

The History of Fishing in Turkistan in the late 19th – early 20th Centuries: Economic and Social Aspects

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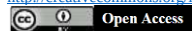
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ABSTRACT

The fishing economy of Turkistan has received far less scholarly attention than cotton growing, irrigation or livestock breeding, although in the late nineteenth and early twentieth centuries it became one of the most rapidly developing branches of the regional economy. The article examines the formation and development of the fishing industry in the Turkistan region from the 1870s to 1917, its place in the regional and imperial economy, and its social consequences for the indigenous population. The study draws on documents of the National Archive of Uzbekistan (fonds I-1 and I-17), legislative acts of the Russian Empire, official statistical reviews of the Syr Darya Region, contemporary scientific descriptions of the Aral Sea and materials of the periodical press. The principles of historicism and objectivity, source criticism, and the comparative-historical, problem-chronological and elementary quantitative methods were applied. The traditional, subsistence- and exchange-oriented fishing of Karakalpak, Kazakh, Uzbek and Tajik communities was gradually replaced by a commercial, market-oriented industry. The Statute on the Administration of the Turkistan Region (1886) declared major water bodies state property and opened the way to a leasing system under which large Russian entrepreneurs obtained long-term rights to fishing grounds. Salting, freezing and canning technologies and, above all, the Orenburg–Tashkent railway (1906) integrated Aral fish into the all-Russian market, with annual exports reaching 1–1.5 million poods. The modernization of fishing was contradictory: it raised output and revenues, but deprived local fishermen of customary rights, deepened their dependence on lessees and merchants, and initiated an extractive model of resource use whose ecological consequences became evident in later periods.

Introduction

In the second half of the 19th and early 20th centuries, the conquest of Turkistan by the Russian Empire brought about drastic changes in the region's traditional system of economic management. While exploiting the raw material base of the region, the colonial administration paid special attention not only to agriculture and livestock breeding, but also to the natural wealth of water bodies, particularly fishery resources [1]. By the late 19th century, a transition from traditional fishing to a capitalist, industrialized fishing economy had begun in the Aral Sea and in the deltas of the Amu Darya and Syr Darya rivers that flow into it.

The relevance of the topic is determined by several factors. First, the economic history of Turkistan in the colonial period has traditionally been written through the lens of cotton monoculture, irrigation and railway construction, whereas such "secondary" branches as fishing remain on the periphery of research [2, 3]. Second, the Aral Sea basin, which was the main fishing area of the region, later became the scene of one of the largest ecological disasters of the twentieth century [4]. Understanding how the region's fishery resources were first drawn into large-scale commercial exploitation is therefore important not only for economic history, but also for environmental history and for the current discussion on the sustainable use of the water resources of Central Asia.

The historiography of the problem can be divided into three groups. The first comprises pre-revolutionary works written by officials, travellers and natural scientists. The descriptions of the Aral

Sea and the lower Syr Darya by A.I. Maksheyev and the fundamental monograph of L.S. Berg, prepared on the basis of the Aral expedition of the Turkestan Branch of the Russian Geographical Society, contain valuable information on fish species, fishing grounds and the fishing population [5, 6]. Official reports of the Turkistan administration, including the report of Governor-General K.P. von Kaufman and the materials of the senatorial inspection of Count K.K. Pahlen, characterize the economic policy of the authorities in the region [7, 8]. The second group consists of Soviet-era studies, in which fishing was mostly considered within the framework of class exploitation and the development of capitalist relations. The third group includes the works of historians of independent Uzbekistan and foreign researchers, which re-examine the colonial character of the imperial economy in Turkistan [9, 2, 3].

Despite the existing literature, the fishing industry of Turkistan as an integral economic and social phenomenon has not yet become the subject of a special study. In particular, the interrelation between the legal regime of water bodies, the leasing system, technological change, transport infrastructure and the social position of local fishermen has not been analysed comprehensively.

The **aim** of this article is to analyse the formation and development of the fishing industry in the Turkistan region in the late 19th – early 20th centuries and to determine its economic role and social consequences on the basis of archival documents, legislative acts and periodical press materials. To achieve this aim, the following objectives were set:

- 1) to characterize the traditional forms of fishing and their territorial distribution before and during the early colonial period;
- 2) to analyse the legislative policy of the colonial administration concerning water bodies and the functioning of the leasing system;
- 3) to identify the technological and infrastructural factors that transformed fishing into a commercial, export-oriented industry;
- 4) to assess the social consequences of these changes for the local fishing population and to outline their long-term ecological implications.

Materials and methods

2.1. Source base

The study is based on a combination of published and unpublished sources, which were grouped according to their origin and informational value (Table 1).

Table 1. Main groups of sources used in the study

Group of sources	Examples	Information obtained
Archival documents	UzNA, Fond I-1 (Chancellery of the Turkistan Governor-General); Fond I-17 (Syr Darya Regional Administration) [1, 10]	Administrative decisions on water bodies, lease contracts, correspondence on fishing grounds and disputes
Legislative acts	Statute on the Administration of the Turkistan Region of 1886 (PSZRI) [11]	Legal status of water bodies and the basis of the leasing system
Official reports and statistical reviews	Report of K.P. von Kaufman; materials of the Pahlen inspection; Review of the Syr Darya Region for 1910 [7, 8, 12]	Economic policy of the administration, volume of catch and export
Scientific and ethnographic descriptions	Works of A.A. Dyayev, A.I. Maksheyev and L.S. Berg [13, 5, 6]	Fishing gear, fish species, fishing settlements, local population
Periodical press	<i>Turkestanskiye vedomosti</i> [14]	Announcements of auctions, news on fishing trade and prices

2.2. *Methods*

The research is grounded in the principles of historicism and objectivity, which require that every phenomenon be studied in its concrete historical context and on the basis of the full range of available evidence. Source criticism was applied to compare data from different types of documents and to identify possible distortions, since official reports of the colonial administration often tended to emphasize the positive results of its policy.

The comparative-historical method was used to compare the traditional and commercial forms of fishing, as well as the development of fishing in the Aral basin with other fishing regions of the Russian Empire. The problem-chronological method made it possible to distinguish the main stages in the evolution of the industry. Elementary quantitative analysis was employed to interpret statistical data on catch and export; values recorded in poods were converted into metric units (1 pood $\approx$ 16.38 kg).

2.3. *Chronological and territorial scope*

The chronological framework covers the period from the 1870s, when the lower reaches of the Syr Darya and the right bank of the Amu Darya were incorporated into the Turkistan Governor-Generalship, to 1917. Territorially, the study focuses on the Aral Sea, the Amu Darya delta and the lower reaches of the Syr Darya, i.e. the main fishing areas of the region. It should be noted that the statistical data for this period are fragmentary and were collected by different institutions using different methods; therefore, the quantitative estimates presented below should be regarded as approximate.

Results

3.1. *Traditional fishing and its territorial features*

Until the conquest by Tsarist Russia, fishing in Turkistan was carried out primarily by the local population – Karakalpaks, Kazakhs, Uzbeks and Tajiks – using traditional methods [13]. Nets, scoops, hooks and special reed traps (*chilim*, etc.) were used as fishing gear. Fishing was largely seasonal: the most intensive catch took place during the spring and autumn movements of fish in the river deltas, while in winter some fishing was conducted through the ice.

The main fishing centres were concentrated around the southern and eastern shores of the Aral Sea, the Amu Darya delta (Moynaq, Chimbay) and the lower reaches of the Syr Darya (Kazalinsk, Perovsk) [5]. The catch consisted mainly of carp (*sazan*), bream, catfish, pike-perch, asp and barbel, as well as sturgeon species, which were described in detail by contemporary naturalists [6].

For the local population, fishing served not only as a source of food, but also as an important medium of product exchange within the domestic market. Dried and salted fish were exchanged for grain, textiles and other goods at local bazaars. Fishing was typically organized on a family or communal basis, and access to fishing grounds was regulated by customary law. Thus, before the 1880s fishing remained a small-scale, predominantly subsistence-oriented activity, closely integrated with agriculture and livestock breeding.

3.2. *The legislative policy of the colonial administration and the leasing system*

According to the Statute on the Administration of the Turkistan Region adopted in 1886, all major water bodies and rivers within the region were declared state property [11]. This meant that fishing rights were taken away from the local population and transferred to large lessees through special auctions (public sales). Announcements of such auctions and of their results were published in the official press of the region [14].

Beginning in the 1890s, fishing plots in the Aral and Syr Darya basins were leased for long periods to large Russian investors and merchants (such as Lapshin, Plotnikov and Khlebnikov) [10]. The lease

system concentrated the most productive fishing grounds in the hands of a small number of entrepreneurs who possessed capital, credit and access to markets. Local communities, which had used these waters for generations on the basis of customary law, found themselves either excluded from the best grounds or obliged to pay for access.

Lessees hired local fishermen as cheap labour and established a system of purchasing the finished product at low prices. A widespread practice was the advance system (debt bondage, *kabalalash*): the fisherman received money, gear or provisions in advance and was obliged to sell his entire catch to the lessee at a pre-determined price, which was considerably lower than the market price. As a result, the fisherman often remained in permanent debt. In addition to local fishermen, groups of Ural Cossacks who had been resettled to the lower Syr Darya and Amu Darya in the 1870s also took part in fishing, bringing with them the organizational practices of the Ural fisheries [6].

3.3. Industrialization, technological change and export

In the late 19th century, new fish processing methods – freezing, salting and canning technologies – were introduced. The first fish-salting enterprises and icehouses were established along the Aral Sea coast and in Moynaq [6]. These innovations made it possible to preserve the catch for a long time and to transport it over considerable distances, which was a decisive precondition for commercial fishing.

The rapid development of the fishing industry was strongly propelled by the launch of the Orenburg–Tashkent railway in 1906 [9]. The railway passed along the north-eastern shore of the Aral Sea, and the station of Aral (present-day Aralsk) and Kazalinsk became important centres for the collection, processing and dispatch of fish. Through the railway, fish from the Aral Sea and the Syr Darya (carp, catfish, pike-perch, asp, etc.) were exported in large quantities to the central cities of the Russian Empire (Moscow, St. Petersburg, Samara).

According to archival and statistical data, at the beginning of the 20th century an average of 1–1.5 million poods (approximately 16–24 thousand tons) of fish products were exported annually from the Aral basin [12]. On the basis of the analysed sources, four stages in the development of fishing in the region can be distinguished (Table 2).

Table 2. Stages in the development of fishing in the Turkistan region (compiled by the author)

Period	Main characteristics	Key factors
Before the 1870s	Traditional, subsistence- and exchange-oriented fishing by local communities	Customary law; simple gear (nets, hooks, reed traps)
1870s – 1886	Initial penetration of Russian merchants and settlers; first commercial purchases	Conquest and administrative incorporation of the lower Syr Darya and Amu Darya
1886 – 1905	Formation of the leasing system; spread of salting and icehouses	Statute of 1886; auctions; long-term leases
1906 – 1917	Industrial, export-oriented fishing integrated into the all-Russian market	Orenburg–Tashkent railway; growth of processing; export of 1–1.5 million poods per year

3.4. Social consequences for the local population

The transformation of fishing had profound social consequences. Firstly, a considerable part of the local fishermen lost their status as independent producers and became hired workers or dependent suppliers of lessees. Secondly, seasonal labour migration to fishing grounds and processing points

increased, and a stratum of wage workers employed in salting, packing and loading appeared in fishing settlements. Thirdly, social differentiation within the local population intensified: a small group of intermediaries and artel leaders benefited from cooperation with lessees, while ordinary fishermen were trapped in the system of advances and debts. Archival documents also reflect conflicts between lessees and local communities over access to fishing grounds, which were usually resolved by the administration in favour of the lessees [1, 10]. The materials of the senatorial inspection of 1908–1909 note numerous abuses in the economic administration of the region, which confirms that the leasing practice was not free from arbitrariness and corruption [8].

Discussion

The results show that the history of fishing in Turkistan fits into the general model of colonial economic policy in the region, which was aimed at turning Turkistan into a raw material supplier for the metropole [2]. As in the case of cotton, the fishery resources of the Aral basin were integrated into the imperial market primarily as a raw commodity, while the main share of profits was appropriated by lessees and merchants rather than by the local producers. In this sense, the evolution of fishing confirms the conclusions of researchers about the dependent and one-sided character of the economic modernization of Turkistan [9, 3].

At the same time, the data analysed make it possible to clarify the existing views. The modernization of fishing was not limited to the extraction of resources: it brought new technologies of processing and storage, created new settlements and transport hubs, and involved part of the local population in market relations and wage labour. These elements of infrastructure and skills later became the basis for the development of the fishing and fish-canning industry in the Soviet period, when Moynaq and Aralsk turned into major centres of fish processing.

A comparison with other fishing regions of the Russian Empire, primarily the Volga–Caspian and Ural basins, shows that the Aral fishery reproduced their basic organizational patterns: state ownership of water bodies, lease auctions, the concentration of grounds in the hands of large entrepreneurs and the advance system of dependence of fishermen. However, in Turkistan these patterns were superimposed on a different social structure and on customary forms of water use, which made their social consequences for the indigenous population particularly acute. The ecological dimension of the problem should be assessed with caution. The catastrophic decline of the Aral Sea in the second half of the 20th century was caused mainly by the large-scale diversion of the waters of the Amu Darya and Syr Darya for irrigation [4]. Nevertheless, the period under study marked the beginning of an extractive approach to aquatic resources, in which the volume of the catch and the profitability of leases were prioritized over the conservation of fish stocks. In this respect, the fishing economy of the late 19th – early 20th centuries can be regarded as one of the early preconditions of the later environmental problems of the region. The present study has certain limitations. The statistical data on catch and export are fragmentary and not always comparable; the voices of the local fishermen themselves are reflected in the sources only indirectly, through the documents of the administration and the observations of outsiders. Further research could involve a broader range of archival fonds (including the documents of the Khiva Khanate concerning the Amu Darya delta), materials of local-language periodicals, and a comparative analysis of the fishing economy of Turkistan with other regions of the Russian Empire.

Conclusion

The development of fishing in the Turkistan region in the late 19th and early 20th centuries had a contradictory character:

1. Economically: fishing ceased to be a traditional local occupation and was transformed into a high-revenue industrial sector oriented toward the imperial market. The leasing system established after 1886 concentrated the main fishing grounds in the hands of large Russian entrepreneurs.
2. Technologically: product circulation expanded sharply owing to new methods of processing and storage (salting, freezing, canning) and to transport opportunities, above all the Orenburg–Tashkent railway, which made it possible to export 1–1.5 million poods of fish annually.
3. Socially: the transfer of water bodies to state ownership and the leasing system deprived local fishermen of customary rights, increased their economic dependence on lessees and merchants, and intensified social differentiation in fishing communities.
4. Ecologically: predatory resource exploitation created the initial preconditions for the negative ecological processes that affected the water bodies of the region in subsequent periods.

The historical experience of this period shows that the economic use of water and biological resources without regard for the interests of local communities and for the sustainability of ecosystems leads to long-term social and environmental costs. These lessons remain relevant for the current policy of restoring the fisheries and ecosystems of the Aral Sea region.

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