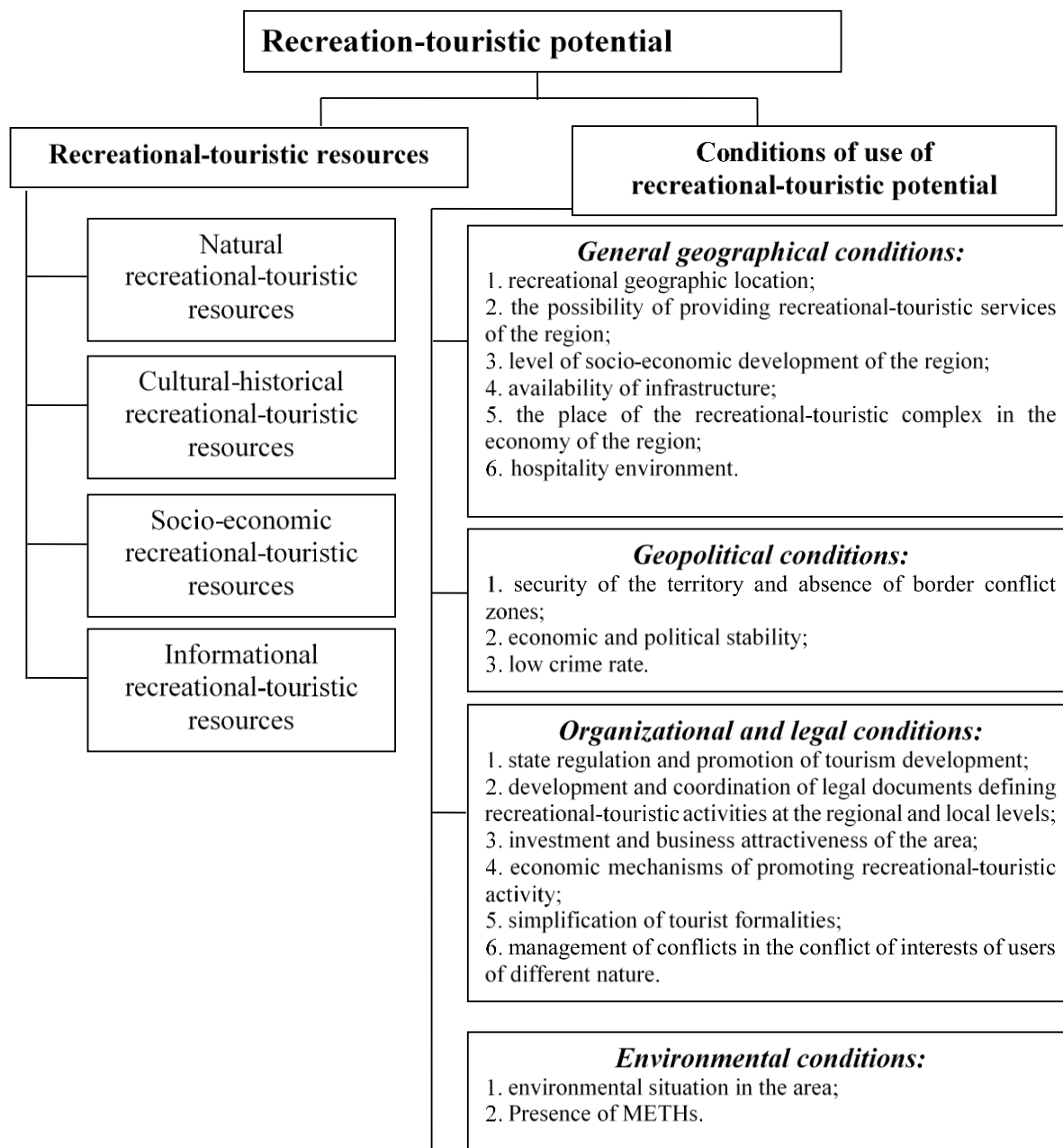


Fig. 1. Recreation and touristic potential

In the assessment of recreation and tourism potential, developed by A.A.Grigorev, M.I.Budiko, D.L.Armand, A.I.Ziryayov, M.V.Gudkovskikh and we used the improved balance method [1, 4, 7, 8].

The balance method is carried out in the following order: 1. Selection of the territorial unit; 2. Defining the main criteria; 3. Adjustment of rating scale; 4. Evaluation of general and individual results; 5. Analysis of results; 6. Final comprehensive assessment; 7. Comparison of results and zoning of the territory according to the level of recreational and touristic potential; 8. Development of the recreational-touristic potential map of the region.

The aim and objectives of the work. The aim of scientific research is to study the recreational and tourist potential of the nature of Fergana region and to develop proposals and recommendations for its use, methods of assessing the touristic and recreational potential of

the region have been improved based on the use of GIS, taking into account regional characteristics. The object of scientific research is the territory of Fergana region and its natural, natural-historical, socio-economic conditions.

Materials and research methods. Using the balance method, the following evaluation blocks of equal importance are distinguished in RTP assessment: natural factors, historical-cultural factors, socio-economic factors, touristic factors, ecological situation and negative factors. In the balance method, it is recommended to determine RTP by the following this formula:

$$\text{RTP} = (\text{Na} + \text{HC} + \text{ES} + \text{T}) - (\text{E} + \text{Ne}) \quad (1)$$

The input part of the balance: Na - natural factors, HC - historical-cultural factors, ES - economic-social factors, T - touristic factors.

The output part of the balance: E - ecological situation, Ne - negative factors.

Each block consists of interrelated components, for example, a block of natural factors, relief, climate indicators, hydrological conditions of the area, etc. In turn, components include a group of evaluation parameters. The sum of the points for each group of evaluation parameters constitutes the total value of the component points. The total potential is not the sum of the points, but the sum of the share of each block. Because each component of the scoring involves different parameters, the sum of the scores cannot be adequately compared. Therefore, the final result of the assessment indicates the share of each region in the total regional potential.

The evaluation is divided into 6 blocks, and the results of each block are summarized. The final result for each block does not represent the sum of points, but the share of each administrative district in the total potential.

Results and its discussion. In the assessment of the recreational and touristic potential of Fergana region, natural factors were considered to be the leader, and the region's relief, climate, internal waters, landscapes, protected natural areas were evaluated according to 38 indicators in 19 administrative units. The share of each administrative unit in the recreational and touristic potential of Fergana region was determined. In the assessment of the natural factors block of the recreational and touristic potential of Fergana region, Fergana district has the highest score, 14 points for relief, 48 points for climate, 27 points for internal waters, 28 points for landscape, 17 points for protected natural areas, a total of 134 points [8].

In the assessment of the historical-cultural recreational and touristic potential of Fergana region, architectural monuments, historical and archaeological monuments, religious and cultural objects, handicraft centers and their level of importance were evaluated according to 28 indicators. According to the results of the evaluation of the block of historical and cultural factors of the touristic and recreational potential of Fergana region, the city of Kokand is the leader and has the highest score with 22 points for architectural monuments, 33 points for historical and archaeological monuments, 18 points for religious and cultural objects, a total of 73 points.

In the assessment of the recreational-touristic potential of Fergana region, in the block of economic-social and touristic factors, regional transport, population and labor resources, material and technical base, tourist accommodation, tourism industry subjects and existing touristic-recreational directions were evaluated according to 34 indicators [15].

In order to effectively establish recreational-tourist activity, it is necessary to take into account the factors that have a negative effect on it when assessing the potential. Climatic discomfort, unfavorable features of the landscape for travel, negative socio-economic, political and ecological conditions affect the tourist image of the region, the level of attraction of tourists.

Recreational-touristic potential of Fergana region was evaluated based on 117 indicators based on 6 blocks (natural factors, historical-cultural factors, socio-economic factors, touristic factors, ecological situation and negative factors). The role and importance of each administrative-territorial unit in the recreational-touristic potential of Fergana region was determined (Tab. 1).

On the basis of the thematic and comprehensive evaluation of the recreation-touristic potential of Fergana region, the private (natural, historical-cultural, economic-social) and general typology (highest, high, medium, low) of the administrative units of the region was distinguished. The typology based on the results of the assessment of the recreational and touristic potential of the Fergana region made it possible to combine the administrative units of the region into 4 groups. It was important to create equal ranks between the indicators of these groups.

According to the general assessment of the recreational and touristic potential of Fergana region, administrative-territorial units were divided into 4 groups:

- the highest - Fergana district;
- high – Margilan city, Kokand city, Sokh d., Fergana city, Quva d.;
- medium – Beshariq d., Buvayda d., Rishtan d., Qoshtepa d., Yozyovon d., Quvasoy city, Altariq d.;
- low – Uchkuprik d., Dangara d., Bagdad d., Toshloq d., Uzbekistan d., Furqat d.

Table 1

Recreational-touristic potential of Fergana region (%)

<i>№</i>	<i>Administrative-territorial units</i>	Na	HC	SE	T	<i>Input</i>	E	Ne	<i>Output</i>	Total	<i>Share</i>
1	Fergana d.	8,01	6,42	5,5	7,82	27,73	1,85	5,38	7,23	20,5	10,3
2	Margilan city	3,71	9,70	6,7	5,25	25,38	5,56	4,23	9,79	15,59	7,8
3	Kokand city	3,77	10,00	7,3	5,72	26,83	7,41	4,81	12,22	14,61	7,3
4	Sokh d.	7,00	3,63	4,1	4,55	19,27	1,85	4,42	6,27	13	6,5
5	Quva d.	6,04	5,31	5,3	7,00	23,68	5,56	5,38	10,94	12,74	6,4
6	Fergana city	3,71	6,70	7,7	5,83	23,93	7,41	4,05	11,46	12,47	6,2
7	Beshariq d.	6,63	5,73	4,5	5,48	22,37	5,56	5,77	11,33	11,04	5,5
8	Buvayda d.	4,60	5,45	5,0	5,25	20,27	3,70	5,58	9,28	10,99	5,5
9	Rishtan d.	5,02	5,59	5,1	5,60	21,31	5,54	5,19	10,73	10,58	5,3
10	Qoshtepa d.	5,14	4,47	5,1	4,67	19,38	3,70	5,77	9,47	9,91	5,0
11	Yozyovon d.	5,90	3,63	4,3	5,13	18,93	3,70	5,58	9,28	9,65	4,8
12	Quvasoy city	5,80	3,77	5,2	6,42	21,23	7,41	4,81	12,22	9,01	4,5
13	Altariq d.	5,31	4,89	5,2	5,13	20,57	7,41	5,19	12,6	7,97	4,0
14	Uchkuprik d.	4,90	4,19	5,0	4,90	18,96	5,56	5,38	10,94	8,02	4,0
15	Bagdad d.	4,54	3,91	4,5	4,10	17,08	3,70	5,58	9,28	7,8	3,9
16	Dangara d.	5,70	3,63	4,8	4,90	19,01	5,56	5,77	11,33	7,68	3,8
17	Toshloq d.	4,12	6,28	5,3	4,43	20,16	7,41	5,38	12,79	7,37	3,7
18	Uzbekistan d.	5,97	3,63	5,1	4,32	19,02	7,41	5,38	12,79	6,23	3,1
19	Furqat d.	4,13	3,07	4,2	3,50	14,89	3,70	6,35	10,05	4,84	2,4
	Total	100	100	100	100	400	100	100	200	200	100

* - the table is calculated by the author.

According to the natural recreational-touristic potential of Fergana region, Sokh district, Beshariq district have the highest index, Uzbekistan district has a high index, while in general recreational-touristic potential, Sokh district is high, Beshariq district is medium,

Uzbekistan district is low index. Beshariq district, Rishtan district, Buvayda district, Toshloq district, which have a high index in the historical-cultural recreational-tourist potential of Fergana region, have a medium and low index in the general potential. This can be explained by the low economic and social indicators, the environmental situation and the high indicators of negative factors (Fig. 2).

The indicators of Fergana district, which has the highest recreational and touristic potential in Fergana region, were calculated using the above formula (in %):

$$10,3 = \frac{(8,01 + 6,42 + 5,5 + 7,82) - (1,85 + 5,38)}{2}$$

In order to raise the potential and brand of Fergana region in the field of recreation and tourism, as well as its position at the national and international levels, the administrative units with the lowest share in the tourism and recreation potential of the region (Altiariq d., Dangara d., Toshloq d., Uchkuprik d., Bagdad d., Uzbekistan d., Furqat d.), it is necessary to develop recommendations for the development of such types as agrotourism, gastronomic tourism, sports-health tourism, shop tourism, ethnographic tourism.

Recreational and tourist activities cannot be carried out directly under any natural conditions. For this, it is necessary to evaluate the natural conditions of the territories from the landscape point of view. The optimal natural conditions of the territory, climate, water, flora and fauna, indicators of ecological and political stability are also considered as the main evaluation criteria. Accordingly, in order to increase the touristic and recreational potential of Fergana region, based on the share of regions in the total potential, directions were classified according to landscape-ecological, historical-cultural geographic, service geographic by touristic object and regions.

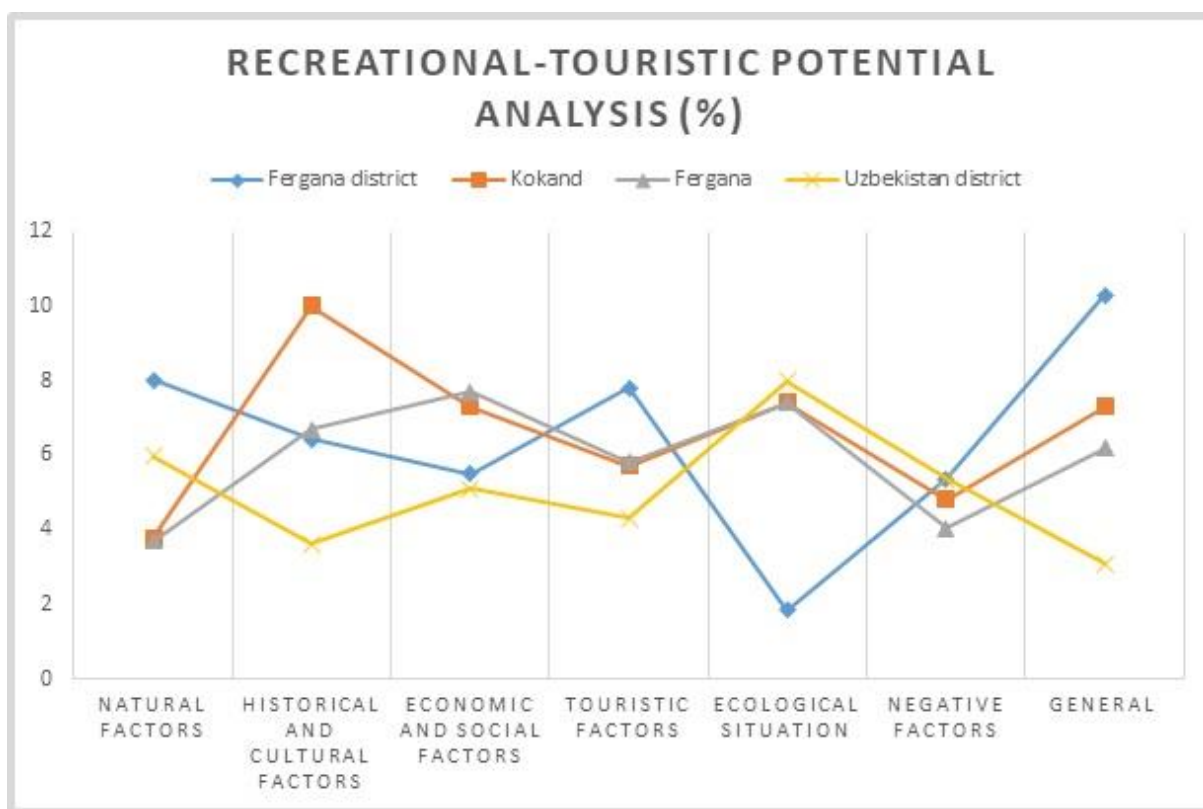


Fig. 2. Recreational-touristic potential analysis of Fergana region

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3 recreational and tourist routes have been developed in Fergana district: Fergana-Satkak-Chimyon, Fergana-Vadil-Shahimardon-Yordon, Fergana-Avval-Ettibulok (Fig. 3).

69.8% of foreign tourists visiting Uzbekistan choose destinations for 1-3 days. This must be taken into account when developing recreational-touristic routes.

The factors listed above were taken into account when developing the recreational-touristic cluster and routes. As a result, a system of recreational-touristic facilities was formed and a recreational-touristic passport was developed, where you can get information about promising new touristic routes and each recreational-touristic facility.

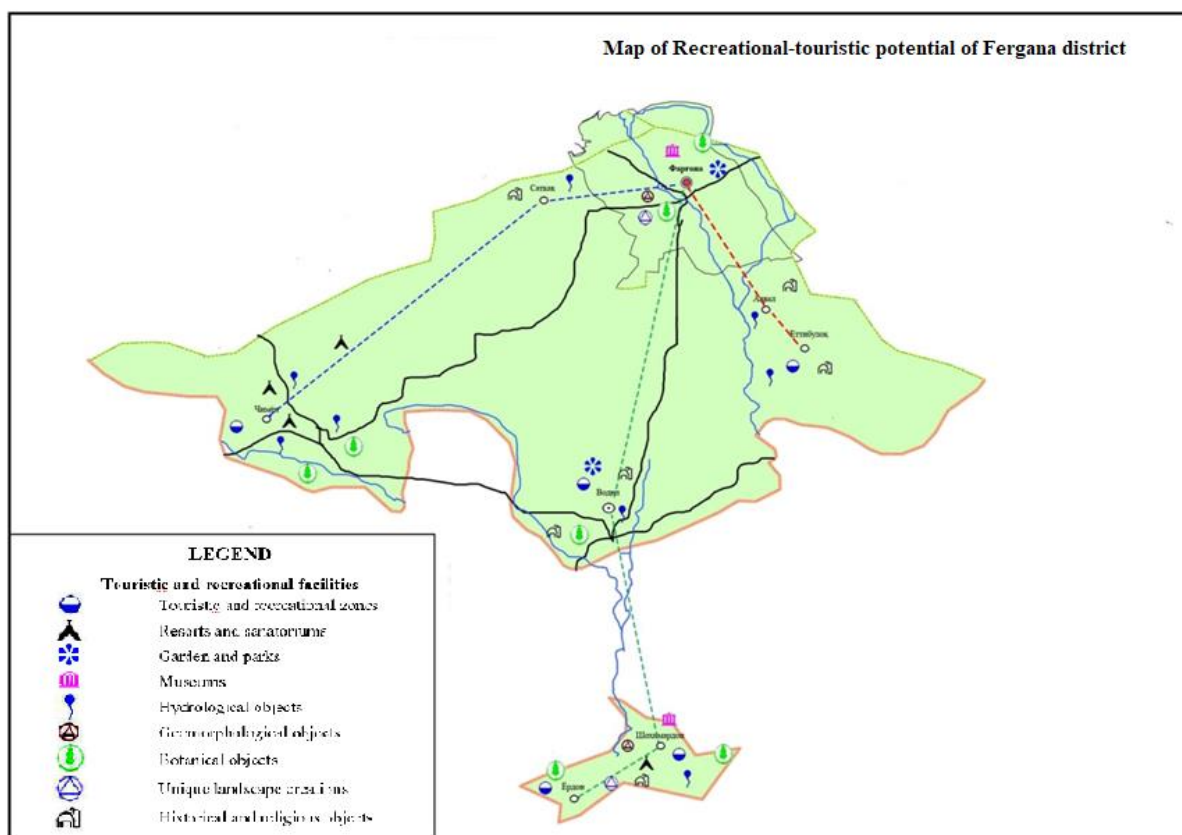


Fig. 3. Map of Recreational-touristic potential of Fergana district (Scale: 1:750 000)

Conclusion. 1. The balance method of evaluating the recreational-touristic potential was improved taking into account the natural (relief, climate, inland waters, landscape, protected natural areas), historical-cultural (historical and cultural monuments, shrines, craft centers), socio-economic (economic and tourist infrastructure, state of existing recreational-tourist routes), ecological and negative (index of air and water pollution, climatic discomfort, economic-social, political disadvantages) indicators of the regions. This guarantees the improvement of the thematic recreational-touristic directions and the mechanisms of their organization based on each region.

2. On the basis of the thematic and comprehensive evaluation of the recreation-touristic potential of Fergana region, the private (natural, historical-cultural, economic-social) and general typology (highest, high, medium, low) of the administrative units of the region

was distinguished. With the help of this evaluation method, the results of the recreational-touristic potential determined by the specific potential of each typology can be used in the development of promising programs aimed at the development of the sector.

3. In Fergana region, recreational-touristic potential for regions with high landscape-ecological indicators (Sokh district, Fergana district) and high natural-historical recreational-tourist potential (Kokand city, Margilan city, Rishtan district) routes were established and the possibilities of expanding the use of the existing ones were identified.

4. Based on the ArcGIS program, a 1:750000 scale “Map of Recreational-touristic potential of Fergana district” was created. It contains recreational-touristic facilities and promising new touristic routes (one-day and multi-day). A recreational-touristic passport of the district was developed, where information can be obtained about each recreational-touristic facility (address, description, possible touristic-recreational directions). It is desirable to improve the system of recreational and tourist facilities and develop new routes for other administrative units on the basis of this card-scheme and passport template.

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