

Irrigation Policy of the Khanate of Khiva regarding the Lawzan Canal (1), 1830-1873

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Abstract

The purpose of this research is to clarify the background, process, and results of the irrigation policy of the rulers of the Qongrat Dynasty in the Khanate of Khiva (1804-1920) on the Lawzan Canal and its surrounding areas with considering the environmental changes and the process of the establishment of this Dynasty in the first half of the 19th century. Especially, this paper challenges the theory of A. L. Troitskaia who argues for a continuous policy of these rulers to construct dams across the Lawzan and its related channels and to restrict the water supply to the Turkmens in Khorazm for the sake of subduing them from the 17th century to the middle of the 19th century.

The author of this paper reached the following conclusion: In the 1570s and 1580s, the lands west of the Lawzan dried up because of alterations of the course of the Amu Darya. As a result of the inundation of the Amu and the formation of lake in Lawzan in the end of the 1820s, the Qongrat khans used the opportunity provided by this ecological change to expand irrigated lands further to the west of the Lawzan in the 1830s and 1840s. They settled groups brought from outside the Khorazm oasis on these lands. The settlement process was promoted by two mobilizing projects, irrigation projects and military expeditions, each reinforcing the other. The combination worked until the disturbance among the Yomuts occurred around 1850. This uprising appears to be related to Muhammad Amin Khan's policy of favouring the Jamshidis over the Yomuts in his military expeditions to the Merv oasis. The rebellion of the Turkmens was expanded in the period of internal succession struggles in the Qongrat Dynasty, after the sudden death of Muhammad Amin Khan in battle in 1855. Sayyid Muhammad Khan's order to dam the Lawzan in 1857 was a reaction to this rebellion, and it caused the devastation of the lands irrigated in the third and fourth decades of the century. Thus, the khans of Khiva turned their policy of expanding the

irrigated lands of the lower Lawzan in the 1830s–1840s, which took advantage of environmental changes, to that of controlling it for political purposes from the 1850s.

Introduction

Khorazm is situated in the lower basin of the Amu Darya, and its irrigation system is based entirely on this river¹. The canal that diverged from the Amu Darya between Khoja-eli and Qipchaq was known as the Lawzan, and it poured into the Daryaliq (*Daryāliq* or *Kuhna Daryā*; in Russian *старое русло*, ‘old riverbed’ of the Amu). Sometimes the name ‘Lawzan’ was used as a general term for the channels of the Amu Darya from between Khoja-eli and Qipchaq to the Daryliq². Russians considered the Lawzan and its surrounding areas to be one of the most fertile regions of the Khorazm

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1 Bregel 2009: 400.

2 According to Bayani (*Muhammad Yūsuf Bayāni*, 1859–1923), a Qaraqalpaq leader, Lawzan Bay (*Lawzān Bāy*), constructed a small canal (*sālma*) named after him. As a result of Amu Darya flooding the Lawzan during the reign of Allah Qulī Khan, this small canal became a river and flowed into the Aral Sea (*Shajara-yi Khvārazmshāhī*: 329b; Гулямов 1957: 218). We must focus on the fact that according to native sources, this canal did not run in the direction of Old Urgench and the Daryaliq but flowed into the Aral Sea at the beginning (*Riyāz al-dawla*: 667b–668a; *Shajara-yi Khvārazmshāhī*: 329a). Munis (*Shīr Muhammad Mīrāb Mūnis*, 1778–1829) refers to the Lawzan for the first time in his description of Eltüzār Khan’s expedition to Khoja-eli, during which he appeared on the coast of Lawzan in Shavval 1219/January 1805 (*Firdaws al-iqbāl*: 430). In the court chronicles, Lawzan has two spellings: *Lawzān* and *Lawdān* (Бартольд 1965[1914]: 181). Grand Duke Nikolai Konstantinovich (*Николай Константинович Романов, Великий Князь*), who visited Lawzan in 1879, ascribed the name Lawzan to a certain Turkmen Lawzan (*Поворот*: 16), although we cannot find such attestation in the native sources in Turkic.

For observation records on the Lawzan in the 19th century, see, Basiner 1969[1848]: 178–179; Данилевский 1851: 87–88; Каульбарс 1881: 398–407.

Nikolai Konstantinovich mentions, ‘Khivans used the Lawzan as a common name for the network of artificial canals (*искусственные арыки*) and natural channels (*естественные протоки*) between the Amu-Darya and the Daryaliq, through which the river once flowed. The Lawzan diverges from the Amu-Darya as five canals (*арык*) between Qipchaq and Khoja-eli at the ruins of the fortress Band (*Бент* in Russian), and seven tributaries (*проток*) pour into the Daryaliq between Porsu and Old Urgench (*Поворот*: 29a)’. Quoting Nikolai Konstantinovich’s description, Troitskaia states, ‘thus, the entire area between Khoja-eli – Qipchaq and Porsu was known as Lawzan (Тройцкая 1954: 82)’.

These and other nineteenth century sources indicate, therefore, that the meaning of the term Lawzan was rather fluid.

oasis. During the Tsarist period, the Russian government, along with Russian nobles, entrepreneurs, and irrigation engineers, planned irrigation projects on the Lawzan (ЦГА РУз, ф. 2, оп. 2, д. 168, лл. 29об.–30)³.

A. L. Troitskaia, investigating the land and irrigation policy of the khans of Khiva with regard to the canal in the 1850s, affirms that these rulers constructed dams across the channel corresponding to the Lawzan in later period from as early as the 17th–18th centuries. They did so in order to bring the Turkmens, who resided downstream, to their knees by regulating their water supply⁴. Based on the Khivan chronicles and the travel and research accounts of Russians, Ia. G. Guliamov (*Я. Г. Гулямов*) made a similar argument to the effect that the khans of Khiva enhanced their power by controlling the water resources of the Turkmens. He also indicated that the khans pressed the Turkmens into military service in support of their military expeditions to the areas that correspond to the territory of modern-day Turkmenistan and Northern Iran, depriving them of the opportunity to engage in agriculture and trade (Гулямов 1957: 222, 224).

However, it is evident that this interpretation simplifies the historical record too much. In particular, it makes little sense to discuss the irrigation policy these 19th century rulers implemented on the Lawzan and the surrounding areas without considering environmental changes and the establishment of the Qongrat Dynasty (1804–1920) in the Khanate of Khiva. This article aims to clarify the background, process, and results of this policy in light of these two factors. In pursuit of this objective, it relies principally on the following sources: 1) Court chronicles in Khiva (written in

3 Grand Duke Nikolai Konstantinovich, *Glukhovskoi* (*А. И. Глуховской*), engineer Gel'man (*Х. В. Гельман*), Duke Andronikov (*М. М. Андроников*) and others were involved in these issues. I will discuss it in detail in another article.

The old riverbed of the Amu Darya became a stage of the 'Main Turkmen Canal (*Главный Туркменский канал*)' construction plan, originated from *Glukhovskoi*'s idea, during the Soviet era (Chida 2009: 5–6, 14–25).

4 Troitskaia's unique article on this theme was inspired by the fact that, in 1952, the Khorezmian Archaeological and Ethnographic Expedition (*Хорезмская археолого-этнографическая экспедиция*) under the command of S. P. Tolstov (*С. П. Толстов*) discovered an irrigation network of the 15th and the early 17th century around Lake Sarīqamīsh on the lower reaches of the Daryaliq that had been used by the Turkmens. Based on the description of Nikolai Konstantinovich and the documents of the khans of Khiva, Troitskaia asserts that the purpose of the dams constructed in 1850 and 1857 across the Lawzan by the order of the khans of Khiva is to deprive water resources from Turkmen and bring them to heel (Тройцкая 1954: 82). In addition, she supposed the same measures had been implemented between the end of 17th and the 18th centuries (Тройцкая 1954: 82–88). For the activities and contributions of Tolstov to the Soviet archeology, ethnography as well as its irrigation plans in Khorazm, see, Germanov 2002.

5 For the court chronicles of Khiva, written by Shir Muhammad Mirab Munis, Muhammad Riza Mirab Agahi (*Muhammad Rizā Mirāb Āgahī*, 1809–1872), Muhammad Yusuf Bayani, Sayyid Hamīdjān Tora (*Sayyid Hamīdjān Tūra Kāmyāb*, 1861–1922), see, Bregel 1988: 1–58; Bregel 1999: vii–lxv; Муниров 2002; Юсупова и Джалилова 1998: 191–192, 198–201, 211–212, 226–227.

I could not use the findings of the Khorezmian Archaeological and Ethnographic Expedition. These remain available for future investigation. As to the outline of this expedition, see, Жданко 1997.

Turkic); 2) Travel accounts and survey materials (written in Persian, Russian, and other European languages)⁵.

I. Irrigation Projects of the Khivan Khans on the Lawzan in the First Half of the 19th Century

Old Urgench (*Kuhna Ūrganj*), which was the central city of Khorazm until the 16th century, is located in the area corresponding to the lower reaches of the Lawzan Canal in the 19th century. In 1388, Timur invaded the city and destroyed it; afterwards, the city fell into decline. Between 1573 and 1582, the course of the Amu Darya changed, which created an interruption of (Old) Urgench's water supply. As a result, the city was devastated, and its inhabitants moved to the southern region of Khorazm or to the Amu Darya Delta (Aral region) (Бартольд 1965 [1914]: 174–178)⁶.

The Amu Darya flooded the Lawzan in the second decade of the 19th century. Muhammad Rahim Khan (r. 1806–1825) attempted to dam up the stream of Lawzan (Данилевский 1851: 74; Гулямов 1957: 218)⁷. The Qongrat khans in this period tried to protect the land adjacent to the Amu Darya from inundations. Therefore, they did not dare to construct large-scale canals or irrigations systems from the Lawzan or the surrounding areas, and it is unlikely that its irrigation network was enlarged or maintained⁸.

In 1804, Eltüzär Inaq (r. 1804–1806) of the Uzbek Qongrat (*Qūngrāt*) tribe expelled the Chinggisid ruler and assumed the title of khan, thus founding the Qongrat Dynasty (1804–1920) in the Khanate of Khiva. In 1811, Muhammad Rahim Khan conquered the Aral region ruled by Tora Murad Sufi (*Tāra Murād Šūfi*), which led to the political unity of the Khorazm oasis. In the same year, he re-established a fortress on the coast of the Ataliq-arna (*Atāliq ārna*) and settled the Uzbek Manghūt (*Manghūt*) tribe there. In 1815, he ordered the building of the Qilīch Niyaz Bay (*Qilīch Niyāz Bāy*) Canal. In the 1810s and 1820s, Muhammad Rahim Khan dredged the Shahabad (*Shāh-*

6 The conditions of the area surrounding Lawzan between the 17th and 18th centuries is unclear because of the lack of local sources, except for the works of Abu al-Ghazi (*Abū al-Ghāzī Khān*, r. 1644-c.1664). For the fragmentary and uncertain accounts of some contemporary authors on them, see, Глуховской 1893: 42-51. In the 18th century, the Khanate of Khiva was in confusion, which ceased after the establishment of the rule of the Qongrat Inaqs in 1770. Thus, there were almost no large-scale irrigation projects in the Khorazm oasis during the 18th century (Бартольд 1965[1914]: 179).

7 In *Rajab* 1234/May 1819, the Khan launched an 18 day expedition to stem the Lawzan (*Firdaws al-iqbāl*: 1048; Тройцкая 1954: 87).

The Russian Orientalist Bartol'd pointed out that the flow of the water on the western bank of the Amu Darya started to increase at the end of the 18th century, while that on its eastern bank tended to decrease (Бартольд 1965 [1914]: 180).

8 In the second half of the 18th and early 19th centuries, however, some irrigation works were conducted by Qaraqalpaqs around the Lawzan (Бартольд 1965[1914]: 181).

Troitskaia argued this measurement of the Muhammad Rahim Khan had the same purpose as the Qongrat khans' measurements in the 1850s to the Turkmens – in order to restrict water supply to them (Тройцкая 1954: 87).

ābād) Canal, constructed embankments and fortresses on the coast, and settled a part of the Uzbek Uyghur (*Ūyghūr*) tribe in Khorazm and the inhabitants of the Amirate of Bukhara in the middle or lower reaches of the canal (Гулямов 1957: 216–219). Allah Qulī Khan (r. 1825–1842) continued the irrigation projects in Khorazm. In 1828, he constructed Tash-saqa (*Tāsh-saqa*) (a stone sluice gate of the Pahlavan Canal) on the embankment of the Amu Darya, ensuring a water supply to Khiva (Гулямов 1957: 220). He settled some groups from outside Khorazm in the lower basin of the Qilīch Niyaz Bay Canal in the 1830s and 1840s (Гулямов 1957: 220–221)⁹. Thus, the Qongrat khans in the first half of the 19th century were greatly concerned with the development of an irrigation system in the Khanate, and new canals were built in important areas as well as in western parts of the Khorazm oasis (Bregel 2009: 400)¹⁰.

In the early period of the reign of Allah Qulī Khan, the Lawzan was once again inundated, and formed a lake in the area between Khoja-eli and Old Urgench. Between 1259–60/1843–45, the water in the lake had already flowed into the Daryaliq (Бартольд 1965[1914]: 181–182)¹¹. A British envoy J. Abbott visited the region in March 1840. In his published travel account, he wrote ‘A wide expanse of water burst upon my eye, which I concluded, was the sea of Aral’; however, he had actually just observed the stream of Lawzan (Abbott 1884: 212; Бартольд 1965[1914]: 182). A Russian envoy G. I. Danilevskii, who visited Khiva in 1842, related that ‘Lawzan (*Лаудан*) is the biggest branch of the Amu Darya’, and that ‘the inhabitants have an impression that the water pressure of the Amu Darya on the Lawzan is growing in recent years and this branch is flowing deeper and wider’ (Данилевский 1851: 73–74). Between the 1830s and the 1840s, the waters of the Amu Darya began to flow into the Daryaliq through the Lawzan, and its stream became larger and larger.

In the 1830s, the Qongrat khans, making use of the increasing water flow from the Amu Darya, undertook successive irrigation projects in Lawzan. In 1246/1830–31, Allah Qulī Khan restored Old Urgench by channelling water from the lake in Lawzan to the city, which was devastated by the course change of the Amu Darya in the 1570s–1580s (*Riyāz al-dawla*: 667b–668a; Бартольд 1965[1914]: 181; Гулямов 1957: 220).

Muhammad Amin Khan (r. 1846–1855) enlarged the irrigation projects from Old Urgench to the south of Daryaliq. The Khan visited the areas in the lower reaches of the Lawzan between

9 The Turkmen ‘Ali-eli tribe and the Jamshidi migrated there. See below for further details.

10 Y. Kawahara mentioned the irrigation projects initiated by the khans of Khoqand (Ming Dynasty) in the nineteenth century. It was necessary for the khans to provide residences and cultivated lands with irrigation facilities for the immigrants from Kashgar as a result of the military expeditions of Muhammad Ali Khan (*Muhammad ‘Alī Khān*, r. 1823–1842) there and for the sedentarizing nomadic Qirghiz (Kawahara 2005: 284). These phenomena were similar to the cases of Khiva in the same period. At the same time cotton farming was prevailed in Fergana Valley as the irrigated lands expanded and cotton became an important item for exportation in the Khanate of Khoqand (Kawahara 2005: 284).

11 Troitskaia affirms that in 1834 the water of the Amu Darya burst and flowed into the Sariqamish lake through the Lawzan and the Daryaliq (Тройцкая 1954: 77).

1262/1845–46 and 1265/1848–49 and ordered the dignitaries Muhammad Ya'qub Mihtar (*Muḥammad Ya'qūb Mihtār*), Ata Murad Qoshbegi (*Atā Murād Qūshbīgī*), Shah Murad Inaq (*Shāh Murād Īnāq*), and Muhammad Amin Yuzbashi (*Muḥammad Amīn Yūzbāshī*) to supervise the construction, extension, and separation of the canals (the canals *Khān-ābād*, *Shāh Murād*, *Sipāhī* and others), the construction of gardens (*bāgh*), and land reclamation in the areas around Old Urgench and the south of Daryaliq. The Uzbek and Qaraqalpaq inhabitants of the region were mobilized for these undertakings (*Jāmi' al-vāqi'āt-i sulṭānī*: 462a–464a; *Shajara-yi Khvārazmshāhī*: 329a–b; Баргольд 1965[1914]: 182; Гулямов 1957: 221–222). Mirza 'Abd al-Rahman (*Mirzā 'Abd al-Raḥmān*), passing these areas with a Russian orientalist A. L. Kun in 1873, listed the remains of the canals built during the reign of Muhammad Amin Khan (*Дневник*: 24–29)¹². Sayyid Ahmad Khoja (*Sayyid Aḥmad Khvāja*), who came to Khiva from Bukhara in 1267–1268/1850–1852, referred to the projects of Muhammad Amin Khan around Old Urgench as follows:

In fact, the Khan (i.e. Muhammad Amin Khan) makes the dominion of Urgench (*vilāyat-i Ūrganj*, i.e. Khorazm) an extremely prosperous. He channelled water and equipped all the area up to [Old] Urgench and even a small desert with canals. Besides, he constructed *bāgh* and *chahār-bāghs* and large fortresses (*qal'a-yi baland*) ... When I visited Urgench (i.e. Old Urgench) before, there were no villages and groves. Therefore, I had to bring water for a few days use when I made a pilgrimage (*ziyārat*) to the chief of saints (*sarvar-i awliyā*) Shaykh Najm al-Din Kubra (*Shaykh Najm al-Dīn Kubrā*), and Shaykh Sharaf al-Din (*Shaykh Sharaf al-Dīn*) ... When I accompanied the Khan and observed here, these areas, containing many buildings, turned out to be totally different from the previous ones (*Siyāhat-nāma*: 15b, 21a–b)¹³.

Some groups outside the Khorazm oasis migrated to the newly irrigated lands in the lower reaches of the Lawzan—Old Urgench and the coast of Daryaliq—in the 1830s and 1840s. In 1252/1836–37 and in *Muḥarram* 1264/December 1847, some groups from the Turkmen Göklän tribe moved from Gorgan to Old Urgench (*Riyāz al-dawla*: 714a; *Jāmi' al-vāqi'āt-i sulṭānī*: 469b–470b; Гулямов 1957: 221). When war broke out against the Amirate of Bukhara in 1842, Allah Quli Khan took inhabitants of the Amirate as captives (*asīr*) and forcefully migrated them to the area between

12 'Mirza 'Abd al-Rahman enumerated the canals *Ūn Qulāj Yāpī*, *Mihtar-yārgān[sic]*, *Yāqūb[sic]-Bāy-yārgān*, *Qūshbīgī Yāpī*, *Tājik Yāpī*, *Khān Yāpī* and *Yasāvulbāshī Yāpī* en route from the Shah Murad Canal to Old Urgench. Among these canals *Qūshbīgī Yāpī*, *Khān Yāpī*, *Ya'qūb Bāy-yārgān* and *Yasāvulbāshī Yāpī* had water flow when he visited (as of 1873).

13 The first visit of the author to Khiva was not earlier than the reign of Muhammad Rahim Khan. During this initial visit, he received 300 *tanāb* of land in Tashhauz from Muhammad Rahim Khan (*Siyāhat-nāma*: 23b).

Manghit and Qipchaq; later, Rahim Quli Khan (r. 1842–1846) moved them to Old Vazir (*Kuhna Vazir*, west of Old Urgench on the Daryaliq) (*Riyāz al-dawla*: 742b–753a; *Jāmi' al-vāqi'āt-i sulṭāni*: 463a; *Sifārat-nāma*: 53; Данилевский 1851: 98; Веселовский 1877: 321; Гулямов 1957: 221). The Persian-speaking Sunni nomadic tribe Jamshidi migrated to the lower reaches of the Qilich Niyaz Bay Canal in 1841–42 and enlarged their territory in the area surrounding Old Urgench (Данилевский 1851: 97). Moreover, some of the Iranian elements, taken from Khorasan in the course of military expeditions or by Turkmen raiders (*ālāmān*) and sold as 'slaves' (*dūghma*, *khānazāda*, *jāriya*, *chūrī*) in Khiva, were possibly forced to resettle in Old Urgench. This supposition is based on Danilevski, who visited Khiva in 1842 and indicated that the Sarts, Uzbeks, Turkmens, and Iranians lived in the 'urban area' (*zopod*) of Old Urgench, and that the Turkmens and the Jamshidi tribe maintained a nomadic way of life in the lands surrounding it (Данилевский 1851: 103–114). According to Agahi's description, Muhammad Amin Khan ordered the vazirs (*Mihtar* and *Qūshbīgī*) to allocate the state lands (*mamlaka-yi pādshāhī*) around Old Urgench to the dignitaries and the military commanders (*umarā va kubarā' va arbāb-i sipāh*) of the Khanate in 1263/1846–47 (*Jāmi' al-vāqi'āt-i sulṭāni*: 463a–b). The Qongrat khans initiated irrigation projects on the Lawzan and its lower reaches continuously during the 1830s and 1840s, utilizing the large quantities of water flowing from the Amu Darya. In the same period, they migrated various groups outside the Khorazm oasis to the newly irrigated lands¹⁴.

These irrigation projects legitimized the rule of the Qongrat khans over the Khorazm oasis, who unlike the Chinggisid khans, had ordinary Uzbek tribal origins. The title of the monarch, 'khan', was monopolized by the descendants in the male line of Chinggisid khans in Khorazm until the beginning of the 19th century. However, their power was relatively weak, and the representatives of Uzbek tribes came to hold real control in Khorazm. This trend increased throughout the 18th century. Finally, one of the representatives of the Qongrat tribe of the Uzbeks, Eltüzär, achieved the title of khan in 1804 after defeating his rivals from other Uzbek tribes and expelling a puppet khan of Chinggisid origin¹⁵. However, its ordinary Uzbek tribal origins forced the new dynasty to make every effort to legitimize its authority in the first half of the 19th century¹⁶.

14 Of course, the irrigation project was led not only by the Qongrat khans, but also by the Qarapalpaqs who opened and cut canals on a small scale. In the 1830s, it is supposed the *Qarāqalpāq-yārghān* canal was said to have been dug in the area of Khanabad (*Khān-ābād*) (Гулямов 1957: 223).

15 For the best explanation of this point, see, Бартольд 1927: 100–103, 110–113.

16 For this purpose, they tried to establish marriage ties with the 'descendants' of Chinggis Khan and of the Prophet (*Muhammad*). The Amirs of Bukhara and the Khans of Khoqand of the contemporary period engaged in similar efforts to legitimize their rules, see, Togan 1981: 204–205; Бартольд 1966[1903]: 316; Komatsu 2006: 977. For the latest valuable discussion on the use of the Mongol tradition and the Islamic norm in the contemporary historians for legitimizing the rulers in the Manghit Dynasty (1756–1920) of Bukhara, see, Кюгельген 2004.

The irrigation projects initiated by the khans of the Qongrat Dynasty in Khorazm in this period were a part of this effort. The court chronicles of Khiva draw a sharp contrast between Chinggis Khan and his descendants, who brought destruction to Khorazm, and the Qongrat khans, portrayed as bearers of prosperity. In this regard, one can cite, for example, the descriptions of the ‘restoration’ of Aq Masjid (*Āq Masjid*; 1809), the construction of the bridges over the Sirchali Canal (*Sirchali / Sirchālī*; 1810), the restoration of Old Urgench, and the construction of Khanabad (*Firdaws al-iqbāl*: 694–695, 886; *Riyāz al-dawla*: 667b–668a; *Jāmi’ al-vāqi’āt-i sulṭāni*: 463a–463b; Бартольд 1965[1914]: 181–182)¹⁷. Land restoration, bridge building, and irrigation projects offered the new khans in Khorazm the means to attest the ability to control the water of the Amu, which is the only water resource for the inhabitants of the Khorazm oasis.

II. Military Expeditions of the Khivan Khans in the First Half of the 19th Century

The almost annual military expeditions of the khans permitted the settlement of various groups from Gorgan, Khorasan, and the territories of the Amirate of Bukhara on newly irrigated lands in the Khorazm oasis. After conquering the Aral region in 1811, the Qongrat khans made repeated forays into these areas¹⁸. From 1813 to 1855, they conducted military expeditions, except for the years 1821–1825 and 1842–1845, when they antagonized the Amirs of Bukhara over the rule of Merv, located on the Murghab River along the trade route between Bukhara and Mashhad (Wood 1998)¹⁹. As a result, the Qongrat khans maintained their influence over the Qazaq (Kazakh) Steppe to the north, the Gorgan region, and the basins of the Murghab and the Tezhen to the south. After the end of Khivan rule in Merv in 1843, Muhammad Amin Khan made expeditions to Khorasan, seeking the reestablishment of his rule over the Merv oasis, and he achieved temporary success in 1854. He died in a war with the united army of the Teke Turkmen and the Qajars in Sarakhs in 1855. This incident triggered the rebellion of Turkmen tribes in Khorazm, and the Khanate of Khiva lost all its positions in southern Turkmenia (Bregel 2009: 400).

17 This Aq Masjid, different from the famous Khoqandian fortress in the lower reaches of the Syr Darya which Russian troops captured in 1853, is located 20 km south-east from Khiva (Гулямов 1957: 218).

18 The aim of these campaigns was plunder, the exaction of tribute, and resettlement of some groups to Khorazm (Bregel 2009: 399).

The ‘Khorasan’ (‘Iran’ is sometimes used as a synonym) mentioned in the Khivan chronicles is difficult to define. These expeditions mainly focused on the Turkmen areas from Gorgan in the west, travelling along the northern foot of the Kopet-Dagh Mountains, to Tezhen and Murghab basins in the east.

19 Merv was an important military base for the operations that took place during the reign of Allah Qulī Khan. The Turkmen tribes of Merv—the Sariq, Salor, and Teke—were subdued by the Qongrat khans during the years 1822–1843 (Komae 2001: 47; Wood 1998: 125–126, 186–205).

Taking advantage of the conflicts between local lords and tribes in Khorasan, and the political disturbances after the military expeditions of the Qajars in this area, the Qongrat khans migrated several peoples to land in Khorazm (especially during the reign of Allah Qulī Khan): the Turkmen ‘Ali-eli from Abivard (*Bāvard* in Khivan chronicles) in 1830, the Turkmen Göklän from Gorgan in 1836–37, the Jamshidi tribe from Badghis in 1841–42, and Iranians (they were treated as captives (*asīr*)) from the suburbs of Mashhad in 1825–1827²⁰. During the conflicts for the rule of Merv with the Amirs of Bukhara (1821–1825 and 1842–1845), the inhabitants (*ilāt*) of the Amirate of Bukhara were also brought to Khorazm (Гулямов 1957: 219, 221).

In the Khivan court chronicles, the military expeditions to Khorasan were justified as ‘holy wars (*ghazāt* or *jihād*)’ against the Shiite ‘infidels (*kuffār*)’ (*Firdaws al-iqbāl*: 914; *Riyāz al-dawla*: 544a, 700b; *Zubdat al-tavārkh*: 769a; *Jāmi’ al-vāqī’āt-i sulṭānī*: 481a). The Qongrat khans, especially Allah Qulī Khan, were considered to be commanders of the holy wars ‘*ghāzī*’²¹. Occasionally, some *qāzīs* joined the expeditions. Once, a grand *qāzī* (*qāzī-kalān*) requested a *fatwā* (a judicial decree pronounced by a *mufī*), which proclaimed the expedition to Khorasan as a ‘holy war’ against the Qajar army (*Riyāz al-dawla*: 721a).

The khans’ irrigation projects and military expeditions ‘holy wars’ were thus two major

20 During the expedition to Khorasan led by Rahman Qulī Tora in 1825–1826, the inhabitants of the fortress of Aq Darband on the narrow path between Merv and Mashhad were forced to migrate to Khorazm and settle in a village named after their previous domicile. The village Aq Darband is situated 17 km north-west from Khiva (Гулямов 1957: 220). On the history of this village up to the collapse of Soviet regime, see, Рахматуллаев, Магмазаров, Курёзов 1993.

On the basis of the information of Agahi, Allah Qulī Khan made expeditions twice to Khorasan against the Turkmen ‘Ali-eli tribe between May 1829 and May 1830, and captured the fortress of Abivard (*Riyāz al-dawla*: 649a–667a). At that time, ‘Ali-eli took part in the internal conflicts of the ruling family of the Khorasan Kurdish principality in Darragaz, giving aid to the opposition parties to the Teke tribe (*Tārīkh-i Zū’l-Qarnayn*: 757–758). After the occupation by the Khivan army of Abivard, the domicile and cultivated land (*mazāri’ u masākīn*) of ‘Ali-eli were distributed to the Teke tribe (*Riyāz al-dawla*: 666a–b). As to the ‘Ali-eli, Allah Qulī Khan forced them to migrate to the lower reaches of the Qilīch Niyaz Bay canal (*Riyāz al-dawla*: 666b–667a; Брегель 1961: 33; Гулямов 1957: 220). However, the above mentioned sources on these incidents have some discrepancies in chronology. These incidents indicate one of the contributions of the military expeditions of the Qongrat khans in the first half of the nineteenth century to the Teke tribe’s process of gaining power in the northern Khorasan. For the Teke expansion in these areas, see Bregel 2009: 404–405, 410–411.

Following the expedition of the Qajar army to the Turkmens in the Gorgan region in 1836, the Turkmen Göklän tribe took refuge in the mountain areas of Gorgan (*Nāsikh al-tavārīkh*: 659). After the withdrawal of the Qajar army, Allah Qulī Khan started his expedition to Gorgan, which lasted from December 1836 to March 1837, and migrated a part of the Göklän tribe to Old Urgench (*Riyāz al-dawla*: 700b–714a). Some remaining parts of this tribe moved to Old Urgench in December 1847 (*Jāmi’ al-vāqī’āt-i sulṭānī*: 469b–470b). Some other sources also attest that the expedition of the Qajar army to Gorgan in 1836 caused the migration of Göklän to Khorazm (*Rawzat al-safā-yi Nāshirī*: 8185–8187; Бодэ 1847: 213; *Correspondence*: 16).

21 Allah Qulī Khan minted the coins with his name and the title ‘*ghāzī*’ (Вельяминов-Зернов 1859 : 442–453).

legitimizing enterprises. Bayani's description reveals the relationship between these two undertakings. He describes the allocation of land by Muhammad Amin Khan to the Turkmen tribes around Old Urgench in 1264/1847–48. The khan distributed lands to the Turkmen elements, i.e. the Göklän, Saqar, Teke, Yomut Qara-choqa, and Qara-yilghunli (*Shajara-yi Khvārazmshāhī*: 332a; Брегель 1961: 27–35)²². It seems that they received lands free of taxes (land tax *sālghūt* and others) and labour obligations (*bigār*; dredging of canals *qāzū* and others) in exchange for fulfilling military obligations (supplying *nūkars* to the army) (Гулямов 1957: 222; Брегель 1961: 91–111, 176–192; Komae 2001: 46)²³. That seems true of the case of the Jamshidi tribe, who immigrated to the Khorazm oasis in 1841–42²⁴. In the 1830s and 1840s, the Turkmens were settled widely in Old Urgench and in the south of the Daryaliq. During this period, they were also implanted along the coasts of the Shah Murad and Sipahi Canals. The Chowdur migrated from the Caspian coast to Khorazm, and the Yomut settled on the southern Daryaliq (Брегель 1961: 26–29, 59). This policy promoted the participation of the Turkmen tribes in the military expeditions and expanded the army of the Qongrat khans. According to the calculations of Bregel, the number of Turkmen soldiers in the Khivan army continued to increase through the first half of the nineteenth century (*nūkars* of Turkmen/total; 2989/15922 in 1825; 5925/21338 in 1830–31; 8200/[an uncertain total number] in 1848) (Брегель 1961: 180).

III. Conversion of the Irrigation Policy on Lawzan

Muhammad Amin Khan repeated his expeditions to Khorasan, attempting persistently to subjugate the Sariqs who became independent of Khivan rule in 1843, and to reestablish Khivan dominance over the Merv oasis (Wood 1998: 206). The military power of the Jamshidi was an essential element in this policy. The Jamshidis were involved in successive conflicts with the Qajar army during its siege of Herat in 1837–1838, the Hazara tribe and the government of Herat, as well

22 According to Bayani, Turkmens and *bī-vaqans* (farmers without possessing lands) were allocated lands on the canals diverging from the canals Shah Murad and Sipahi (*Shajara-yi Khvārazmshāhī*: 332a).

The main canals were constructed by the Khanate through levying laborers. The smaller canals were constructed by the Turkmens themselves in these newly irrigated lands (Брегель 1961: 60–61, 96).

23 These lands are called *atliq*. Most of the Turkmens who received lands in the Khanate were granted this category of land (*atliq*) and a part of them lived in the crown lands (*pādshāhliq*) (Брегель 1961: 111).

Nūkar has the original meaning of 'comrade' in Mongol and means 'servant' in the Turkic languages (Бударов 1871). In Central Asia in the 19th century, *nūkars* were recruited from the general population and served in the army with their own horses, weapons, and supplies; they were usually exempt from the land tax (Bregel 1999: 546).

24 It seems that the Jamshidi received some kind of tax-exemption (Данилевский 1851: 97). The tax-exempt *atliq* land also existed in the settlement of the Jamshidi in Khorazm (Брегель 1961: 110).

as in internal conflicts ('*Ayn al-vaqāyi*': 29; *Rawzat al-ṣafā-yi Nāṣiri*: 8219–8220; Adamec 1975: 187–188). These conflicts must have caused their emigration to Khorazm. The Jamshidi emigrated from Badghis in the direction of the upper Murghab River to Khorazm during (or earlier than) the expedition of Rahim Qulī Tora to Khorasan from November 1841 to April 1842. Agahi explains that they made this move because they were oppressed by Kamran Mirza of Herat; consequently, they asked for the protection of the Khivan army, which escorted them to Khorazm. Allah Qulī Khan settled them in the lower basin of the Qilich Niyaz Bay Canal (*Zubdat al-tavārikh*: 769a–790b; Wood 1998: 166–171)²⁵.

The *nūkar* of the Jamshidi was estimated at 2,000 men (*Sifārat-nāma*: 115–116; *Zubdat al-tavārikh*: 790b). According to Bayani's description of the military expedition to Khorasan in 1265/1848–49, the troops of the Jamshidi formed a very large contingent, having the same number as the Qaraqalpaqs (2,000 men) and coming just after the Yomut (3,400 men) in number (*Shajara-yi Khvārazmshāhi*: 333a–b; Брегель 1961: 121). The leader of the Jamshidi in Khorazm, Mir Ahmad Khan (*Mir Ahmad Khān*), first garrisoned Tezhen and then Qara-yap in the Merv oasis. The army headed by Mir Ahmad Khan continued to wage battles with the Sariqs, depriving the latter of the chance to farm and profit from trade; he stirred up conflict among them and cut off their support outside Merv (for example, reinforcements from the Hazara tribe and the Qajars)²⁶. The isolation of the Sariqs deepened. Headed by 'Abd al-Rahman Khalifa ('*Abd al-Rahmān Khalīfa*), they continued military resistance to the Khivans and the Jamshidis from 1849, but submitted to Khiva in May 1854 (Wood 1998: 220–252). The interests of Muhammad Amin Khan and Jamshidis were thus in accord. The former aimed at re-establishing his rule in the Merv oasis using the military power of Jamshidis,

25 In contrast to Agahi's description, Kamran Mirza had no real power at that time, but his vazir Yar Muhammad Khan (*Yār Muḥammad Khān*) possessed authority in the government of Herat (Komaki 2006: 81–87). Yar Muhammad Khan made an expedition to the Jamshidis immediately before the Rahim Qulī Tora's expedition (Adamec 1975: 188). It is possible that Yar Muhammad Khan took and confined Mir Ahmad Khan or his brothers, Mahdi Qulī Bek (*Mahdī Qulī Bīk*) and Abd Allah Beklerbegi ('*Abd Allāh Khān Bīklārbīgī*), to Herat and that Mir Ahmad or his brothers fled or were released and left for Khorazm (*Khāṭirāt-i asārat*: 37; Семенов 1923: 166; Adamec 1975: 188; Wood 1998: 168).

Many issues concerning their migration to Khorazm remain to be investigated, though the following outline of their migration seems consistent: As a result of the military conflicts between the Jamshidi and Yar Muhammad Khan, the former sought refuge from the Badghis to the direction of Merv oasis. The 6,000-7,000 families of this tribe migrated to Khorazm in the years 1841–1842. For further details, see, *Riyāz al-dawla*: 741b; *Zubdat al-tavārikh*: 769a–790b; *Tavārikh al-khavānin*: 115a; *Khāṭirāt-i asārat*: 37; Basiner 1969[1848]: 205; Данилевский 1851: 97; Vámbéry 1864: 355; Веселовский 1877: 307–308; Семенов 1923: 166–167; Иванов 1958: 174; Adamec 1975: 187–189; Wood 1998: 166–171.

26 Mir Ahmad Khan murdered Karimdad Khan (*Karīmdād Khān*), head of the Hazara tribe, which was the Jamshidi's old enemy and supported the Sariq. Mir Ahmad Khan also repelled the reinforcement of the Qajar army for the Sariq and captured their commanders (*Jāmi' al-vāqi'āt-i sulṭānī*: 485a–501a; *Khāṭirāt-i asārat*: 35, 39–40, 60–76).

His name is written as *Mir Muḥammad Khān* in the Saint-Petersburg MS of *Jāmi' al-vāqi'āt-i sulṭānī*.

who know the political and geographical situation there; the latter took refuge in the Khorazm oasis, avoiding constant conflict with hostile powers.

It is possible that these shared interests caused the dissatisfaction of the Yomuts. The Yomut tribe was the biggest group of Turkmen in Khorazm and was a major component of the khan's cavalry²⁷. Bayani mentions an incident involving Mir Ahmad Khan and one of the Yomut chieftains, Aman Niyaz Sardar (*Amān Niyāz Sardār*), in 1263/1846–47. According to Bayani, Aman Niyaz Sardar, dispatched to Tezhen, offered Mir Ahmad his return to Khorazm. However, the latter rejected this proposal. Aman Niyaz was enraged at this refusal, but those around him stopped the quarrel, and Mir Ahmad and Aman Niyaz were reconciled. Mir Ahmad permitted him to return and sent a letter to Muhammad Amin Khan through Aman Niyaz. Muhammad Amin Khan, receiving the letter and recognizing what had happened, became angry with Aman Niyaz and ordered him thrown from the top of a minaret in Khiva (*Shajara-yi Khvārazmshāhī*: 329b–330b)²⁸. Bayani also states that Muhammad Amin Khan did not follow the established custom of military expeditions, appointing an advance guard (*ilghārī*) made up of Jamshidi rather than Yomut. This policy change caused the latter's discontent (*Shajara-yi Khvārazmshāhī*: 349b–350a)²⁹. These episodes indicate that Muhammad Amin Khan considered the military forces of the Jamshidis indispensable to the reestablishment of his authority in the Merv oasis; furthermore, they reveal the discontent among the Yomut caused by the change in military policy.

The turning point in the irrigation enterprises and the military expeditions appears in an event in 1850. In *Rabī' II* 1266/ March 1850, Muhammad Amin Khan constructed a dam called Tashbugut over the Sharqirawq (*Shārqrāwq*, a part of the Lawzan which connected the Lawzan and the Daryalīq) in order to withhold water from the 'ruffians' (*ūbāsh u marām*) of the Yomuts (*Jāmi' al-vāqī'āt-i sulṭānī*: 484b; *Sifārat-nāma*: 94; Каульбарс 1881: 399; Бартольд 1965[1914]: 182; Гулямов 1957: 222; Брегель 1961: 198). The Khivan chronicles make no mention of the reason for the disturbance amongst the Yomuts, though Bregel suggests it is possible that some of the Yomuts carried out hostile actions toward the khan after the execution of Aman Niyaz Sardar (Брегель 1961: 198–199)³⁰. Thus, an event in the course of the military expeditions caused disturbances in the newly

27 The total Turkmen population in the Khanate of Khiva is estimated 30–40 thousand families, and almost half of them were Yomut (including numbers of the Qara-yilghunli tribe, separated from the Yomut) in the first half of the nineteenth century (Брегель 1961: 40–44).

28 Bregel suggests that this figure seems to have been a brother of Ata Murad Khan, who was central to the rebellion of the Yomut in 1855–1867, and that his execution was one of the causes of the rebellion (Брегель 1961: 198–199).

29 We can find similar descriptions of these episodes in Kamyab's *Tavārikh al-khavānīn*, though Kamyab identifies Aman Niyaz with a certain Aman Geldi (*Amān Gildī Vakīl*) (*Tavārikh al-khavānīn*: 125b–126a).

30 It is necessary to investigate whether or not there were conflicts between the Yomut and the Jamshidi in the Khorazm oasis especially in Old Urgench where they lived near each other (Данилевский 1851: 97).

irrigated lands, leading the khan to control rather than expand the water supply there³¹.

IV. Construction of Band over Lawzan: Irrigational Expansion to Water Control

When Muhammad Amin Khan died fighting in Sarakhs in 1855, a struggle for succession of the dynasty started. ‘Abd Allah Tora (r. 1855), who joined the expedition to Sarakhs was enthroned as a new khan with the assistance of Muhammad Ya‘qub Mihtar and Mir Ahmad Khan in March 1855, preventing the ascension of another pretender to the throne, Tengri Qulī Tora (*Tengri Qulī Tūra*) (*Jāmi‘ al-vāqi‘āt-i sulṭānī*: 506a–b, 510a–b; *Khāṭirāt-i asārat*: 85–87). As early as May 1855, the rebellion of the Yomuts began (Брегель 1961: 200–201). ‘Abd Allah Khan and Mir Ahmad Khan died in battle against the Yomuts in August–September 1855 (*Jāmi‘ al-vāqi‘āt-i sulṭānī*: 511a–513a; *Khāṭirāt-i asārat*: 86). Qutluq Murad (r. 1855–1856) rose to the throne in September 1855. Another pretender, Muhammad Niyaz Bi (*Muḥammad Niyāz Bī*), entered Khiva with the assistance of the Yomuts and assassinated the khan. However, the inhabitants of Khiva, stirred up by Muhammad Ya‘qub Mihtar, massacred the Yomut chieftains and soldiers who came to Khiva. Afterwards, Sayyid Muhammad Tora ascended to the throne in February 1856 (*Jāmi‘ al-vāqi‘āt-i sulṭānī*: 519b–522b; *Gulshan-i dawlat*: 16b–30a).

By the end of 1855, these struggles for succession had cost the Khanate the northern part of its territory, which was now dominated by the rebellious Turkmen tribes, Qaraqalpaqs, and Jamshidis (Брегель 1961: 209). After the enthronement of Sayyid Muhammad Khan (r. 1856–1864), the rebellions of the Qaraqalpaqs and the Jamshidis subsided, although the rebellion of the Yomuts—headed by Ata Murad Khan (*Atā Murād Khān*), who seemed to have been a relative of Aman Niyaz Sardar—continued until August 1867 (Бартольд 1965[1914]: 183; Брегель 1961: 197–225). Offensive and defensive battles took place in Ghaziabad (*Ghāzī-ābād*), Tamach (*Tāmāj*), Tashhawz (*Tāsh-ḥawz*), Hilali (*Hilālī*), Lawzan, and Old Urgench (Бартольд 1965[1914]: 183)³².

As stated above, Muhammad Amin Khan constructed the Tash-bugut Dam over the Sharqīrawq in 1850. The dam did not immediately devastate the lands that had introduced irrigation during the

31 According to Bregel, the khans failed to distribute enough water supply to the sedentarizing Turkmens in the newly irrigated lands in the 1830s and 1840s. At the same time, the khans attempted, on the one hand, to strengthen their authorities and to increase taxes on the Turkmens, while on the other, the Turkmen tribal nobilities (*родовой знать*) tried to establish their authorities among the Turkmens, and their centrifugal tendency to the Khanate was intensified. In addition to these, the Turkmens’ interests declined in the 1840s’ unsuccessful military expeditions of the khans in Merv. These factors caused the anti-Khivan attitudes among Turkmens and led to the Turkmen rebellion in Khorazm from 1855 (Брегель 1961: 193–196). Bregel discussed the military expeditions and the irrigation projects separately in his argument on the cause of the rebellion, however my discussion is rather focused on the break up of the interdependence of both activities initiated by the Qongrat khans.

1830s and 1840s. However, when the Turkmen rebellion began and expanded, the situation changed. At the end of 1855, the Turkmen tribes under Ata Murad Khan flooded the fortress of Khanabad, where the garrison of the Khanate was stationed, by damming up the canal Shah Murad. The loss of cultivated lands and the spread of famine caused the garrison to disperse (*Shajara-yi Khvārazmshāhī*: 364b–366b; Брегель 1961: 209).

On 4 *Rabi' I* 1274/ 23 October 1857, Sayyid Muhammad Khan dispatched Hasan Murad Qoshbegi (*Hasan Murād Qūshbīgī*) to the head of the Lawzan Canal on the Amu Darya, with orders to close the canal by constructing a dam called the Band (*Бент* in Russian sources). According to Agahi, Hasan Murad dammed up the water flowing into the Lawzan for ten days (*Gulshan-i dawlat*: 117b–118b; *Поворот*: 17об.–18; Бартольд 1965[1914]: 181–183; Тройцкая 1954: 78–79; Брегель 1961: 216)³³. The motivation for this action was the same as the construction of the Tash-bugut Dam in 1850—to deprive the rebellious Turkmens (Yomuts) of water (*Gulshan-i dawlat*, 118a). However, this time the water running from the Amu Darya to the Lawzan was blocked by a complex system made up of the Band and other nearby dams (Тройцкая 1954: 82). Whenever the Band suffered from flooding, it was restored (*Поворот*: 18–18об.; Тройцкая 1954: 80). According to Troitskaia's analysis of the Band, based on the Khivan documents, the canal heads with their adjacent area were built up by four earthen dams (*qāchī*). The embankment of the Amu Darya and all the lands between the dams were strengthened by logs (*qara qāchī*). A levee was constructed at some distance from the river's bank. It ran along the bank of the Amu for a small distance and continued parallel to the bank of the eastern channel where it finally crossed three main canal beds and the lands between them. A levee was built to hold back the water flowing from the Amu and to return it to the river in case of floods (Тройцкая 1954: 79).

A fortress of 20.5 *сажени* square³⁴, equipped with two canons, was built alongside the Band for blocking any attempt to destroy the dam (Глуховской 1893: 76; Тройцкая 1954: 80). According to

32 For the details of the rebellion of Qaraqalpaqs headed by Er Nazar Bi (*Īr Naẓār Bī*) from November 1855 to June 1856, see, *Gulshan-i dawlat*: 44b–48a.

For the details of the rebellion of the Jamshidi after the death of their leader Mir Ahmad Khan from about January 1856 and their return to Badghis in February 1856, see, *Gulshan-i dawlat*: 34b–38b.

The Turkmen tribes in Old Urgench and the coast of the Daryaliq were the main components of the rebellion headed by Ata Murad Khan. They settled later than the other Turkmen tribes in Khorazm and afterward led a semi-sedentarized or nomadic way of life. The extent of participation in Ata Murad's rebellion differs by tribe or sub-tribe (Брегель 1961: 203–204).

The rebellions weakened the Khanate and caused the loss of all its positions in southern Turkmenia. Nevertheless, the Khanate attempted to extend its authority over the Qazaqs of the Junior Zhuz, which caused increasing tensions with Russia (Bregel 2009: 400).

33 Nikolai Konstantinovich asserted that 'Abd Allah Mihtar undertook the construction of the Band.

34 1 *сажень* equals 2.134 m.

Nikolai Konstantinovich, Abd al-Rahman Sufi (*‘Abd al-Rahmān Šūfi*) was the head of the artillery stationed in the fortress (*Поворот*: 18–18об.). Based on Agahi’s description, Abd al-Rahman Sufi joined Muhammad Murad Divanbegi’s expedition to Ghaziabad as the head of artillery (*tūpchībāshī*); this undertaking was intended to block the water supply from the rebellious Yomuts in the lower basin of the Ghaziabad Canal (*Shāhid-i iqbāl*: 61b–68a). After the expedition, he stationed gunners (*shamkhālchī*) in Tashhawz and moved canons to Hilali at the end of *Safar* 1284 /June–July 1867 in order to defend these areas from Yomut cavalry attacks (*Shāhid-i iqbāl*: 91a–b). Thus, the Lawzan was dammed up by the Band and other related dams according to a strategic plan; they were defended by soldiers with firearms³⁵.

The effects of these measures are evident. The cultivated, irrigated lands of the 1830s and 1840s, west of Old Urgench and along the Daryaliq were now deserted. New Yomut settlers in that period sought other lands, either staying on the western edge of the Khorazm oasis or migrating to the coast of the Caspian Sea to breed cattle (*Поворот*: 18–18об.; Тройцкая 1954: 80; Брегель 1961: 226). The inhabitants of Old Urgench had to move to Khoja-eli, and the caravans no longer passed through the area in order to avoid raids by the Turkmens (*Shāhid-i iqbāl*: 154b; *Дневник*: 26об.–27; Игнатъев 1897: 89–90).

Some irrigation projects were initiated after 1867. Sayyid Muhammad Rahim Khan supplied water to Old Urgench in 1869, and some of former inhabitants returned there from Khoja-eli (*Shāhid-i iqbāl*: 186a–b; Бартольд 1965[1914]: 183)³⁶. In 1872, Muhammad Murad Divanbegi dug a canal from the upper reaches of the Band toward the Daryaliq. The waters of the Amu Darya began to flow through the *Šuḥbat-yārghān* Canal and the Daryaliq to the Shah Murad Canal (Каульбарс 1881: 400; Глуховской 1893: 78–79). Thus, with the closing of the Lawzan, the water of the Amu diverged in the directions of the Shah Murad Canal via Suhbat-yarghan to the south and Old Urgench via Khan-yap in the north. Mirza ‘Abd al-Rahman mentioned that some Yomuts cultivated lands near Old Urgench, and that Uzbeks and some Qazaq farmers did so between Old Urgench and Khoja-eli (*Дневник*: 27об.–29). In spite of these irrigation projects, the main channel of the Lawzan remained closed. It was under these circumstances that the Russian army entered Khiva and the Russian officials, scholars and irrigation engineers launched research on the Lawzan and Daryaliq in 1873.

35 Some Turkmen Chowdur troops also cooperated in the defence of the Band (Тройцкая 1954: 81).

36 Mirza ‘Abd al-Rahman states that a certain Ya‘qub Bay (*Ya‘qūb Bāy*) dug a canal to Old Urgench and that 350 families gathered there (*Дневник*: 26об.–27). According to A. V. Kaul’bars, the Khan-yap, which flowed towards Old Urgench was also called Ya‘qub-Bay-yarghan (Каульбарс 1881: 400).

Conclusion

The water resources of the Amu Darya were (and are) essential for the inhabitants of the Khorazm oasis. They considered it difficult to control the river, which often changed its course ‘on a whim’ (*По волею*: 60б.). The rulers of Khorazm relied on natural and artificial changes of its waterways as a political strategy. However, the opinions represented by Troitskaia, who argues for a continuous policy of the khans of Khiva to restrict the water supply to the Turkmens in Khorazm for the sake of subduing them from the 17th century to the middle of the 19th century must be reconsidered.

That is, in the 1570s and 1580s, the lands west of the Lawzan dried up because of alterations in the course of the Amu Darya. Twice in the 1810s and the end of the 1820s, the water of the river flooded the Lawzan, and the lake was formed there. In the 1830s and 1840s the Qongrat khans used the opportunity provided by this ecological change to expand irrigated lands further to the south and west of the Lawzan. They settled groups brought from outside the Khorazm oasis on these lands. The settlement process was promoted by two mobilizing projects, irrigation projects and military expeditions, each reinforcing the other. In these years the sedentarization of the Turkmens on the Lawzan and the Daryaliq was rapidly promoted. The combination worked until the disturbance among the Yomuts occurred around 1850. This uprising appears to be related to Muhammad Amin Khan’s policy of favouring the Jamshidis over the Yomuts in his military expeditions to the Merv oasis. The rebellion of the Turkmens was expanded in the period of internal succession struggles in the Qongrat Dynasty, after the sudden death of Muhammad Amin Khan in battle in 1855. Sayyid Muhammad Khan’s order to dam the Lawzan in 1857 was a reaction to this rebellion, and it caused the devastation of the lands irrigated in the third and fourth decades of the century. Thus, the khans of Khiva turned their policy of expanding the irrigated lands of the lower Lawzan in the 1830s–1840s, which took advantage of environmental changes, to that of controlling it for political purposes from the 1850s³⁷.

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Abbreviations

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