

CLIMATIC CRISIS IN THE EASTERN PROVINCES OF THE OTTOMAN EMPIRE DURING THE SECOND HALF OF THE NINETEENTH CENTURY (According to British Consular and Travel Accounts)

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Abstract

The article presents the crisis situations—drought, crop failure, and the resulting years of famine—that developed in the eastern provinces of the Ottoman Empire during the second half of the 19th century, based on British consular reports and travel accounts. These climatic anomalies were part of the final phase of the Little Ice Age, which was characterized by climatic instability that created weather extremes, including fluctuations in temperature and precipitation.

Keywords: Ottoman Empire, climate crisis, drought, crop failure, famine, British sources

1.1 Climatic Factors in the Formation of the Crisis

The climate crisis was a crucial factor in the deepening of the 19th-century crisis in the Ottoman Empire. This period corresponded to the final phase of one of the global climatic eras, the “Little Ice Age.” The Little Ice Age is characterized by climatic fluctuations that began approximately in the 13th-14th centuries, and then—after a certain mild phase—became more pronounced from the mid-16th century to the mid-19th century. This period is characterized by a decrease in global average temperatures².

This is the only period for which data obtained from all regions of the world indicate cooler conditions than the current climate. At the same time, the primary characteristic of the Little Ice Age was not solely the drop in temperature, but also an increase in climatic instability³.

During the Little Ice Age, both short-term climatic episodes and long-term fluctuations occurred⁴. This climatic change can arise from the internal processes of the climate system as well as from the influence of external forcings⁵.

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² Grove 2008.

³ Lamb 1995: 212.

⁴ Collet, White *et al.* 2025: 4.

⁵ Hegerl, Zwiers, Braconnot *et al.* 2007: 667.

Factors of climatic variability include changes in prevailing winds, oceanic circulation, volcanic factors, astronomical cycles (Milankovitch cycles), and solar activity (Spörer Minimum (approx. 1400–1510), Maunder Minimum (1645–1715), and Dalton Minimum [1790–1830])⁶. Prolonged declines in solar activity may be linked to the cooling phases of the Little Ice Age, but they should be viewed as only one component of a broad, multi-factor climate system⁷.

The Earth's climate can change significantly following major volcanic eruptions, which loft dust and gases into the atmosphere that reduce the penetration of solar radiation. Major eruptions eject sulfate aerosols into the stratosphere, which diminish solar radiation; as a result, short-term cooling events occur within the same year or within one to two years⁸.

An example of such a major eruption in the 19th century was the eruption⁹ of Mount Tambora, such that the year 1816 became known “the year without a summer”¹⁰.

One of the factors in global climate change is the North Atlantic Oscillation (NAO). It defines the large-scale meridional (north-south direction) fluctuation of atmospheric mass between the subtropical high-pressure center (located near the Azores) and the subpolar low-pressure center (located near Iceland), which exert opposing climatic impacts on Middle Eastern region during the years of their positive and negative phases¹¹.

Thus, the Little Ice Age was the result of the combined influence of both external climatic factors (volcanic and solar variability) and the internal dynamics of the climate system (oceanic and atmospheric circulation), which led to climatic instability.

On the other hand, climate changes do not operate in isolation; their impact depends on the environment and societal resilience¹².

The relief of the Armenian Highland, with the configuration of its respective mountain ranges and the plateaus and depressions lying between them, presents a system characterized by distinct regularities, the sub-units of which often form axes and analogous zones extending around these axes. This system is characterized by a clear vertical zonation, which is determined by the mountainous nature of the terrain and defines its landscape diversity¹³. The territory of the Armenian Highland belongs to the basins of the Black and Caspian Seas, and the Persian Gulf of the Indian Ocean¹⁴.

⁶ Lamb 1995: 52-70.

⁷ Grove 2008: 365.

⁸ Sigl, Winstrup *et al.* 2015: 1.

⁹ Other major eruptions of the 19th century are: St Helens 1800 (Washington), Tambora 1815 (Lesser Sunda), Cosiguina 1835 (Nicaragua), Chikurachki 1853 (Kurile Islands), Sheveluch 1854 (Kamchatka), Krakatau 1883 (western Java), Okataina 1886 (Tarawera, New Zealand) (Briffa *et al.* 1998: 453).

¹⁰ Sigurdsson and Carey 1992: 38.

¹¹ Cullen & deMenocal 2000: 853–863.

¹² Grove 2008: 420.

¹³ Bobokhyan 2023: 26.

¹⁴ Gabrielyan 2000: 13.

Although the Armenian Highland is a landlocked country, the influence of the seas is significant¹⁵. The seas facilitate the penetration of cyclones and moist air masses moving from west to east, which bring abundant precipitation from the Atlantic Ocean and the Mediterranean Sea. The ascent of air on the windward slopes of the mountain ranges causes heavy precipitation. Central and Eastern Anatolia are drier because the mountains obstruct the penetration of moist air, and the air loses its moisture as it crosses the mountains, becoming drier¹⁶.

The distribution of precipitation is highly uneven: it exceeds 1000 mm on the shores of the Black Sea (up to 2300 mm in Rize) and 800–1500 mm on the Mediterranean coast, whereas dry and semi-arid zones are formed on the leeward sides of the mountain ranges. Central Anatolia is semi-arid (350–500 mm), while Eastern Anatolia is relatively more humid, although precipitation decreases in valleys and low depressions. The topography also shapes local microclimates¹⁷.

From a societal perspective, Middle Eastern regions are particularly sensitive to climate change. In these areas, climatic stress is driven by extreme heat and limited water resources, which can create or exacerbate pre-existing socio-political tensions¹⁸.

These parts of the Armenian Highland, as noted, possessed a continental climate, and these areas were considered zones of marginal agriculture, where farming was carried out at the absolute limit of the possibilities offered by climatic, topographical, or soil conditions. However, agricultural regions located on mountainous or climatic margins (for example, Van, Erzurum, Bitlis, and other high elevated provinces) were more frequently subjected to famine and economic crises. This is due to the great climatic fluctuations; in high mountainous regions, one year's harvest could differ drastically from the next because of late-onset frosts, early snow, drought, or low temperatures¹⁹.

Weather parameters directly affect crop yields. In addition to temperature and humidity, sunlight, hail, wind, high humidity, and snow are also important, as they can both damage and protect crops. It is precisely the combined sequence of weather factors that makes certain years extraordinarily good or bad harvest years²⁰. In agricultural societies, the impact of adverse climatic phenomena, particularly prolonged droughts, was determined by both their frequency and the adaptive capacities and available reserve resources of the population. When a drought became continuous, it led to a decline in crop yields, the depletion of food reserves, and the deepening of a food crisis. Malnutrition caused by famine weakened the population's resilience, facilitated the spread of infectious diseases, and significantly raised mortality rates²¹.

¹⁵ Gabrielyan 2000: 133.

¹⁶ Türkeş 1996: 1058.

¹⁷ Türkeş 1996: 1059.

¹⁸ Mann 2002: 287.

¹⁹ For a discussion of marginal agriculture and its vulnerability to climatic change, see Parry 1978.

²⁰ Grove 2008: 417.

²¹ Erler 2024: 707.

Paleoclimatic reconstructions make it possible to reconstruct and study past climatic conditions. According to them, extreme drought events occurred in the Eastern Mediterranean and Asia Minor in the late 19th century, leading to famines, diseases, and economic hardships. The years 1874, 1887, 1890, and 1928 stand out as severely dry years²².

The Little Ice Age exerted its influence right up to the late 19th and early 20th centuries. Within the territory of the Ottoman Empire, the most conspicuous manifestations of this influence were the climate crises of the 1840s–1850s and 1879–1881. These climatic anomalies of the second half of the 19th century resulted from global climate changes. The Ottoman Empire was not exempt from these global climatic developments, and similar climatic manifestations were recorded across its territory simultaneously. The year 1842 was a year of exceptionally severe and prolonged drought in Europe on a pan-European scale²³. In the late 1870s (especially 1878–1879), a sharp cooling occurred in European temperatures, accompanied by prolonged frosts and crop failures; as a result, climatic stress transformed into widespread famines, migration, and agricultural depression²⁴. Nevertheless, the impact of climatic anomalies in the eastern provinces of the Ottoman Empire could be somewhat different, depending on the geographical and climatic characteristics of the region.

1.2 Drought, Crop Failure, and Famine According to British Authors

The impact of the climatic anomalies of the LIA on subsistence and economic activity in the Ottoman Empire persisted from the mid-19th to the end of the century. According to climatological reconstructions, beginning in the 1850s, the Eastern Mediterranean region was in a phase of high climatic variability, characterized by the instability of precipitation (during the months of May–August)²⁵. Indeed, the eastern provinces of the Ottoman Empire entered a prolonged phase of climatic instability in the 1830s–1840s. According to British commercial statistics, a widespread failure of grain crops occurred in 1839–1840, creating a severe food shortage; as a result, even regions that were normally exporters were forced to import grain²⁶.

Fluctuations in temperature and extreme climatic events continued from the 1840s into the 1850s. “Unusually” warm weather seasons alternated with exceptionally cold periods. This adverse climatic phase was followed by the famine of 1845–1850²⁷.

The final phase of the LIA Age was thus manifested by precipitation instability and temperature fluctuations. The first half of the 1840s was characterized by relatively high

²² Akkemik & Aras 2005: 546.

²³ Brázdil *et al.* 2019: 1868.

²⁴ Fagan 2000: 217.

²⁵ Touchan *et al.* 2005: 89.

²⁶ MacGregor 1847: 116.

²⁷ Çelik 2017: 96.

temperatures. This warming peaked in 1847, when the highest temperature metrics of the period were recorded²⁸. Insufficient precipitation led to periodic droughts, which were characteristic of the final period of the LIA. The droughts resulted in crop losses and the drying up of meadows²⁹.

Descriptions of the Erzurum region during this period emphasize the short and cold growing season inherent to a high-altitude mountainous environment, where vegetation was only beginning to develop even in early June. Summers were far too short for crops to mature fully, which necessitated the extensive use of artificial irrigation to protect the crops from scorching before they could ripen³⁰.

A similar picture emerged in the Pashalik of Kars. Traveling through these territories in the 1830s–1840s, the British consul James Brant testified that sufficient crops had not been harvested over the preceding two years to meet the needs of the population, and the prolonged retention of snow on the ground often impeded the ripening of grain. The late activation of vegetation (trees only budding in June) underscores once again the shortened nature of the growing season and the climatic severity³¹. In 1841, J. Brant reported that the drought and subsequent years of poor harvests had created a difficult situation among the population. As a result, the price of bread was being sold six times higher than its usual value³².

Another traveler conveyed a firsthand experience of the drought: *“While the population was rapidly diminishing under the destructive wave of the plague and the flight of thousands whose terror had driven them from their homes, another calamity threatened them—hardly less severe. It was autumn, but since the previous April, the sky had not yielded a single drop of rain. The reservoirs that supplied the city were almost completely exhausted, and several of the public fountains had already dried up.”* In Southgate’s words, all classes of the population began to feel the full weight of this misfortune, as water in some neighborhoods was sold at such a high price that a poor man’s earnings were barely enough to purchase his ordinary daily ration³³.

Mass prayers addressed to God to supplicate for rain were among the widespread social manifestations utilized for the purpose of preventing drought in both Islamic and, more generally, European societies³⁴. As the same author notes, not even the strictest fatalism could withstand a new, impending disaster, so public prayer was undertaken to prevent it³⁵. Nevertheless, the author notes that “still there were none of the signs of

²⁸ Çelik 2020: 58.

²⁹ Pehlivan 2016: 184.

³⁰ Hamilton 1842: 182.

³¹ Brant 1836: 198.

³² Pehlivan 2016: 184.

³³ Southgate 1840: 89.

³⁴ Armenians also had the custom of singing rainmaking songs and performing prayers. These songs have been preserved in Armenian folklore. See: Hayrapetyan 2004.

³⁵ Southgate 1840: 90.

winter which usually, in our own country, appear at this season in the same latitudes. The fields, which during the summer had been parched and desert-like, were beginning, under the influence of the autumnal rains, to assume the fresh green tint of spring”³⁷.

The information provided by British consul J. Brant that the water of Lake Van had receded so much in 1838 that the dry land in the vicinity of Archesh had expanded by about approximately 1.6 km could be linked to prolonged arid conditions³⁸.

Under these conditions, regions within the Ottoman administrative system were frequently perceived and characterized as either possessing a “favorable climate” (*âb ve havası güzel*—having good water and air) or as climatically unfavorable zones. Consequently, no official wished to serve in regions with harsher climatic conditions, whereas locations with a favorable climate were considered preferable for occupying an administrative post³⁹.

In this regard, a letter written in mid-June 1845 by Vasif Pasha, the governor of Ankara, is particularly notable, wherein he describes the process of the formation of the famine in detail. According to his testimony, due to the absence of snow and rain during the preceding winter and spring, the crops were unable to propagate and grow sufficiently. An attempt was made to resolve the problem of water scarcity by opening canals and directing water from smaller rivers and more water-abundant locations to the fields that needed it. Although the population waited hopefully for the harvest for months and survived on limited reserves, the complete absence of precipitation in the summer and the drying up of springs following recent storms led to the total destruction of the

³⁶ Southgate presents this ceremony in detail: “*The Sunneh prescribes that the assembly shall be in the open air; that no public prayer shall be made by the Imam, but that each individual shall offer his petitions for himself; that the ceremony shall be performed by command of the sovereign, and that none but Muslims shall be permitted to join in it. Near the end of September, a royal order having been issued for public prayers for delivery from the drought, fifty teachers of the common schools, accompanied by their pupils, repaired to the great meadow of Kaat Khaneh, or, as my readers will more easily remember it, the European Valley of the ‘Sweet Waters.’ Selecting a large open space, the whole company passed three times around it in solemn procession, headed by an Imam. The teachers then seated themselves upon the grass, and their respective pupils arranged themselves around them. Before each teacher were placed two small bags, one empty and the other filled with clean pebbles. The ceremony commenced. Each of the fifty took a pebble from the full bag, pronounced over it a short prayer, then blew upon it three times and deposited it in the empty bag. This act was performed by all simultaneously, and at the close of each prayer the whole company of boys responded, ‘Amen.’ When the Imam had ascertained by calculation that 72,000 prayers had been offered, he gave the signal for closing the ceremony. The bags containing the pebbles blessed by prayer were then collected and emptied into one large leathern sack. The mouth of this was secured, a cord was attached to it, and the whole was thrown into the stream which flows through the meadow, there to remain until the intercession should take effect.*”

³⁷ Southgate 1840: 93.

³⁸ A-Do 1912: 12.

³⁹ Çelik 2017: 100.

crops. He noted that the food shortage was not limited to Ankara alone but extended to all towns and villages⁴⁰.

Documentary sources testify that a universal shortage of water resources was recorded globally in 1842, as a result of which numerous wells and springs dried up⁴¹, a phenomenon from which, in fact, the Ottoman Empire was not exempt.

The drought of 1845 was one of the most extreme climatic events of the past two centuries. Prior to that, the interval between major droughts was approximately 30 years, but in the final two decades of the century, climatic fluctuations became more frequent and periodic. Beginning from the winter of 1879, climatic disruptions were recorded approximately every 5 to 6 years. The drought of 1879 is considered one of the most severe events of that period. The harshest cold wave was recorded in the winter and spring of 1880, immediately following the severe drought in the region⁴².

Information regarding the famine in the Ottoman Empire also found a wide resonance within British public and charitable circles. In this context, during a meeting of the “Asia Minor Famine Relief Fund Committee” convened in London on June 24, 1875, the committee’s chairman, Major-General Sir Henry Rawlinson, described Anatolia as a “garden of happiness” that had been transformed into a “howling wilderness”⁴³.

American missionaries and British consuls attempted to fill the gaps left by the Ottoman state in providing aid by establishing relief networks, which in many cases became influential. They helped thousands of people, saving them from starvation in the central and eastern provinces, as well as in the Mosul region. However, in addition to humanitarian goals, these figures definitely had their own religious and political agendas. In their descriptions of the two famines (1845–1850 and 1879–1881), they shaped discourses about the Ottoman Empire that were linked to specific ideologies and perceptions of governance⁴⁴. Even while organizing relief under famine conditions, the British continued to conceptualize Anatolia as an “uncivilized” territory. Some British figures did, of course, criticize English industrial cities, stating that they grew wealthy from trade with the East and Asia Minor but ignored the starving population there⁴⁵.

Due to its geographical location—characterized by mountainous terrain, harsh winter conditions, and transportation primarily dependent on pack animals—even a short-term drought in the region could exert a long-term, devastating impact on the subsistence of the local population, literally paralyzing it. Very little time had passed since the Ottoman-Russian War of 1877–1878⁴⁶. The drought of 1879 led to a decline in

⁴⁰ Çelik 2017: 146-147.

⁴¹ Brázdil 2019: 1872.

⁴² Pehlivan 2024: 31.

⁴³ Ó Gráda *et al.* 2006 (Eds): 22.

⁴⁴ Ertem 2017: 160.

⁴⁵ Ertem 2015: 25.

⁴⁶ Ertem, Özge 2010: 75.

crop yields, as a result of which the first alarms of famine were already recorded by September 1879⁴⁷.

In his report, British official Chermside⁴⁸ emphasizes that the severity of the established situation was comparable to the great famine recorded in India. Under the conditions of the severe winter that followed, news of deaths from starvation began to arrive from Van and Diyarbakır as early as January 1880⁴⁹.

From the perspective of presenting the socio-economic situation of the region, British consular reports constitute an important primary source. They are vital sources for reconstructing the societal experiences of climate changes and weather phenomena, as they reflect the immediate reactions of communities within the Ottoman Empire.

In November 1879, a letter from the Armenian bishop's vicar regarding the extreme plight of the Armenian population in the Bashkala region was conveyed to the British consulate through Khrimian⁵⁰. According to the letter, 100 families had already left the region and relocated to Persia, while those remaining were without food and clothing, surviving by begging from house to house. "They have scarcely anything left to eat, and men, women, and children go out into the fields, gathering roots and grass to appease their hunger. Cases are even reported where people have begun to eat earth. Disease is prevalent in consequence of this scarcity, and has caused many deaths, while a part of the emigrants die on the road"⁵¹.

Regarding the Bagrevand district, we find the following description: "All provisions were almost completely exhausted. People first slaughtered and ate their horses and other animals, and then, as the demand for wheat and bread grew increasingly intense, they began to resort to extreme measures. The meat of mangled and dead animals was used as food"⁵².

In the areas around Bayazet, the famine both began earlier and was more severe in its intensity. During the winter frosts, all food supplies were fully depleted, and while communication from all sides was cut off due to the snow, the famine set in. Those who possessed wheat supplies from the previous year demanded inaccessible prices for it, and the poor began to die of hunger. Before affecting humans, diseases spread among the livestock, and a mass die-off began. The careless and unsuitable foods consumed due to the famine proved even more harmful, triggering various diseases⁵³.

⁴⁷ Report 1885: 13.

⁴⁸ Sir Herbert Chermside was a British Army officer and imperial administrator who served as a military attaché and consular official in the late 19th-century Ottoman Empire, reporting on conditions in Anatolia.

⁴⁹ Ghazarian 2022: 492.

⁵⁰ Mkrtich Khrimian (Khrimian Hayrik, 1820–1907) was an Armenian national, ecclesiastical, and public figure who served as the Prelate of Van and later the Patriarch of Constantinople, as well as the Catholicos of All Armenians (1892–1907). He supported relief initiatives and contributed to the organization of assistance for the affected rural Armenian population.

⁵¹ Memorandum by Lord Tenterden on the Distress in Asiatic Turkey: In FO 424/106: 1880: 392.

⁵² Report 1885: 13.

⁵³ Report 1885: 14.

On December 30, 1879, Captain Clayton⁵⁴ reported to Major Trotter⁵⁵ an exceedingly heavy snowfall that had occurred overnight in Bashkala, rendering the roads impassable for laden animals⁵⁶. According to his testimony, “Everywhere the season is very backward; the mountain ranges are still covered with snow, and the roads in the valleys are almost impassable owing to the flooded rivers, many bridges being either broken or under water. The population, both Muslim and Christian, complain of the dearness of bread and hard times.” The apparent scarcity and high prices of grain were the consequence of an invasion of locusts, from which these regions suffered in the autumn of 1879⁵⁷.

The prolonged snow cover delayed the growth of pasture plants, while the price of hay was inaccessible to most people. In April of the following year, Clayton noted: “Most of the animals have either already been slaughtered for food or have died from lack of fodder.” The protracted winter and late-melting snow destroyed the foundations of livestock farming; as a result, the population lost both food and their primary means of economic survival. In the regions of Van and Erzurum, the famine had transformed into a widespread human and pastoral disaster⁵⁸.

On May 27, 1880, the “New York Evangelist” - a journal published in New York and addressed to Protestant communities - published a letter dated to April written by Boyajian, the spiritual leader of the Protestant Armenian community of Diyarbakır. This letter is one of the most important documentary sources regarding the famine that broke out in the eastern provinces of the Ottoman Empire in 1880—a famine which, according to contemporary data, caused the death of at least 10,000 people. The letter records and certifies on the spot the extreme gravity of the situation prevailing in Diyarbakır. Boyajian describes that the devastation of the war had been followed by a terrible famine, as a result of which the price of bread had increased around 16-fold, and a significant portion of the population—more than 4,000 people—was living on relief. The city was filled with beggars, some of whom were starving to death, and British aid was insufficient to mitigate the consequences of the catastrophe. The severe winter further deepened the crisis⁵⁹.

⁵⁴ Emilius Clayton (1803–1887) was a British diplomat and army officer who served as vice-consul at Van from 1878 to 1881.

⁵⁵ Major Henry Trotter, British Consul for Kurdistan (1879) and subsequently British Consul at Erzurum (1880), was one of the principal British diplomatic observers of the Ottoman eastern provinces in the aftermath of the Russo-Turkish War of 1877–1878.

⁵⁶ Captain Clayton to Major Trotter: Van, December 30, 1879: 165: In FO 424/106: 1880: 392.

⁵⁷ Vice-Consul to Sir A. H. Layard—Received at the Foreign Office, May 11, Koniah, April 22, 1880: 364: In FO 424/106. 1880: 364.

⁵⁸ Ghazarian 2022: 492.

⁵⁹ Ertem, Özge 2010: 74.

Roughly three weeks after the transmission of Boyajian's letter from Diyarbakır, the decree of the Sultan stated that "since it has not rained for a long time, and the crops are in dire need of God's mercy, just as in previous years when there was a cessation of rains," it was necessary once again to go out for rain prayers⁶⁰.

The cold and prolonged winter of 1879–1880 had further deepened the scarcity and increased the loss of livestock. In 1879, the province of Erzurum, particularly its eastern portion, was struck by a prolonged and severe winter, which had a devastating impact on the numbers of large and small livestock. According to a report by British Colonel William Everett in May 1880, nearly half of the oxen and around 70 percent of the sheep had perished in the district of Pasin. Animal mortality was also enormous within Alashkert, which was part of the Sanjak of Bayazet⁶¹.

"Information regarding the famine and distress had also been received from the settlement of Ushak, under the jurisdiction of the Diocese of Smyrna, where the primary cause of the crisis was the devastation wrought by locusts over the preceding two years, which had caused significant damage to agriculture"⁶².

In the "Memorandum on the Distress in Asiatic Turkey," a famine was recorded during the years 1879–1880 in the Asiatic provinces of the Ottoman Empire, specifically in Bayazet, Van, certain parts of the Vilayet of Erzurum, some districts of the Vilayet of Diyarbakır, as well as in the Vilayets of Sebastia, Mosul, Antalya, and Aleppo⁶³. Everywhere, a decline in the 1879 harvest was reported, which had intermingled with the devastation carried out by irregular Kurdish cavalry⁶⁴.

According to British parliamentary documents, the harvest in Bashkala and its villages had failed almost completely, and the yielded crop often did not even cover the seed used for sowing. "In several villages, only three or four of the wealthiest families were able to eat bread, while the rest had slaughtered and salted their sheep and subsisted solely on that meat, without any vegetable food, as a consequence of which diseases began to spread rapidly. In other places, the peasants go to the mountains and gather certain roots, which they grind and use for making bread"⁶⁵.

In March 1880, as Captain Everett reports, famine and poverty were deepening in Erzurum as well. However, according to his testimony, the famine was largely the result of certain individuals hoarding flour with the aim of securing high profits later on. According to Captain Everett's observations, numerous villages in Pasin and adjacent districts—including Zuluk, Kopgli, Haran, and Yuzveran—were in conditions of extreme destitution and at risk of starvation⁶⁶.

⁶⁰ Ertem, Özge 2010: 745.

⁶¹ Köksal and Can 2024: 55.

⁶² Report 1885: 20.

⁶³ Memorandum by Lord Tenterden on the Distress in Asiatic Turkey: In FO 424/106. 1880: 388.

⁶⁴ Memorandum by Lord Tenterden on the Distress in Asiatic Turkey: In FO 424/106. 1880: 388.

⁶⁵ Memorandum by Lord Tenterden on the Distress in Asiatic Turkey: In FO 424/106: 1880: 388.

⁶⁶ Memorandum by Lord Tenterden on the Distress in Asiatic Turkey: : In FO 424/106: 1880: 393.

In February 1880, the entire territory of Diyarbakır, spanning from these regions to Aleppo, was on the verge of famine. Extraordinary snowfalls had occurred, and the ground remained covered under snow for five consecutive weeks, while the cold was extreme. The livestock population was dying by the thousands. In almost every village, one could see anywhere from 12 to 500 dead animals, with very few survivors left alive⁶⁷.

In November 1879, it was reported from Mosul that under the conditions of the ongoing drought, if rains did not fall soon, the region could face the peril of famine. The cost of commodities exceeded the level of two years prior by around 50%, and grain hoarders were holding onto their stocks in hopes of higher prices⁶⁸.

In a communication from Chermside⁶⁹ addressed to Layard⁷⁰, it is noted that the sunny and rainless spring of the preceding year had caused a significant crop failure, creating a severe scarcity. By January, a shortage of provisions and animal fodder was already observable, and even dung—used as fuel—had become rare and expensive. The continuous severe winter had led to heavy famine and the almost total loss of livestock. Beyond the Euphrates, in Kurdish and mixed Arab-Kurdish settlements, due to the scarcity of timber, houses were mostly constructed in the form of mud domed structures or small rooms excavated into the ground⁷¹.

The famine extended from Amadia, Dohuk, Akre, and Zakho toward Eastern Kurdistan and down along the Persian frontier, thence across the entire desert (as well as the losses previously sustained by the Tai, Obeid, and Shammar tribes) all the way to Zor, and from there toward Aleppo and Antioch. Information regarding the famine in the desert was scarce, as many tribes took their food supplies with them into the desert; human suffering is not as severe as the loss of livestock, which has been immense⁷².

Chermside testifies that the winter had passed with exceptional severity. The author notes that in mid-March, snow was still falling in the Mosul region, while winter conditions continued to prevail in the plain of Kharput; snow remained both on the mountain slopes and in the streets, and ice blocks had formed around the springs. The gradual melting and refreezing of the snow had destroyed its natural protective effect, causing severe frosts instead. Consequently, the grain sown in some places had

⁶⁷ Memorandum by Lord Tenterden on the Distress in Asiatic Turkey: In FO 424/106. 1880: 393.

⁶⁸ Memorandum by Lord Tenterden on the Distress in Asiatic Turkey: In FO 424/106. 1880: 395.

⁶⁹ Sir Herbert Chermside (1850–1929) was a British Army officer and military diplomat who served in the Ottoman Empire and produced reports on the administrative, military, and social conditions of Anatolia.

⁷⁰ Sir Austen Henry Layard (1817–1894) was a British archaeologist, diplomat, and later politician who became famous for excavating ancient Assyrian sites at Nineveh and Nimrud. He subsequently served as a British envoy and ambassador in the Ottoman Empire, where he was actively involved in diplomatic affairs and in shaping British perceptions and policy regarding Ottoman governance, particularly in the eastern provinces.

⁷¹ Lieutenant Chermside to Sir A. H. Layard, Kharput, April 3, 1880: In FO 424/106. 1880: 412.

⁷² Lieutenant Chermside to Sir A. H. Layard, Kharput, April 3, 1880: In FO 424/106. 1880: 416.

germinated and subsequently perished, while in other districts it had failed to germinate at all—as was the case, for instance, in the Mardin–Diyarbakır sector⁷³.

In the context of the famine and climatic crisis, inter-ethnic relations in the region deteriorated significantly. The famine of 1879–1880, accompanied by a scarcity of fodder and grain, dealt a heavy blow particularly to nomadic and semi-nomadic groups. In February 1880, the American missionary Robert Chambers wrote that the “Turkish villages” on the Pasin plain of Erzurum were in “a worse condition than those inhabited by Christians.” In the same region a few months later, Trotter noted that “the Turks and Kurds are those who suffer most.” Similarly, outside of Van, Clayton reported that in Karakilisa, the Turks “were dependent even for bread upon their Armenian brethren.” The massive mortality of livestock among the pastoralist population may explain why the nomadic Kurds and tribal groups suffered more severely; however, the question remains as to why the sedentary Kurds and Turks were in an equally dire condition⁷⁴.

In November 1879, heavy snowfalls had also dealt a severe blow to the Circassians, endangering their principal wealth—horses. The British source notes that government inaction and economic pressures could not only cause major livestock losses but also exacerbate the discontent of the Circassians, thereby contributing to an increase in pillage and social instability in the border regions⁷⁵.

In an itinerary dated May 7, 1880, the Armenian Patriarch Khrimian wrote to A. H. Layard: *“The famine does not frighten the population of our vilayet as much as the robberies and crimes committed by the Kurds and those like them, which even today threaten the utter ruin of this province. These Kurds, by obstructing and almost neutralizing the efforts of the committees established both in Constantinople and in Van, which aim to bring relief to the starving, cause the famine to be aggravated thereby instead of being mitigated. For this reason, as soon as the weather permits, these criminals, according to the custom of their race, have begun to move upon the villages, leaving terrible devastations in their wake”*⁷⁶.

Complaints were also received from the Nestorian (Assyrian) community. In 1880, the Nestorian Christian population of Hakkari was in an extremely critical condition. Continuous attacks by Kurdish tribal groups, fiscal oppression by local officials, and violence by Ottoman troops had resulted in widespread plunder, famine, emigration, and death. Mar Shimun⁷⁷ wrote to Clayton: “Can a man, who is not stone, but has flesh and blood, endure such oppressions?”⁷⁸.

At this same time, Vice-Consul Clayton wrote to Major Trotter regarding the rebellion raised in the south by the Kurdish Chieftain Sheikh Obeydullah. Obeydullah

⁷³ Lieutenant Chermside to Sir A. H. Layard, Kharput, April 3, 1880: In FO 424/106. 1880: 417.

⁷⁴ Ghazarian 2022: 492.

⁷⁵ Memorandum by Lord Tenterden on the Distress in Asiatic Turkey: In FO 424/106. 1880: 394.

⁷⁶ The Armenian Patriarch to Sir A. H. Layard: May 1880. In FO 424/106. 1880: 430.

⁷⁷ Patriarch of the Assyrian Church of the East.

⁷⁸ Mar Shimoun to Captain Clayton: Kotchannis, March 27, 1880: In FO 424/106. 1880: 439-440.

had told Mutasarrıf⁷⁹ Tousoun Pasha: *“What are these rumors I hear, that the Armenians are to receive an independent state in Van, and the Nestorians are preparing to raise the British flag and declare themselves British subjects? I will never permit that, even if I have to arm the women.”* At the same time, the Sheikh had sent a letter to Mar Shimun, calling upon him to join him against the Turkish government. He had made the same proposal to the Armenian ecclesiastical leader there, declaring that he would protect the Christians. He had also forced the villages, even those situated only four hours’ distance from Bashkala, to promise to pay him taxes. The same source reports that the Sheikh intended to send his son to Constantinople with the following proposal: he wished to remind them of the substantial sum that Bedir Khan Beg⁸⁰ used to pay to the Sultan in a semi-independent state, and to offer even larger payments if his authority over Kurdistan were officially recognized and there would be no interference in his administrative affairs. On this basis, Clayton concludes that the Sheikh, and presumably the other Kurdish leaders as well, would look very unfavorably upon granting any special privileges to the Armenians or Nestorians⁸¹.

In October 1880, the British official linked the rise in Kurdish bandit attacks in the Arjesh district of the Van province not only to the instability arising after the Hakkari rebellion, but also to destitution and high grain prices, which forced the Kurds to secure provisions for the winter through plunder⁸².

Writing from Van on June 30, 1880, Vice-Consul Clayton informed Major Trotter that 98 percent of the deaths had occurred precisely among the Kurds, as the Christians possessed greater resources to withstand difficult times and also received more assistance from the Armenian committees. The Kurds, who were the primary victims, had lost almost their entire herds and livestock, upon which their livelihood principally depended. At the same time, Clayton recorded an increase in cases of robbery and pillage: *“The Shikakli Kurds, under Ali Khan, are doing much damage, coming down from the Persian frontier, plundering villages, and then carrying their booty across the border. Since the beginning of spring, about twenty villages have already been plundered. The latest instance was a large Armenian village in Haspistan, which nine days ago was surrounded by Ali Khan’s men, and all the cattle and sheep were driven off from it; out of more than 100 houses in the village, only three lambs were left”*⁸³.

The Armenians demonstrated a much better degree of organization in resisting the famine, coordinating relief through communal networks. In January 1880, the Central

⁷⁹ A Mutasarrıf was a senior Ottoman official who governed a sanjak (district or sub-province) as part of the empire’s provincial administration.

⁸⁰ Bedir Khan Beg was the hereditary ruler (emir) of the Botan principality in southeastern Anatolia, centered around the Cizre-Şirnak region. His authority was abolished as a result of the Ottoman Empire’s centralization policies, particularly within the framework of the Tanzimat reforms.

⁸¹ Vice-Consul Clayton to Major Trotter: Bashkala, July 11, 1880: In FO 424/107. 1881. 105-106.

⁸² Memorandum by Lord Tenterden on the Distress in Asiatic Turkey: In FO 424/106. 1880: 391.

⁸³ Vice-Consul Clayton to Major Trotter: Bashkala, July 11, 1880: In FO 424/107. 1881: 249.

Armenian Committee was formed in Constantinople as an organized body responding to the famine in the eastern provinces during 1879–1880. Its creation was prompted by petitions received from Erzurum, Van, and adjacent regions, which brought information regarding the famine and acute food shortages to the Patriarchate. Formed under the auspices of Patriarch Nerses Varzhapetian, the initial composition of the committee was reinforced with representatives of the Armenian merchant and public circles of Constantinople, including Serovbe and Abel Gulbenkian, Arik Unjian, Poghos Shashian, Grigor Nikodimosian, as well as Sahak Ghazarosian, Gabriel Noradounkian, and Garnik Hovakimian. In a short time, it was transformed into a coordinating body aimed at collecting and distributing aid among the starving population in an organized manner⁸⁴.

During the 1880 famine Armenian communities showed high degree of organized self-relief. Under the aegis of the Constantinople National Assembly were continued donations that extended not only throughout Armenian populated centers but also into the Armenian communities of the Russian Empire. Armenian media has had an important role in the organization of donations. “Mshak” of Grigor Artsruni, “Meghu” of Petros Simonyants and “Ports” («Ardzaganq») of Abgar Hovhannisyan initiated donations in the Caucasus, a part of which immediately were sent to starving provinces⁸⁵. In the article published in “Masis” in 1882 «Famine in Armenia: Amount of the Russian Armenians’ donations” figures the amount of collected donations.⁸⁶

The organization of the Armenians in helping one another during the famine and the consolidated work of the committees further provoked discontent among the Kurds. Although the Committee’s report stated that “*the collected relief was to be distributed equally to all needy, starving persons of the Armenian nation without religious discrimination, and according to necessity and capability, portions were also to be allocated to Turks, Kurds, and people belonging to other creeds and nationalities*”⁸⁷, complaints were nevertheless regularly raised among the Kurds on this account. To such an extent that the British official likewise emphasized that “*the Patriarch collects aid only for Christians, whereas Turkish wheat must be distributed among all Ottoman subjects, regardless of religion*”⁸⁸.

Since the Armenians were able to survive thanks to food aid but were frequently no longer in a position to pay their taxes, Kurdish tribal chieftains expropriated large quantities of Armenian lands, not infrequently entire villages⁸⁹.

Traveling through Erzurum, Layard wrote in his memoir: “*The Kurds and the Armenian Christians, both a hardy and industrious race, are nearly equal in numbers, and live amicably together in the same filth and wretchedness*”⁹⁰.

⁸⁴ Report 1885: 3–4.

⁸⁵ Ghazaryan 2001: 488.

⁸⁶ Ghazaryan 2001: 490.

⁸⁷ Report 1885: 6.

⁸⁸ Captain Everett to Major Trotter: Erzeroum, January 30, 1880: FO 424/106. 1880: 165.

⁸⁹ McDowall 2021: 69.

Conclusions

In the second half of the 19th century, the crisis situation that emerged in the eastern provinces of the Ottoman Empire—characterized by periodic droughts, crop failures, and famines—was driven by global climatic fluctuations occurring during the terminal phase of the LIA. Although these changes impacted diverse societies worldwide, they manifested with particular severity in the Ottoman East due to the complex topography, continental climate, and structural deficiencies in administration and the economy. British consular reports and travel accounts highlight the manifestations of the climatic crisis on the ecological environment of the Ottoman Empire's eastern provinces: prolonged and harsh winters, an absence of precipitation from spring to autumn, famine, and subsistence hardships. These factors affected the local populations in diverse ways depending on their mode of life. Consequently, the climatic and food crises served as an additional factor driving the accumulation of discontent and the escalation of social tensions among the various communities.

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