

THE ROLE OF CROSSINGS AND RIVER PORTS IN THE COMMUNICATION SYSTEMS OF THE KHOREZM OASIS (9TH–13TH CENTURIES)

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Abstract: This article examines the communication systems that developed and operated in the Khorezm Oasis during the 9th to 13th centuries, with particular emphasis on the role of river crossings and ports. The research analyzes the socio-economic and military-strategic significance of these infrastructures. It explores the Amu Darya River, its tributaries, canal networks, and the riverside trading and military stations – namely, the ports and fords – within the broader context of Khorezm’s political administration, trade connections, and international transit systems. The study is based on classical sources by Arab and Persian geographers such as Ibn Rusta, Istakhri, Ibn Hawqal, and al-Maqdisi, as well as on modern historical and archaeological investigations. Particular attention is given to the development of agriculture, domestic logistics, and foreign trade in the oasis through water routes and related hydraulic engineering structures. In conclusion, the integrative role of the Amu Darya and Syr Darya rivers in interregional networks is synthesized, and the historical-geographical position of Khorezm is evaluated within the context of contemporary academic research.

Keywords: Khorezm Oasis, 9th–13th centuries, river crossings, river ports, Amu Darya, waterways, caravan routes, city of Kath, Urgench, Arab geographers, trade centers, defense structures, communication system.

Annotatsiya: Mazkur maqolada IX–XIII asrlarda Xorazm vohasida shakllangan va faoliyat yuritgan kommunikatsiya tizimlari, xususan, daryo kechuvlari va bандаргоҳlarning o‘rni o‘rganiladi. Tadqiqotda bu infratuzilmalarning ijtimoiy-iqtisodiy hamda harbiy-strategik ahamiyati tahlil qilinadi. Amudaryo, uning irmoqlari, kanal tarmoqlari, shuningdek, daryo bo‘yida joylashgan savdo va harbiy punktlar – bandargohlar hamda kechuvlar Xorazmning siyosiy boshqaruvi, savdo aloqalari va xalqaro tranzit tizimidagi o‘rni doirasida ko‘rib chiqiladi. Tadqiqot Ibn Rusta, Istaxriy, Ibn Havqal va Maqdisiy kabi arab va fors geograflarining klassik manbalari hamda zamonaviy tarixiy va arxeologik tadqiqotlarga asoslangan. Maqolada suv yo‘llari va ularga bog‘liq muhandislik inshootlari orqali voħa qishloq xo‘jaligi, ichki logistika va tashqi savdo aloqalarining rivojiga alohida e‘tibor qaratilgan. Xulosa qismida Amudaryo va Sirdaryoning mintaqalararo integratsiyadagi o‘rniga umumiy baho beriladi, Xorazmning tarixiy-geografik holati esa zamonaviy ilmiy izlanishlar kontekstida baholanadi.

Kalit so‘zlar: Xorazm vohasi, IX–XIII asrlar, kechuvlar, bandargohlar, Amudaryo, suv yo‘llari, karvon yo‘llari, Kat shahri, Urganch, arab geograflari, savdo markazlari, mudofaa inshootlari, kommunikatsiya tizimi.

Аннотация: В данной статье рассматриваются коммуникационные системы, сформировавшиеся и функционировавшие в Хорезмском оазисе в IX–XIII веках, с особым вниманием к роли речных переправ и портов. В исследовании анализируется социально-экономическое и военно-стратегическое значение этих инфраструктур. Объектом анализа выступают река Амударья, её притоки, система каналов, а также торгово-военные пункты — порты и переправы, расположенные вдоль её берегов — в контексте политического



управления, торговых связей и международной транзитной системы Хорезма. Исследование опирается на классические источники арабских и персидских географов, таких как Ибн Руста, Истахри, Ибн Хаукаль и аль-Макдиси, а также на современные историко-археологические исследования. Особое внимание уделяется развитию сельского хозяйства, внутренней логистики и внешней торговли через водные пути и связанные с ними гидротехнические сооружения. В заключение обобщается интеграционная роль Амударьи и Сырдарьи в межрегиональных связях и дается оценка историко-географического положения Хорезма в контексте современных научных исследований.

Ключевые слова: Хорезмский оазис, IX–XIII века, речные переправы, речные порты, Амударья, водные пути, караванные дороги, город Кат, Ургенч, арабские географы, торговые центры, оборонительные сооружения, система коммуникаций.

Introduction:

Central Asia has long served as a crossroads of world civilizations, where major cultural-administrative centers, international trade routes, and transportation-communication systems have historically developed. Among these regions, the Khorezm Oasis occupies a distinct and significant position. Situated around the Amu Darya basin, Khorezm experienced a remarkable period of development during the 9th to 13th centuries, evolving into one of the most prominent political, economic, and cultural centers of the region. It was during this era that the Khwarazmshah State saw the rise of its political power, internal administrative organization, and external trade relations.

Natural and artificial communication systems played an indispensable role in the development of the Khorezm Oasis. Its proximity to the Amu Darya River, the existence of fords (crossing points), and the operation of river ports along the river formed the backbone of the region's transport infrastructure. Particularly, caravan routes and river transport that passed through Khorezm facilitated commercial exchange, military movements, and diplomatic interactions. These factors significantly increased the strategic importance of river crossings and ports in the socio-political life of the region.

Literature Review

The study builds upon a diverse range of classical and contemporary sources that collectively illuminate the historical communication systems of the Khorezm Oasis from the 9th to 13th centuries. A significant portion of the research relies on classical Arabic and Persian geographical treatises, which offer first-hand descriptions of the Amu Darya River, its canal networks, settlements, and trade infrastructure. Among the key authors consulted are Ibn Rusta (*Kitab al-A'lak an-Nafisa*), Istakhri (*Kitab Masalik al-Mamalik*), Ibn Hawqal (*Surat al-Ard*), and al-Maqdisi (*Ahsan al-Taqasim fi Ma'rifat al-Aqalim*), all of whom provided invaluable insights into the geographical, economic, and administrative landscapes of Khorezm.

These early Islamic geographical texts not only detail the course and economic function of the Amu Darya but also discuss the location and strategic role of river ports, crossings, and surrounding settlements. The study also references *Hudud al-'Alam*, an anonymous 10th-century geographical compendium that contributes to a broader understanding of Central Asian connectivity.

In addition to these classical sources, the research incorporates the findings of modern scholars such as V. V. Barthold and M. A. Itina, whose works offer archaeological and historiographical perspectives on the development of transport systems, fortified structures, and urban centers in the Khorezm region. Contemporary interpretations by T. Abdullaev are also utilized, particularly in understanding water-based transport and canal use in medieval Khorezm.

By synthesizing information from both medieval textual sources and modern academic scholarship, the study establishes a multidimensional view of Khorezm's communication



networks and their socio-economic and strategic importance within the broader framework of Central Asian history.

Research Methodology:

This study employs an interdisciplinary historical-geographical approach to examine the development and function of communication systems, particularly river crossings and ports, in the Khorezm Oasis between the 9th and 13th centuries. The methodology integrates qualitative analysis of historical texts, cartographic reconstruction, and comparative evaluation of archaeological and geographical data.

Primary research is based on classical Arabic and Persian geographical sources, including works by Ibn Rusta, Istakhri, Ibn Hawqal, and al-Maqdisi, along with the anonymous *Hudud al-'Alam*. These texts were critically analyzed to reconstruct the course of the Amu Darya River, the location of major settlements, and the infrastructure of crossings and river ports.

In addition, the study draws upon modern academic literature and archaeological findings by scholars such as V.V. Barthold, M.A. Itina, and T. Abdullaev to contextualize historical data and provide spatial and functional interpretations of medieval communication routes.

Cartographic methods were applied to estimate the distances between fortresses and caravanserais (typically a one-day journey), as well as to trace ancient trade and transport corridors along the river. A systems approach was employed to analyze the interconnectedness of river networks, irrigation canals, caravan routes, fortresses, and administrative centers as components of a broader logistical and strategic infrastructure.

Results and Analysis:

River crossings (i.e., natural or man-made routes prepared for crossing rivers) and river ports (trade and military stations located along rivers) were among the key infrastructural pillars of Khorezm's external trade, military defense, and regional integration systems during the 9th-13th centuries. These facilities facilitated not only the movement of goods but also of military forces, diplomats, pilgrims, and scholarly ideas. In this way, crossings and ports functioned not merely as logistical nodes but also as centers for cultural interaction, tax collection, and political control.

Starting from the early 10th century, the conditions in Khorezm – similar to other parts of the Muslim East – were described in detail by Arab and Persian geographers such as Ibn Rusta, al-Istakhri, Ibn Hawqal, and al-Maqdisi, as well as in anonymous works like *Hudud al-'Alam* and others. These sources provided more comprehensive descriptions than ever before regarding the geography of the Amu Darya basin, including its cities, canals, culture, lifestyle, and populations. However, not all authors offered clear or consistent accounts of the river's course. For instance, writers of the late 9th and early 10th centuries such as Ibn Khordadbeh, Ya'qubi, and Ibn al-Faqih presented conflicting or vague information on this matter.

The most reliable and detailed account of the Amu Darya's flow was provided by Ibn Rustah. He wrote: "Then (the Jayhun River) flows toward Zamm (Karki), after which it reaches Amul (modern-day Chardjuy), and from there continues in the direction of Khorezm, passing near its capital (Kath). Beyond the capital, the river branches off into canals and distributaries to the right and left..."[2,p.133]

Moreover, the aforementioned sources do not depict the Amu Darya merely as a natural geographical object, but as a primary waterway that played a central role in the political and economic life of the Khorezm Oasis. In particular, major settlements, irrigation facilities, and trading posts located along the river were of crucial importance in maintaining and expanding Khorezm's economic ties. By examining the direction of the river's flow, one can better understand the strategic positioning of key Khorezmian cities such as Kath and Amul.

The city of Kath, located on the right bank of the Amu Darya, served as the capital of the Afrighid dynasty (305–996) and functioned as a significant economic and cultural hub. The



name “Kath” in the language of the Khorezmians, is believed to mean “wall in the desert” [3,p.199]. During this period, the Khorezm Oasis was part of the Afrighid state, and its capital, Kath, emerged as a major trade center situated along the Amu Darya waterway. It also served as a departure point for caravan routes heading west toward Byzantium via Sogdiana and northward to the pastoral nomadic tribes around the Aral Sea.

According to Ibn Hawqal’s accounts, by the early 10th century, the Amu Darya flowed past the old capital and continued northeast toward ancient Gurganj (Urgench). However, in the high medieval period, as Urgench served as the capital of the Khorezmian state, the river’s course shifted, eventually leaving the city without access to water. This change led to the capital being moved to Khiva in the early 12th century. One of Khiva’s renowned rulers and historians, Abu’l-Ghazi Bahadur Khan, in his famous work *Shajara-i Turk*, noted that as a result of this shift in the river’s flow, “Urgench turned into a desert...”[4,p.167].

In the Chorju (modern Chardjuy) and Khorezm oases, land has historically been irrigated through canals diverted from the Amu Darya River, enabling sustained agricultural activity. According to historical sources, even during the medieval period, Khorezm continued to rely heavily on a system of large irrigation canals. Agriculture was widely practiced using water from these canals, and in many cases, cargo vessels transported agricultural goods along them to various destinations. Al-Maqdisi, while acknowledging the importance of these canals, noted that he did not include them all in his maps due to their sheer number [5,p189].

Notably, in the developed medieval era, several major canals – such as Hazorasp, Govuhar, Kardaran-Khash (Kardaran-khas), Madra, and Vadak – were diverted westward from the Amu Darya and played an essential role in the oasis’s agricultural and economic life [6,p.10-11]. Al-Istakhri’s work provides further details: he wrote that the canal system began from Hazorasp, followed by Kardaran-Khash two farsakhs downstream, and then the Khiva, Madra, and Govuhar canals [1,p.121]. The Vadak Canal started approximately two farsakhs from the city of Kath, with another large canal – Buvva (or Buya) – originating even further downstream [7,p.301-304].

These large-scale irrigation canals diverted from the Amu Darya were significant not only for agriculture but also for internal logistics and trade. The movement of cargo boats along these waterways, combined with irrigation capacity and densely settled areas, contributed to the development of an advanced transport and military control system within the oasis. Consequently, these conditions fostered the emergence of civil and regional connections and led to the construction of engineering and defensive infrastructure such as fortresses and caravanserais.

In the Khorezm Oasis, numerous fortresses and fortified caravanserais were established to monitor key crossing points along the Amu Darya River. These structures were typically located at intervals equivalent to a day’s journey apart. Among the prominent ones active during the high medieval period on the right bank of the river were the caravanserais of Eshikrabort, Doshqala, Sartarosh I, and Meshekli. Also notable were the fortresses of Viza, Mardus, Isbas, Sayfana, al-Tahiriya, Dargan, Jigarband, and Sadvar [8,p.22-26].

It was possible to cross the river from the Kukurtli caravanserai on the right bank to Dargon-Ota on the left bank, and from the Sartarosh caravanserai to the Jigarband fortress. The crossing near Doshqala provided access to Hazorasp, while the route from the Meshekli caravanserai led to the city of Kath [8,p.21].

These fortresses and caravanserais served not only as defensive posts but also played critical roles in trade and diplomatic relations. They offered shelter for travelers, caravan leaders, ambassadors, and pilgrims, and functioned as information exchange hubs, temporary storage sites for goods, and control checkpoints. Furthermore, fortresses located near river crossings monitored river traffic and facilitated the collection of taxes and tolls. This strategic network



enhanced not only the economic significance of Khorezm's waterways but also their military and geopolitical importance.

Conclusion:

During the 9th to 13th centuries, the Khorezm Oasis emerged as one of the most strategically and economically significant regions in Central Asia. In this transformation, the Amu Darya River and the network of river crossings and ports established along its course played a vital role. The canal systems branching off from the river facilitated the development of agriculture, enabled freight transport, and supported domestic trade through inland waterways, all of which contributed to the stable functioning of the region's economic sectors. At the same time, water routes served as the main channels of communication for both diplomatic and military affairs.

Through the network of river crossings, fortresses, and caravanserais, Khorezm became a key hub not only for internal but also for international trade routes. As attested by Arab, Persian, and local sources, strategic centers such as Kath, Amul, Urgench, and Khiva fulfilled complex functions—logistical, defensive, and administrative. All of these factors firmly established Khorezm's status as a critical transit point along the Silk Road.

Just as the Amu Darya waterway played a vital role in connecting Bactria–Tokharistan with the Khorezm Oasis and the Eastern Caspian region, the Syr Darya River fulfilled a similar function in linking the Fergana Valley and the Tashkent Oasis with the Aral Sea basin and northern Khorezm. These two major water arteries served as crucial instruments in the economic, political, and cultural integration of the peoples of Central Asia throughout historical processes.

References :

1. Abdullaev, T. “Водные пути и транспорт в древнем и средневековом Хорезме (письменные источники)” [Waterways and Transport in Ancient and Medieval Khorezm (Written Sources)]. In *Priaral'ye na perekrestke kultur: Theses of the International Symposium and Second Field Seminar 'Archaeology of the Ancient Tashkyrman Oasis'*, dedicated to the 100th anniversary of the eminent Central Asian scholar S. P. Tolstov, Nukus, 2007. p.121.
2. Ibn Rusta. *Kitab al-A'lak an-Nafisa* [The Precious Jewel Treatise]. Translated by I. Yu. Krachkovsky. In *Arab Geographical Literature*. Moscow: Nauka, 1970. p.133.
3. Barthold, V. V. *Turkestan During the Mongol Invasion*. p. 199.
4. Abu al-Ghazi. *Shajara-i Turk* [Genealogy of the Turks]. Tashkent: Cholpon, 1992, p. 167.
5. Al-Maqdisi. *Ahsan al-Taqasim fi Ma'rifat al-Aqalim* [The Best Divisions for the Knowledge of the Regions]. Extracts based on De Goeje edition. Translated by S. Volin. In *MITT. Arab and Persian Sources of the 7th–15th Centuries*, Institute of Oriental Studies. Moscow–Leningrad: Academy of Sciences of the USSR, 1939, vol. I, p. 189.
6. Ibn Hawqal. *Kitab Surat al-Ard* [The Configuration of the Earth], p. 461. See also: Abdullaev, T., “Waterways and Transport in Ancient and Medieval Khorezm...”, Nukus, 2007, pp. 10–11.
7. Al-Istakhri. *Kitab Masalik al-Mamalik* [Book of Routes and Realms]. Extracts based on De Goeje edition. Translated by S. Volin. In *MITT. Arab and Persian Sources of the 7th–15th Centuries*, Institute of Oriental Studies, vol. I. Moscow–Leningrad: Academy of Sciences of the USSR, 1939, pp. 178–180; also see Al-Istakhri. *Book of Routes and Realms* (Kitab Masalik al-Mamalik). Translated from Persian by Z. N. Vorozheykina and Ya. Krapolsky. Moscow, 2005, pp. 301–304.
8. Itina, M. A. “Archaeological Sites along Ancient Trade Routes on the Banks of the Amu Darya.” pp. 21, 22–26.
9. Tolstov, Sergey P. *Ancient Khorezm*. Translated from Russian. Moscow: USSR Academy of Sciences Publishing House, 1948.



10. Yaqut al-Hamawi. *Mu'jam al-Buldan* [Dictionary of Countries]. Edited by Ferdinand Wüstenfeld. Leipzig: F. A. Brockhaus, 1866–1873.
11. Abidova, Z. (2018). Pilgrimage sites and shrines of Khorezm oasis (historical and ethnological research): A dissertation for the degree of Doctor of Philosophy (PhD) in History.
12. Kadirberganovna, A. Z. (2020). Sanctification of Water among the Population of the Khorezm Oasis. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 12(4).

