

Organization and activities of offices and societies on the issue of ecology in the Turkestan general governorate

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Abstract. The purpose of the research is to reveal the organization of offices and societies on the issue of ecology in Turkestan in the second half of the 19th century - the beginning of the 20th century and their place in the ecological situation and environmental protection in the country, as well as the theoretical and conceptual foundations of the problem. Research methods. Research methods such as historical analysis and synthesis, chronological-comparative analysis, civilizational approach, synergetic method and objectivity were used in the research. Report on the main results of the research: Firstly, ecological offices and societies established in Turkestan in the second half of the 19th century - the beginning of the 20th century. Secondly, it was justified that he tried to find a solution to existing problems by studying information about flora and fauna, water resources, climate and natural disasters, epidemics and sanitary conditions in the region. Thirdly, it has been revealed that they are striving to ensure environmental protection by sending appeals to the government regarding environmental issues in the country and their solutions.

1 Introduction

Since the second half of the 19th century, a number of scientific societies and agencies have been established in Turkestan in order to study the environment and natural resources and socio-economic issues. In 1867, the first meteorological station for the purpose of studying climate in the Turkestan region [1], in 1869, the Central Asian Society, in 1870, the Turkestan branch of the Amateur Society of Natural Sciences, Anthropology and Ethnography, on December 19, 1869, the Tashkent Chemical Laboratory, Tashkent Chemical Laboratory On August 20, 1892, in Samarkand, the regional branch of the Russian Society for the Protection of Animals, in 1895, the Turkestan branch of the Imperial Russian Geographical Society, as well as in 1895, the Turkestan Agricultural Society, in 1897, the Department of Agriculture and State Properties, in 1898, under the Agricultural Society "Locust Committee", Turkestan Medical Society in 1899, Tashkent Hunting Society in 1901, Turkestan Entomological Station established in 1911, and other

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societies and agencies are included. Within the framework of the topic, it is appropriate to study the activities of some of these societies and agencies.

Central Asian society is one of the first societies opened in Tashkent in 1869 based on the permission of the Turkestan Governorate. This society was formed by natural scientists led by APFedchenko. From 1869 to the beginning of 1872, the society carried out its activities, and its main goal was to comprehensively research the Turkestan region, including the study of the environment and natural resources of the region [2]. The society has its own Charter, museum, library and archive [3]. There are different information about the date of establishment of the society, and archival documents confirm that it was founded in 1869. In some studies, based on the fact that the first open meeting of the society was held on January 28, 1871, it was indicated that the society was founded in 1871 [4].

2 Methods

According to the archive documents, special attention is paid to the issue of personnel in the society. In particular, the members of the society include not only natural scientists, but also governor general officials A.S. Tatarinov (chairman of the society), K.V. Struve (vice president), N.F. Petrovsky (secretary and treasurer), A.K. Abramov (major general, Zarafshon) head of the district) and more than 10 other officials can be seen. Also, the presence of representatives of local people such as Mirzahakim Dodho, Saidazimboy Muhammadboyev, Haji Yunusov as members in the society shows the perfection of the society's structure [5]. A significant aspect of the society is the large number of officials of the General Governorate, which shows that the society served the interests of the Russian Empire.

In the case of the researcher A. Nazarov, the suspension of the society's activities was preceded by insufficient financial support from the government, most of the members of the society were members of the Amateur Society of Natural Science, Anthropology and Ethnography, which was founded on the initiative of A.P. Bagdanov, who worked almost at the same time. It was pointed out that the departure of A.S. Tatarinov from Tashkent in 1873 [6], due to various reasons, was the reason for this.

It should be noted that, although this society was active for a short time, it managed to collect a lot of valuable information about the nature and natural resources of the country and published them in newspapers and collections. It should also be noted that the members of the society actively participated in a number of scientific expeditions and contributed to the development of natural sciences in the country.

The Amateur Society of Natural Science, Anthropology and Ethnography, established in 1870, played a significant role in collecting important information on the country's ecological situation, natural resources, and socio-economic life of the population and their scientific research. Many scientific expeditions and trips were organized by this society headed by A.P. Fedchenko [4]. According to the results of the expedition, valuable information about the nature and ecology of the country was obtained. However, this society did not function for long.

3 Results

By the end of the 19th century, a society was established in the regions of Turkestan to protect animals, especially stray animals. In particular, on August 20, 1892, the regional branch of the Russian Society for the Protection of Animals started its activities in Samarkand. In the report on the activities of the society for the period from August 27,

1892 to January 1, 1893, information on personnel, i.e., this department was founded on August 27, 1892 with 31 founding members. It was noted that 10 more people were accepted on August 27 [7]. Also, membership fees of 17 rubles were paid to the account of the society until August 27, the day of the establishment of the society, and the previous contribution of 40 rubles was sent to the St. Petersburg fund, because at that time the Samarkand branch was not yet approved. Then, on January 1, 1893, a membership fee of 15 rubles was accepted [8].

The society held 4 general meetings from August 27, 1892 to January 1, 1893. The society has adopted a number of orders during its activity [8]. In particular, according to the first order, members of the society, Dr. B. U. Beynar, veterinarian Ye. V. Peplov, mirshabboshi K. M. Duplitskiy, inspected the aviary of the city of Samarkand and reported the situation to the military governor.

The rest of the orders include the admission of well-known specialists from the local population to the membership of the society, the strict compliance of the mirshab employees with the circular of the Minister of Internal Affairs No. until the dissolution, it is decided to refrain from holding the representatives of the local population responsible for violations, to protect animals, to organize concerts and literature evenings in the spirit of caring for them, to ensure the implementation of proposals to open the first veterinary hospital in the country [8].

The services of the Turkestan branch of the Imperial Russian Geographical Society are of particular importance in the detailed study of the natural resources, flora and fauna, water resources and other opportunities of the Turkestan region. After long-term discussions, this society was founded on May 20, 1895 by the Governor-General of Turkestan [4]. It was established by the order of Vrevsky and the suggestion of Russian researchers in the country. On December 26, 1896, the Charter of the Turkestan branch of the Imperial Russian Geographical Society was approved by the Ministry of Internal Affairs [9]. Also, the financing of the society was the responsibility of this ministry.

According to archive documents, this society was headed and sponsored by Governor-General A.B. Vrevskiy, and its first meeting was held on February 28, 1897, in the residence of A. B. Vrevskiy [10]. The first chairman of the society was topographer S.I. Jhilinsky (1838-1901) [11].

The main goal of the society in the process of studying documents is to study the natural and ecological environment of Turkestan, Bukhara, Khiva and the bordering regions, to organize geographical and ethnographic research, to support the scientific community that came to study the country, it can be seen that the collection and preservation of educational manuals, books, manuscripts, maps created as a result of expeditions [4].

It is worth noting that the organization of this society aroused positive opinion among Russian and local intellectuals. That is probably why the number of members of the society has increased year by year. For example, in 1897, 78 people joined the society at first, and in 1903, the number of members reached 104. Of course, the number of members changed for various reasons. For example, in 1912, the number of members of the society decreased to 53 people [6].

Scientific expeditions, researches, reports prepared on the basis of them, lectures at organized events and meetings, scientific works were regularly published in collections by the responsible employees of the society. These publications were recognized by the scientific community of foreign countries. Later, in addition to its members, the society also supervised and helped the scientific expeditions of foreign tourists and researchers organized in Turkestan, which made it a major scientific center in the country.

Since the beginning of the Russian Empire's occupation of Turkestan, its main focus was on the production of not only cotton raw materials, but also other areas of agriculture,

in particular, horticulture and polishing products. Therefore, he paid special attention to further development of agriculture in the country.

A number of experts were sent to the country by the Russian Empire, and they were assigned important tasks such as problems in the field of agriculture, localization of new crop varieties, development of ways to use new experiences in farming. Russian and local communities put forward the idea of creating a society that will provide practical assistance to the development of agriculture in the country. The empire, which has enough experience in creating societies and organizing their activities, and which aims to obtain great economic benefits through the development of agriculture, supports this idea.

For this purpose, the Turkestan branch of the Russian Horticultural Society was established in 1885 at the initiative of the Governor General of Turkestan in order to develop the agricultural sector in the country. On January 11, 1885, the Ministry of Agriculture and State Property approved the Charter of this society [12]. It shows that the society will help the Russian horticultural society and will carry out extensive activities in the field of agricultural development in the region. If we pay attention to the composition of the management and members of the society, well-known natural scientists, officials of the governor general's office and representatives of the local population (Saidgani Azimbayev, Akrom Askarov, Orifkhoja Azizkhoyev, Mirazim Mirayupov [13]) have taken place. In accordance with the above points, the membership of officials in this society also means that it serves the purposes of the Russian Empire. The management structure of the society consisted of a chairman, deputy, secretary and employees selected from 2 to 4 members. On March 5, 1885, the chairman and members of the management structure were elected at the first meeting of the society. According to it, N.N. Kosyanov was elected as chairman, D.P. Patsevich as deputy chairman, N.K. Smirnov as secretary, I.I. Krauze, N.A. Mayev, V.F. Oshanin and N.F. Ulyanov as members [14]. It should be noted that by the end of 1885, the real members of the society reached 100 people, which shows that its activity was effective [14]. There were also elected honorary members of the society, including officials, in particular, Governor-General N.O. Rosenbach, Adjutant-General G.A. Kolpakovsky and Major-Generals N.I. Grodekov, N.I. Korolkov, M.A. Ivanov, A.K. Abramov and others.

4 Discussion

During its activity, the society has made significant changes and scientific experiments in the field of agriculture, especially forestry, horticulture, and policing. Due to the extensive activity of this society, the Turkestan Governor General changed its name and by 1895 it was reorganized as the Turkestan Agricultural Society [6]. Effective scientific research was carried out by the society on land and water issues, irrigation systems, agriculture, introduction of new types of plants, their localization, and further improvement of fruit production.

It should be noted that through the activities of these societies, economic growth was observed in agriculture, and the Russian Empire achieved great economic benefits, but due to the development of new lands, inefficient use of water resources, and the construction of new irrigation facilities, the Turkestan began to cause serious damage to nature and the ecological situation. This situation did not interest the imperial government at all. In addition, by the end of the 19th century - the beginning of the 20th century, the process of specialization of agriculture in the region began by the empire, and the main attention was paid to the cultivation of the cotton plant, which is considered an important raw material for the Russian textile industry, and further expansion of its areas. If we pay attention to the laws of nature, the Russian Empire's drastic changes to the existing natural environment served to gradually change the ecological situation of the country in a negative direction.

In the Turkestan region, societies have also been active in the field of wildlife conservation and control of laws and requirements related to their hunting. One such society is the Tashkent Hunting Society, the year of its establishment corresponds to 1901. Because archival documents confirm that this society took an active part in the process of adopting and making changes to regulatory and legal documents related to hunting at the beginning of the 20th century.

During the research of archival materials, a document containing the annual report of the Tashkent Hunting Society for 1911-1912 was found. This document contains valuable information about the members of the society and its activities. On July 9, 1912, a meeting of the Tashkent Hunting Society was held. Information about the structure and activities of the society was given at the meeting. At the beginning of 1912, there were 196 members in the society, and 36 more people joined during the year. As of July 1, 1912, there were 232 members, of whom 3 were considered proud [15]. Also, this document contains the list of members of the Tashkent Hunting Society, and their families are indicated in the list [16]. If you pay attention to the statistics on the increase in the number of members of the society, it can be observed that the interest in the activities of the society among the public is increasing.

According to the annual report, the society held four meetings in 1911 and discussed 16 issues on various topics. The meeting held on October 27, 1911 was one of the most important, in which some new clauses of the lease agreements of hunting lodges in Toytepa, Gaybat, Maidontol and Osmonota volosts from July 1, 1912 were revised [17]. It is noteworthy that, according to the new version, it is prohibited to hunt them without the permission of the society, unlike the dwellings rented by the Hunting Society from the local population. In addition, the fact that the new contracts were concluded for a period of 12 years, with payment of 50 rubles per year per volost, was of particular importance [17]. It was under these conditions that the head of the society concluded new contracts with the Volosts of Gaybat, Toytepa and Maidontol. In order to preserve the diversity of the fauna in its territory, the Osmonota Volost did not rent its habitats to the Hunting Society.

This society played a major role in the preservation of the country's wildlife, prevention of arbitrary hunting, and the determination of hunting periods. It should be noted that, despite the development of laws and requirements for hunting in the country, as well as the supervision of responsible organizations and the Hunting Society, illegal hunting processes in the regions have not been completely eliminated. As a result of non-compliance with the laws, first of all, great damage was done to the animal world in the Turkestan region, and secondly, this situation in itself had a negative impact on the violation of the laws of nature and the ecological situation in the region.

It should be noted that insects and pests have caused great damage to the environment, ecology, in particular, to vegetation and agricultural crops. In order to combat these disasters, in 1898 the Governor General of Turkestan established the "Locust Committee" under the Turkestan Agricultural Society to study agricultural pests, and later in 1911, the "Turkistan Entomological Station" was established in Tashkent by V. Plotnikov [4]. The purpose of the establishment of this station is to study harmful insects scientifically, to provide practical assistance to the population in agriculture against them, to issue and distribute manuals, pamphlets, to organize a museum of applied entomology, to help local agronomists fight against harmful insects. It is intended to provide knowledge and skills [4]. Although a separate building and a plot of land were allocated for this station, the number of its employees was small. The head of the station, 3 of his assistants, that is, 2 entomologists and 1 mycologist made up the staff of the office.

Demand for the station's service has increased from various regions of Turkestan. In particular, the experts of the station conducted entomological research in Bukhara, Samarkand, Fergana and other regions, and studied dangerous pests there, namely

Moroccan and Italian locusts, Tetranychus mite, Karadrina butterfly and heliotis cotton worms, as well as other harmful insects from a scientific point of view. learned. Even in 1912, at a meeting held with the participation of representatives of the cotton industry, a decision was made to revive the Bukhara Agronomy Organization and establish the Bukhara Entomology Station, focusing on the development of cotton in the country, in order to fight against insects that damage crops [18].

In August and September of 1912, the Turkestan Entomological Station carried out a number of works in the Sherabad, Boysun, Kalif, Sariosia, and Denov districts of southeastern Bukhara in order to identify pests, especially Moroccan locust swarms, and destroy them. Experienced specialists of the station and their assistants are involved in these works. During the research, 38 were found in Sherabad district, 36 in Bashkhurt volost, 11 from parts of Laylakkon and Khotak, 26 from Kumkurgan, Yamchin, Bandikhon, Boysun volosts of Boysun district, from the border of Sariosiya district to Yorkurgan village, 24 locust nests were identified in the areas of the region, and 38 locust nests were found in the territory of the Qarluq region [19]. In the fight against locusts in these affected areas, "Vermorel" horse carts and hand tools and the method of working with shield ditches were mainly used [19].

In November 1912, at a meeting of growers in Tashkent, the head of the Tashkent entomological station V.I. Taking into account the presence of harmful pests in the regions, Plotnikov emphasizes the need to fight against them, for this purpose, the station should be expanded and departments should be established in Mirzachol, Kaspiyorti regions, Amudarya department, Bukhara and Yettisuv [20].

It should be noted that there were problems in allocating financial resources for the operation of this station by the Governor General of Turkestan. If you pay attention to the notification No. 853 of September 25, 1912 of the head of the Tashkent entomology station to the Department of Agriculture of the country on January 11, 1913, it can be seen that the government did not allocate enough funds for the station's activities. In particular, the head of the station asked to allocate 7745 rubles for the expenses planned for 1913 [21]. The Council of the Governor-General of Turkestan reduced the submitted estimate to 5500 rubles. However, it is not normal for the Department of Agriculture to sharply limit the activities of the entomology station, recognizing that it is extremely important to study other pests as well, assuming that the work started in this direction may be stopped, and to allocate funds in the amount of 2245 rubles from the Department of Agriculture for the budget of the station [21].

In 1913, on July 1, a meeting was held under the leadership of the head of the station V.I. Plotnikov. At the meeting, it was emphasized that in 1913 there was a sharp increase of prussic locusts in the regions, which poses a serious threat to agricultural crops, and it is necessary to fight against pests. It was also noted that it is permissible to establish the position of the 3rd assistant of the khanate agronomist - entomologist at the expense of the funds of the Bukhara Khanate [22].

The pages of the Jadid press also reflect the processes related to the activity of the entomology station. It can be seen from this information that the ideas and suggestions put forward by the entomology station were also supported by local representatives. In particular, special techniques for combating insects and pests were brought and started to be used. Tashkent entomology station offered garden owners to rent or buy machines called "Pomun" in order to quickly and effectively fight against harmful worms [23]. Also, in May 1914, it was possible to save trees and gardens from the danger of harmful insects in regions that followed the advice given by the Tashkent entomological station to the farmers of the region about ways to fight against pests [24].

On the page of "Sadoi Fergana" newspaper, the Tashkent entomological station reported that "a new worm named "bagworm" has appeared in the Holodnoy steppe, which destroys

crops. The worm itself is in a bag of charms. It seems that even though it is new, it has increased tremendously [25]. It is noted in the newspaper that since this is the first time that the experts are dealing with this worm, they will send the hand machines used to destroy the locusts and help in the fight against them.

Not only gardeners, specialists of the entomology station, but also ordinary people gave their advice on the protection of agricultural crops and fruit trees from pests in the territory of Turkestan, based on the information they saw and heard about the fight against insects. This opinion is based on the letter of the son of Sharifjan Khoji Salih, published in "Sadoi Fergana" newspaper. In the letter, "In number 9 of "Sadoi Fergana", we were reading articles about worms and other harmful insects on fruit trees, talking and killing them. One of us, who often lived in Alma-Ota (Verny), said the following words: "Even in Alma-Ota in 1907, caterpillars appeared on the trees. Gardeners and local authorities In the end, after the worms laid their eggs, they mixed the talc with lime and sprinkled it on the trees. I wrote it in the newspaper, so that maybe the trees will be saved from the disaster, and some people who make a living from their fruits will be able to benefit [26].

On August 21, 1915, the head of the Turkestan Agriculture and State Property Department, A.A. Tatishev, at a meeting with the employees of the field, emphasized that the number of specialists in the state unit of the Turkestan Entomology Station is very small compared to the scope of work, and the need to increase the number of employees. He mentions that the station with a large number of state units cannot work effectively in the fight against pests, and it is necessary to increase the number of station employees in the regions and support them materially [27]. Also, based on the difficult situation at the station, A.A. Tatishev increased the number of its employees by inviting three entomological instructors to Syrdarya, Samarkand and Fergana regions, setting a salary of 1,200 rubles per year for each, and allocating 300 rubles for trips or states that it is appropriate to set a total amount of 4500 rubles for all of them [28].

On August 13, 1916, the Entomology Station presented the program of the station's activities to the Department of Agriculture [29]. In this program, the main content of the station's activities, its tasks, protection of agricultural crops, including horticulture, viticulture, rice and field crops from various pests, fight against them, and the implementation of permanent cooperation with foreign entomology stations in this regard.

5 Conclusions

In conclusion, it should be noted that entrepreneurs engaged in agriculture, farmers, and gardeners were greatly helped by the entomology station opened in Tashkent and its specialists in the fight against pests. In particular, the station organized free consultations and special courses in order to combat insects that attack horticulture, field and homestead crops.

Experts in the field of entomology in Turkestan have studied not only insects that harm plants, but also insects and parasites that are dangerous to humans and animals, as well as the consequences of their appearance and damage, based on their scientific research and observations. The establishment of an entomology station in the country serves to prevent disasters such as the arrival of harmful insects, which are considered ecological disasters, to the cultivated fields, their serious damage to trees, especially fruit trees, plants and crops, and also contributes to the preservation of the ecological environment it happened [30-36].

If we pay attention to the activities of environmental agencies and societies established in the country in the second half of the 19th century - the beginning of the 20th century, they have problems in terms of personnel, in particular, the lack of specialists, the lack of jobs, insufficient funds allocated by the government, such organizations had a negative

impact on the activity. As a result of this, it can be seen that some societies have ended their activities.

In general, the offices and societies whose names have been highlighted above and whose activities have been analyzed, first of all served the development of natural sciences in the country, and secondly, they provided information about the region's flora and fauna, water resources, climate and natural disasters, epidemics, and sanitary conditions. studied the data and tried to find a solution to the existing problems. Thirdly, they sent appeals to the government regarding environmental issues in the country and their solutions, and sought to ensure environmental protection.

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