

The Quarterly Journal of Iranian Islamic Period History, Volume 12, Issue 27,
Summer 00/21, Pages 79-105

Received Date: 99/11/01 (2021/01/20) Accepted Date: 1400/02/27(2021/05/17)

*The Three Famines and the Makings of a Malthusian
Catastrophe in Iran (1869-1944)*

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Abstract

Iran suffered three catastrophic famines in the seventy-five-year span of 1869 to 1944. The population in 1945 was unchanged from that of 1840, a classic case of a Malthusian catastrophe. This article aims to assess the impact of the famines on Iran's population level. It is first shown that the human losses in the Great Famine of 1869-1873 have been vastly understated in much of the literature. Two-thirds of the population was lost. Barely had Iran recovered its 1869 population when the Great Famine of 1917-1919 in World War I had carried off nearly half of the population. Finally, World War II and the resulting 1942-1944 famine and typhus epidemic had claimed a quarter of the population and again restored the 1840 population level. Only after 1945 was Iran able to shake off the Malthusian trap into which it had fallen for more than a century.

Keywords: Famines, Starvation, Disease, Population Loss, Malthusian Catastrophe.

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Introduction

Iran's population in 1944 was practically unchanged from that reported in 1841, a result of three catastrophic famines during 1869 through 1944. First, the Great Famine of 1869-1873, in which 10 to 12 million people were lost, was possibly the greatest calamity in the recorded history of modern Iran. Forty-five years later, as the population had about recovered to its 1869 level, the Malthusian *positive checks*, war and famine, as predicted, had restored the *equilibrium* level. The World War I famine of 1917-1919 and the associated epidemics resulted in 8 to 10 million victims. This was followed by the World War II famine and typhus epidemic of 1942-1944 that carried off an additional 3 to 4 million. The direct population loss from the three famines was in the order of 25 million. The long-term population loss to the country, however, was considerably greater.

The nineteenth century sources notwithstanding, the entire Western literature on 1869-1873 famine until recently consisted of only five scholarly articles (Okazaki, 1986: 183-92; Melville, 1988: 309-25; Seyf, 2010: 289-306; Gilbar, 1976: 125-56; Kazemi, 2016: 335-58). Only recently have two short monographs appeared on the subject (Majd, 2018; Gurney and Safatgol, 2013). Although there is no mention of the 1869-1873 famine in Mike Davis' 2002 book, it is clear that it was a precursor of the devastating famines that ravaged much of Asia and Africa in the latter part of the nineteenth century. In particular, the Iran famine was comparable to the 1876-1879 famine in North China, deemed by Davis as possibly "the worst ever to afflict the human species." (Davis, 2002: 1). Unquestionably, the 1869-1873 famine was one of the deadliest disasters of the nineteenth century. Similarly, the World War I and World War II famines in Iran were major calamities which until recently had remained unknown and unexplored.

This article provides a documentary and statistical account of the three famines and how they impacted Iran's demographic developments. As the findings on the 1869-1873 famine in this article differ greatly from the results found in much of the literature, an array of primary micro and macro level documentation is provided in support of the new findings. It is shown that each time Iran was on the verge of recovering its 1869 population, it was faced with a new famine that had wiped out

the gains. Only after 1945 was Iran finally able to shake off the century long Malthusian trap.

The Great Famine of 1869-1873: Some Mortality Statistics

An account of the famine and its terrible toll as it spread from the southern, central, and eastern parts (the main opium growing regions) to the rest of Iran is given in Mohammad Gholi Majd (2018). Beginning with Tehran, a sample of the numbers on mortality in urban and rural areas is provided. Arriving in Tehran in February 1866, August H. Mounsey stated its population at 120,000 (Mounsey, 1872: 97). The 1873 population of Tehran is given at 70,000 by Gad G. Gilbar (Gilbar, 1976: 150). In a note dated February 4, 1872, Āqā Bozorg Birjandī, a resident of Tehran, stated the following: “In Tehran 200 persons die of famine and cold each day, and men and women fall in the streets like autumn leaves.” (Gurney and Safatgol, 2013: 151). Henry Walter Bellew of the Goldsmid Persian Boundary Commission who had arrived in Tehran in June of 1872, states the following: “The official returns for the past week represent the daily mortality within the city walls at two hundred souls, almost wholly victims to starvation and typhoid fever.” (Bellew, 1874: 412). Given that the Iranian government, through its Minister in London and his numerous letters to the editor of the *Times*, had long denied the existence of famine, calling the food shortages seasonal and localized, there is little doubt that the reported daily toll understated the actual. A letter dated May 27, 1872, from American missionary Reverend G. W. Coan of Urmia to Reverend William Rankin in New York, stated: “A correspondent in Tehran writes us that it has been computed that 106,000 have died in that city from famine, and disease consequent.” (PCUSA, letter no. 82). In a letter to Reverend Benjamin Labaree, another American missionary in Urmia, dated July 14, 1872, John Tyler, a British resident of Tehran, wrote: “It is now computed that 100,000 have died in Tehran alone during the 8 or 9 months.” (PCUSA, letter no. 85.). As the dates indicate, the source of Coan’s information was not John Tyler. An Iranian observer, Hāji Esmā‘il Šīrāzī, stated that in the year 1288 Lunar (1871-1872), 130,000 perished in Tehran (Gurney and Safatgol, 2013:150). The death statistics for Tehran are consistent. While Tyler gave 100,000 dead during eight to nine months, Hāji Esmā‘il Šīrāzī stated that 130,000 perished in one

year. As observed repeatedly, the discrepancy between the mortality figures and the decline in population is explained by the fact that many of the victims were rural migrants who had come into the cities and whose death could not be captured by comparing population figures at two different dates.

Dubbed “the New York of Persia” by American missionaries, Tabrīz was by far Iran’s largest city and the hub of its trade with Europe and a center of industry and agriculture. Its 1865 population would have exceeded 250,000. An indication of the death toll is given in a letter dated August 15, 1871, from Reverend Coan in Urmia to Reverend David Irving in New York: “This week’s mail from Tabrīz reported the death rate in that city at from 300 to 600 daily.” (PCUSA, letter no. 42). The population of Tabrīz is reported at 200,000 in 1884 by Reverend James Bassett who states that its prefamine population was much larger: “The city has been much larger and more populous than it now is.” (Bassett, 1886: 65). Its 1872 population is given at 120,000 by Mounsey (Mounsey, 1872: 97). Max von Thielmann, an Austrian diplomat posted in Russia had visited Tabrīz in October 1873: “The area of the city cannot be much less than that of St. Petersburg or of Moscow, although the population is only estimated at 100,000 souls.... The misery inflicted during the last famine appears to have been fearful.” (von Thielmann, 1875: Vol.2, 55).¹ Elsewhere he adds that “the late famine had caused sad havoc in the country, especially in this neighborhood; newly built cemeteries gave evidence of the multitude of victims.” (von Thielmann, 1875: Vol. 2, 45). Given that the famine had lasted until the summer of 1873, it is not surprising that von Thielmann’s population figure is lower than Mounsey’s. The population of Tabrīz had fallen by at least 150,000, and the number of victims would have been considerably greater.

In June 1872, Bassett, an American missionary, had traveled from Tabrīz to Tehran via Zanjān. He describes southeast of Tabrīz: “Four miles beyond Turkmānčāy, we passed the ruins of a village which a few months previously contained one hundred families. It was now reduced to fifteen households. Men, women and children were met on the way slowly travelling westward. Many sat by the way eating herbs and roots

1. He adds: “I was struck by the small number of dogs in the street, for Eastern towns generally swarm with them. The famine has probably made a great clearance amongst them” (vol. 2, 55).

which they had dug up.” He calls Miāneh “a miserable collection of about one thousand hovels,” and adds: “The village was filled during the winter with refugees from the famine, many of whom perished. I was told that the dead lay in the streets, and were eaten by the dogs.” On the village of Serčam: “The forty families, inhabitants of this village, have been reduced to twenty by the famine.” (Bassett, 1886: 70-74). In the town of Zanjān (population 24,000 in 1918), Bassett indicates that by September 1871 the burial grounds in the city had no more room and that that during October 1871 to June 1872, 10,500 corpses had passed through the two city gates for burial outside the city walls (Bassett, 1886: 76-77).

Mašhad was the third largest city. Quoting the *Bombay Gazette* of October 28, 1871, the *New York Times* of December 4, 1871, writes: “At Meschid, the capital of the province of Khorasan and a town of 120,000 inhabitants, 80,000 people are said, in letters received in India up to date of August 7, to have died from starvation, 20,000 have fled the city, and those who remained have for the most part been seized and carried away into slavery by Afghan hordes.” Similarly, in a note dated February 4, 1872, Āqā Bozorg Bīrjandī, a native of Khorasan, declared: “This time last year this scarcity and high prices prevailed in Holy Mašhad and 100,000 died. This year the dearth of money and high prices prevail in the entire country.” (Gurney and Safatgol, 2013: 174-75). In a report to Nāṣer-al-Din Shah which appears to be from the fall of 1872, Hesām-al-Saltāna, the Governor of Khorasan and the Shah’s uncle, stated that 80% of the houses in Mašhad were unoccupied, their inhabitants having died or left the city (Gurney and Safatgol, 2013: 174-75). ‘Alī Akbar Feyż, an ecclesiastic functionary who provided a detailed account of the famine in Qom, wrote: “Hāji ‘Alī Aşgar Tājer, son of the well-known Tehran merchant, the late Hāji Qāsem Tājer, who until recently had resided in Mašhad, said that His Excellency Hesām-al-Saltāna had stated that in the plains (*safehāt*) of Khorasan 200,000 had perished to hunger. In the town of Tus, 50,000, residents and migrants, had died of hunger.” (Gurney and Safatgol, 2013: 130).¹

Bellew documents the devastation he saw in the District of Qāyen, south of Mašhad: “The population of the district was formerly reckoned

1. Tus is northwest of Mašhad.

at thirty thousand families, but with losses by death and emigration during the famine, it does not now contain half that number." (Bellew, 1874: 302). In the town of Qāyen, Bellew reports, of the nearly 10,000 houses, only 1,500 were inhabited (Bellew, 1874: 320). Those that remained occupied were scantily inhabited. Euan Smith, another member of the Goldsmid Commission, reported that Qāyen "now contains only about 2,500 inhabitants: and it was melancholiest to see the hundreds of empty houses and deserted gardens that met us at every turn." (St. John et al., 1876, Vol. 1, 341). Smith's report on Torbat-e Ḥaydariya, south-east of Mašhad: "Before the disastrous famine, Torbat could boast 1,500 families; there are now not over 200." (St. John et al., 1876, Vol. 1, 353). The town had lost at least 87% of its inhabitants. Smith on the town of Sabzavār, west of Mašhad: "Sabzavar was once a very extensive city.... At present it only contains 3,000 houses with about 10,000 inhabitants, out of 9,000 houses and 30,000 inhabitants before the famine.... The bazaars had ample space for 2,000 shops, but only 200 were occupied when we visited the city." (St. John et al., 1876: Vol. 1, 372).

Bellew and Smith also document the death and suffering that they witnessed in the villages of Khorasan. On April 14, 1872, Bellew and his party had passed through the village of Kalāt on the road to Mašhad whose population, judging from the number of houses, had fallen from at least 1,200 to a mere eighty. Bellew writes:

The alarm produced by our sudden appearance had brought out the whole population to the hillside, and at a rough guess did not exceed eighty men and women, and not a single child was seen amongst them. On resuming our march we passed through the village. It contains about two hundred and fifty houses, but most of them are untenanted and falling to decay. The people were miserably poor and dejected, and looked very sickly.... I may here state in anticipation, that in all our march from Qāyen to the Persian capital we hardly anywhere saw infants or very young children. They had nearly all died in the famine.... We passed through village after village, each almost concealed from view in the untrimmed foliage of its gardens, only to see repetitions of misery, melancholy and despair. The suffering produced by this famine baffles description, and exceeds our untutored conceptions (Bellew, 1874: 336-37).

Next, on the district of Tabas, Bellew notes: “The whole district has suffered fearfully during the famine.... Some of the smaller hamlets have been entirely depopulated, and many villages have been decimated. We heard of one village in the Tun *buluk* (district), in which not a man or child was left, and only five old women remain.... It is not quite easy to understand the cause of the famine in these parts, for the villages are mostly well watered and their fields fertile.” (Bellew, 1874: 339-40). Another village: “Yunasi is a collection of about two hundred and fifty houses ... marking the boundary between the districts of Tabbas and Turbat Hydari.... The place has been almost depopulated by the famine.” (Bellew, 1874: 341-42). The village of Jāy-qarak, twenty miles west of Mašhad is described by Smith: “In its surroundings and construction it much resembles a hamlet in Switzerland.... The *Kadkhuda* of the place informed us that ... 400 out of 700 families had perished during the recent famine.” (St. John et al., 1876: Vol. 1, 366-67).

William Brittlebank had traveled from Būšehr on the Persian Gulf to Anzalī on the Caspian Sea during March to May 1872, traversing the entire country at the height of the famine. Passing through Shiraz, Isfahan, Qom, and Tehran, he describes the horrors he witnessed along his route (Brittlebank, 1873). However, his account, similar to that of C. J. Wills a decade later, contains few statistics. Fortunately others have compensated. The population of Qom and district (*buluk*) is reported at 51,000 in 1868. The area’s population is reported at 25,000 in 1874, a decline of 26,000. Feyż, however, also reports that there had been at least 40,000 burials in Qom and vicinity as of March 1872 (Gurney and Safatgol, 2013: 133-34). The discrepancy is due to the fact that many of the victims were rural migrants. Feyż reports that the population of the village of Bidhend had fallen from 1,500 in 1870 to 200 in 1872, “and most of the rest died of hunger.” The population of the village of Vašnāveh was 1,204 before the famine: “By the end of the famine only 20 remained. The rest died of hunger.” (Gurney and Safatgol, 2013: 138). The similarities with the case of Kalāt reported by Bellew are noteworthy.

Isfahan was the fourth largest city. The *Times* of November 23, 1871, contains a letter from Reverend Robert Bruce, British missionary in Isfahan, to the former chief of the British Telegraph Department in Iran,

Major J. U. Bateman-Champain: “One-third of the Mahomedan inhabitants of Ispahan have died. In some places children have been eaten; men and women lie dying in the streets, while dead bodies remain unburied in the houses and roads, often torn and tangled by beasts of prey.” Given that the worst was yet to come, it is not surprising that Prince Zell-al-soltān, governor of Isfahan (1874-1907), stated in his memoires that 100,000 had died in Isfahan due to starvation and disease (Melville, 1988 :315). The population of the town of K̄vānsār, Isfahan Province, according to a local resident, had fallen from 30,000 to under 10,000 (Gurney and Safatgol, 2013: 146).¹ Edward Stack who had passed through K̄vānsār in 1882, wrote: “Khonsar ought to have a population of five thousand, but perhaps it has not half that number now.... I saw many excellent houses of two and three stories deserted and falling to ruin.” (Stack, 1882: Vol. 2, 112-13). Similarly, “Gulpaigan may have had 10,000 inhabitants, but the late famine has laid half of it in ruins, and a ride through the streets is not so cheerful as it might be.” (Stack, 1882: Vol. 2, 116).

In June 1872, Bellew, on his return journey to India, had traveled from Tehran via Hamadān to Kermānshāh and the Iraq border. His observation on Robot-Karim, 25 miles southwest of Tehran, where his party spent the night in some of the abandoned houses: “The population of the village was formerly reckoned at a thousand families. It does not now contain a fourth of that number, and a very wretched, sickly-looking set they are, with hardly a child to be found amongst them. And so it was with every place we came to on all the journey down to Kirmanshah.” (Bellew, 1874: 415). The next day he had come across the ruins of a caravansary (place of rest) that dated to Shah ‘Abbās the Great: “In the interior we found portions of several human skeletons. To two of them were still adhering the clothes they wore during life, and they told the tale of the dead—poor peasants cut short on their way to the capital in search of food.” (Bellew, 1874: 418). Next, the village of Kānābād: “This is a poor little village, and has only fifteen families left of a population of sixty before the famine.” (Bellew, 1874: 419). Twenty miles on to the village of Kuškak: “It is a poor village and only retains twenty of the fifty families that formed its population.” (Bellew, 1874: 420). On

1. Local resident

famine losses in Hamadān: “The population of the city was reckoned at fifty thousand before the famine, and now is estimated at half that number, but I don’t think there can be so many as fifteen thousand.” (Bellew, 1874: 428). In July 1872, Bassett had also traveled from Tehran to Hamadān. Southwest of Tehran, beyond Robāt-Karim, lay the village of Kuškak: “Of the sixty families that composed this village two years ago, only fourteen remained. The famine had dispersed or destroyed the forty-six households.” (Bassett, 1886: 123). He documents what he saw near the town of Malāyer: “In one village the skulls and bones of human beings lay in the ruins of deserted huts.” (Bassett, 1886: 127). Citing H. L. Rabino, Seyf states that the town of Kangāvar, located between Hamadān and Kermānshāh contained 2,500 families before the famine, and in 1873 only 1,000 remained. By 1902, the number of families had only recovered to 1,800. In the nearby town of Şahna, of the 500 families, only one hundred remained in 1873 (Seyf, 2010: 298).

Finally, a glance at famine in the south of Iran. An official of the Telegraph Department, R. M. Smith, had traveled from Būšehr to Isfahan in April 1871. In his report of May 3, 1871, to Charles Alison, the British Minister in Tehran, he stated that “all roads were strewn with dead bodies.... Two-thirds of Kazerun’s inhabitants either died of recurring food shortages or left the city.” (Okazaki, 1986: 184). Quoting the British political resident in Būšehr, the *Times* of October 26, 1871 writes:

At Bushire, where relief is most easily afforded, and where much has been done under the auspices of the British Resident, deaths by starvation are of daily occurrence. It is reported that the population of Kazeroun, lately estimated at 10,000, has fallen during these days of visitation to one-fifth of that last year: that in round numbers some 4,000 have died of famine since this time last year, and a like number have fled the place. A similar condition of affairs exists at Shiraz, Koomesheh, and more or less over the large provinces of Kirman and Khorasan, while even in the less afflicted northern districts the most lamentable distress prevails.

Contemporary Statements on the Number of Victims

The estimates of the number of victims by the members of the Persian

Boundary Commission ranged from 200,000 to at least 1.5 million. In an 1873 article, Sir Frederick J. Goldsmid, head of the Boundary Commission, estimated that 200,000 to 300,000 Iranians perished (Goldsmid, 1873: 65-83). Taking issue with his former boss, Oliver B. St. John had raised it to 500,000: “I do not think that the actual death from disease and starvation can have exceeded half a million, though from the disproportionate mortality of women and children, the ultimate loss to the country will be far higher.” (St. John et al., 1876: Vol. 1, 98). Bellew states that because of the famine “the country has lost a million and a half at least of its population, and cannot regain its former prosperity for a full generation to come.” (Bellew, 1874: 364). Elsewhere he states that the government “has so far ignored the existence of a calamity that has well-neigh depopulated the country.” (Bellew, 1874: 412).¹ In a letter to Reverend Benjamin Labaree in Urmia, dated July 14, 1872, John Tyler in Tehran wrote: “It is computed that two million have died since the commencement (of the famine).” (PCUSA, letter no. 85).

In a letter dated May 27, 1872, from Reverend Coan of Urmia, to Reverend William Rankin in New York, the following is stated: “The famine rages still, and accounts from Hamadān represent a fearful state of things. Cannibalism is awfully prevalent. Little children are decoyed on side, killed and eaten ... The writer says that it is probable that about 3,000,000 of the inhabitants of Persia have perished by famine.” (PCUSA, letter no. 82). On May 30, 1872, Reverend Coan had written to Reverend Henry Jones in London in which he had given the same information. The letter had been forwarded to the *Times* which had published it in its issue of July 18, 1872. The same figure appeared in the *New York Times* of October 11, 1872.² Finally, by December 1872, the estimated number of casualties had been raised to 3.5 million. Reverend William L. Whipple in Urmia wrote to Reverend David Irving in New York on December 30, 1872: “This terrible famine which has swept over

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1. The Persian government for two years had denied the existence of famine, resulting in some interesting and acrimonious exchange of letters in the *Times* between the Persian Minister in London and the members of the Persian Famine Relief Committee (Majd, *Victorian Holocaust*, 15-23).
 2. The *New York Times*, October 11, 1872, noted on page 1, under the heading “Foreign Telegram,” titled, “Fearful Ravages of the Famine in Persia.” The telegram notes: “Persia. Three Millions of People Perish by Famine,” the text reads: “Constantinople, Oct. 10—It is estimated that 3,000,000 inhabitants have died from the famine in Persia.”

this land with such fearful loss of life (it is estimated that nearly three and a half million souls have perished either directly or indirectly), desolating whole cities and towns and causing so much suffering and misery." (PCUSA, letter no. 122). Sir Henry Rawlinson, who had spent many years in Iran (1833-1860) and much of it in the service of the Iranian government, had implied that at least 4 million had perished. As below discussed, he estimated the 1850 population at 10 million and that of 1873 at 6 million. Even assuming zero population growth during 1850-1868 (as Gilbar does), Rawlinson implies that at least 4 million were lost.

The *New York Times* of August 23, 1871, citing the *Levant Herald*, had stated that one-third of the population of Iran had perished. Given that the famine had lasted another two years, it is not surprising that Iranians portrayed a grimmer picture. Writing in 1874 and describing the famine in Yazd, Hāji Esmā‘il Šīrāzī makes the following statement: "In the three years of famine in Iran, it has been estimated and analyzed that ten korour of God's children died of hunger in all of Iran. I speak the truth, as God is my witness." (Gurney and Safatgol, 2013: 152). As a *korūr* equals 500,000, he implies that 5 million perished. Seyyed Ebrāhim Zayn-al-Ābedin Eṣfahānī's note is dated May 13, 1873 (16 Rabi-ol-Aval 1290): "I am in a state of lethargy and deep sadness from having witnessed the recent famine and general calamity in which half of the population of the country died of hunger. Of the remaining half, one-half—that is a quarter of the population—went to Europe, England, Rome, Russia, and Afghanistan and Turkoman areas. Many died of cholera and worst still, the plague. In Tehran, the seat of the mighty monarchy, dead bodies were stacked in the streets and the bazaar. In the cemeteries outside the town, bodies were piled high." (Gurney and Safatgol, 2013: 155-56). The author's inference is that the postfamine population was merely one-quarter of that of the prefamine population.

Writing in the 1920s about the famine which he had witnessed as a youth in a village near Zanjān fifty years earlier, Shaikh Ebrāhīm Zanjāni (1853-1934), a radical Majlis deputy during the Constitutional Revolution, wrote: "Without exaggeration, half of the population of Iran died because of starvation during the famine of 1288 (1871-1872), especially those unfortunate cultivators and farm workers who were

cheated out of their grain by the powerful and charlatans. It was these unfortunates who died." He also adds: "What I witnessed during the famine of 1288 I saw again in the year 1336 (1917-1918) in Tehran. Often those on the verge of death by hunger experienced bleeding from the mouth and nose, and the suffering of those unfortunates at the end of life is beyond imagination. In both famines, where hunger left off, cholera and disease took over." (Majd, 2018: 93).

The Famine's Toll

In order to derive a more definitive estimate of the number of victims, it is necessary to compare the pre- and postfamine population. The 1841 population of Iran was reported to be 11 million by J. R. McCulloch, considered the intellectual heir to the British political economist, David Ricardo (1772-1823) (Seyf, 2009: 447-60). On the population of Iran in 1865, the following is stated by John Ussher: "The population is supposed to reach eight millions, the Persians themselves asserting, however, that there are double that number of inhabitants in the empire." (Ussher, 1865: 643). Given that the 1850 population was given at 10 million by Rawlinson, and in the absence of a major famine in the interim, the 8 million is not plausible. The Iranians believed the population to be 16 million in 1865. Second, the latter is consistent with McCulloch figure and indicates a population growth rate of 1.5% during 1841-1865. And third, as below described, the gap between the foreign estimates of the population and that of the Iranians was again observed in 1910 when Iranians expressed the opinion that the actual population was greater than the figures given by resident foreigners. Assuming a population of 16 million in 1865, and growing at 1.5%, the population stood at 17 million in 1869, and should have reached 18 million in 1873 in the absence of famine.

Contemporary British opinion on the postfamine population ranged from 10 to under 4 million. St. John stated the following: "The population of Persia is variously estimated at from ten to four millions.... I myself am inclined to put it at the higher figure." (St. John et al., 1876: Vol. 1, 98). Other sources put it much lower. The lowest estimate of the postfamine population is under 4 million found in the *Times* of October 26, 1871, given in the context of British famine relief. Writing in May 1872, Mounsey makes the following statement: "Now a

gentleman, who has long been resident in the country and has traversed it in every direction, states that the total number of inhabitants falls short of 5,000,000 souls.” (Mounsey, 1872: 96). Mounsey’s source was not Rawlinson because in 1873 Rawlinson had stated the population at 6 million (Seyf, 2009: 296). Very likely, the source was Major J. U. Bateman-Champain, former head of the British Telegraph Department in Iran. As reported by Wills, on January 15, 1883, Bateman-Champain had given a paper at the Royal Geographic Society in London in which he gave the population at 6 million (Wills, 1883: 417). Both Wills and Bateman-Champain had worked for the Telegraph Department, and, the latter figure is consistent with an estimate of under 5 million in 1872. The general British consensus is that postfamine population was 5 to 6 million. Moreover, given that the population in 1900 is reported at 10 to 12 million, it is reasonable to conclude that the postfamine population in 1873 could not have been much more than 6 million, and Rawlinson’s 1873 estimate of 6 million is reasonable.

Comparing the prefamine population of 17 million in 1869 with a postfamine population of 6 million indicates that, conservatively, 10 to 12 million, or about two-thirds of the population had perished or emigrated. Moreover, this conclusion is not only supported by the micro evidence given, but also by the proportion of empty and abandoned houses noted by contemporary observers. C. M. MacGregor had visited Iran in 1875, some two years after the famine ended. Passing through Kāzerun, he reports that of the 2,700 houses in the town, only 1,000 (37%) were occupied. MacGregor also stated that this 37% occupancy rate “is about the usual proportion throughout Persia.” (Seyf, 2009: 297). Given that over 60% of the houses were empty of inhabitants, it is safe to conclude that at least two-thirds of the population, or 10 to 12 million was lost during the five years of famine. The conclusion is also consistent with the above noted statements by Shaikh Ebrāhīm Zanjāni who stated that at least half of the population was lost and that of Seyyed Ebrāhīm Zayn-al-‘Ābedīn Eṣfahānī who stated three-quarters died or emigrated, as well as the observation by Bellew that the country had been “well-neigh depopulated” by famine. Russia and Turkey had imposed a strict quarantine from the summer of 1871, and effectively closed their borders to Iranians. Even Zoroastrians fleeing to India had been unable to board ships bound for Bombay until they had been

quarantined. Consequently, the majority of the missing 10 to 12 million had perished.

Given that Gilbar's figure of 1.5 million victims has often been cited, his assumptions and analysis merit scrutiny. He summarizes his conclusions:

In 1850 the population of Persia would have numbered 9 to 10 million people. In the 1850's and 1860's the population increase would have been limited because of the occurrence of severe famine and cholera, and by 1868 it would probably have been no more than 9.5 to 10 million. Of these only 8 to 8.5 million would have survived in 1873, after the years of the great famine. For the next twenty-five odd years, until the late 1890's, the population would have grown at an average annual rate of 0.5 to 1.0 per cent, and by the turn of the century the population would have been about 10 million (Gilbar, 1976: 144).

He also states: "Estimates of the number of people who died of hunger and cholera range from half a million souls to over three million. A check of the many sources which gave data on the effects of the famine and cholera on the nomadic as well as the settled population in various regions suggest that the number of deaths was about one and a half million souls." (Gilbar, 1976: 143-44). Contemporary estimates of victims, as noted, ranged from 200,000 to over 5 million.

As to his estimate of the prefamine population, it is obvious that he has taken Rawlinson's estimate of 10 million in 1850 and assumed zero population growth for the next eighteen years. To justify this assumption, he states that "Persians, apparently officials of the fiscal administration, put at the *lowest* estimate 10 million for the late 1860s." (Gilbar, 1976: 126). He does not provide the higher estimates. Other Persians, as reported by Ussher, had placed the population at 16 million in 1865 which was at least consistent with the figure of 11 million given by McCulloch in 1841.

To estimate the postfamine population in 1873, Gilbar uses Julian Bharier's 1968 results and methods (Bharier, 1968: 273-79). Taking Bharier's population estimate of 9.86 million for 1900, which he notes is similar to Albert Houtum-Schindler's estimate of 9.00 to 9.25 million, Gilbar applies retrogression using three alternative annual growth rates

of 0.50, 0.75, and 1.0 percent. He is reassured by the fact that his postfamine population estimate of 8 to 8.5 million is included in the retrogression results (Gilbar, 1976: 130). Finally, based on Bharier's estimate of 9.86 million, Gilbar claims that Iran had recovered its prefamine population by 1900 (Gilbar, 1976: 144). As below discussed, there are serious problems with Bharier's assumptions and results. Moreover, not until 1914 had Iran recovered its 1869 population, only to be plunged into the World War I famine that carried off 8 to 10 million, or as much as half of its population.

World War I Famine

The population count in the first census, conducted in November 1956, was 18.9 million. Adjusting by 7.5% to compensate for a suspected undercount, Bharier establishes a base of 20.4 million from which to calculate expected yearly population levels back to 1900 by means of retrogression. Following the approach of Mehdi Amani of Tehran University, he identifies three distinct periods with different growth rates. For 1946-1956, he adopts Amani's growth rate of 2.5%; for 1926-1945, he similarly adopts Amani's estimate of 1.5%. But in contrast, for 1900-1925 he disregards Amani's figure of 0.20% and adopts Houtum-Schindler's 1875-1910 assumed growth rate of 0.75%. Using 20.4 million for 1956 and the various time spans and growth rates, he estimates the annual population levels back to 1900. He declares his results "to be the nearest one can get to the truth." (Bharier, 1968: 275). For our purposes, the following dates and population estimates are of interest: 1900, 9.86 million; 1910, 10.58 million; 1920, 11.37 million; 1941, 14.76 million; and 1945, 15.66 million.

Bharier's rationale for extending Houtum-Schindler's 0.75% growth estimate to 1900-1925 is problematic. He first extends Houtum-Schindler's 0.75% for 1875-1910 to 1910-1919 on the basis of a confidential Foreign Office handbook. He next extends the 0.75% to cover 1920-1925 as well because "these were years of civil war, (and) famine." (Bharier, 1968: 277). But 1920-1925 were not years of civil war and famine. The suppression of localized uprisings and mutinies in Gilān, Azerbaijan, and Khorasan, during 1920-1921, the actions taken against the Kurdish and Lur tribes, or even the so-called military campaign against the Sheikh of Mohammara and the "liberation of

Kuzestān” in 1924, could hardly be considered civil war (Majd, 2008: 126-29, 193-216). It was a reassertion of central government authority after the chaos of World War I. As to famine, a drought in 1925 had caused some anxiety at possible repetition of World War I famine, prompting the American Chargé d’Affaires Wallace Murray to write: “Persia would appear at least threatened with the situation which arose in 1917-18 when, due to the drought and the destruction of her crops by the invading armies, she suffered a famine that carried off, so it is estimated, a third of her population.” (NARA, RG59, State Department Decimal Files, 891.5018/-, June 17, 1925). But it soon became clear that the anxiety was unwarranted and the apparent shortages were contrived and part Reza Khan Pahlavi’s maneuvers to overthrow the Qajar monarchy. There had been disturbances in Tehran on September 23 and 24, 1925, but the “protests” had backfired and the new American Chargé d’Affaires Copely Amory reported that “during the second day of the disorders there was an ample supply of bread in the bakeries.” (NARA, RG59, State Department Decimal Files, 891.00/1362, September 24, 1925, and 891.00/1370, September 28, 1925). With prompt grain shipments from Azerbaijan, the shortage had ended. But the most glaring shortcoming of Bharier’s article is that it contains no reference or even a mention of the World War I and World War II famines. In this construct, population had grown steadily, wars, famines, and epidemics notwithstanding.

Houtum-Schindler’s estimate of the population in 1900 was 9.25 million and its proximity to Bharier’s 9.86 million, as noted, had reassured Gilbar to adopt the latter figure in his deliberations. In January 1900, the State Department had instructed the American Minister in Tehran, Herbert W. Bowen, to report on the population of the country. Bowen’s reply to John Hay, Secretary of State, is dated March 15, 1900, and reads in part: “Sir: I have the honor to acknowledge the receipt of your circular of the 20th of January, 1900, regarding census statistics in Persia, and in reply beg to state that hitherto no census of the population of Persia has been taken, consequently no authentic statistics exist on the subject. It appears, however, from the observations of travelers, surveyors, and others, whose estimates on the whole fairly agree, that the population at the present time is about twelve millions (12,000,000).” (NARA, M 223/9, Diplomatic Series No. 24, March 15, 1900). In

dismissing the figure, Gilbar claims that for the latter part of the nineteenth century only Houtum-Schindler was qualified “to make fairly reliable estimates.” (Gilbar, 1976: 127-28).¹ As the report clearly states, the 12 million was a consensus figure and not Bowen’s estimate. Moreover, it appears that Houtum-Schindler’s views were not widely shared at the time.

For the decade of 1910-1920, the population figures given in the American diplomatic archives greatly differ from those given in Bharier. In a report dated May 11, 1910, the American Minister, Charles Welles Russell, wrote: “The Persian authorities are engaged in taking the census of Teheran, a notice to us indicates. Our English clerk-interpreter ... estimates the population at 300,000 ... From another foreigner I get the estimate of between 350,000 to 400,000, based on the amount of bread consumed, the bakeries being more or less under government supervision. The Persians think the population of the country has been much understated, one intelligent acquaintance of mine putting it at 17,000,000. The clerk-interpreter (Mr. Tyler) puts it at about 13,000,000.” (NARA, RG59, State Department Decimal Files, 891.5011/-, May 11, 1910). In his 1912 book, W. Morgan Shuster, the former Chief of the Persian Treasury, states: “The population of Persia has been singularly misrepresented; an old so-called census of sixty years ago seems to be the basis of the low figures given in some books and generally accepted by outsiders. Certain that no census has been taken since then, but Europeans who are familiar with the situation estimate the population at from 13,000,000 to 15,000,000.” (Shuster, 1912: ix).² It is likely that Shuster had Houtum-Schindler in mind who had recently given the 1910 population at 10 million. After five years of residence and travel in Iran, the American Minister had also concluded that the population had been understated. In a report on Russo-Persian relations dated March 11, 1914, Russell wrote: “Persia is as large as Austria, France and Germany combined with a population of 20,000,000.” (NARA, RG59, State Department Decimal Files,

1. For the 1850s and 1860s, he states that only Sir Henry Rawlinson was qualified to provide useful estimates. He nevertheless dismisses Rawlinson’s 1873 population estimate of 6 million. Moreover, given that the Qajar period had lasted until October 1925, it is curious that Gilbar does not go beyond 1906, his article’s title notwithstanding.

2. It should also be noted that Gilbar has misrepresented Shuster’s population figure for 1910. He cites 13 million whereas Shuster gives 13 to 15 million.

761.91/48, March 11, 1914.). In another report dated June 14, 1914, Russell discusses the large and enthusiastic voter turnout for the recent parliamentary elections to the Third Majlis and refers “to the importance of the present revolutionary struggle of 20,000,000 Aryans in Persia.” (NARA, RG59, State Department Decimal Files, 891.00/828, June 14, 1914). These figures indicate that population growth rate during 1900-1910 was about 2% and growth had continued into the next decade, and that Houtum-Schindler’s estimate of 0.75% growth rate for 1900-1910, adopted by Bharier and extended to 1925, is neither accurate nor justified.

With 15 million inhabitants in 1910 and growing at 2% per year, Iran’s population should have been 18.3 million in 1920. At 17 million in 1910, it should have been 20.7 million in 1920. John L. Caldwell, American Minister in Iran during 1914-1921, reported the 1920 population at 10 million, and that of Tehran at 200,000 (NARA, RG59, State Department Decimal Files, 891.00/1157, April 10, 1920). General Sir Percy Sykes who spent many years in Iran, including his last posting during 1916-1920, also gave the 1920 population at 10 million (Sykes, 1921: Vol. 1, 13). Consequently, at least 8 to 10 million Iranian lives were lost to famine and disease during World War I.¹ Even taking Bharier’s 11.37 million for 1920, it would still indicate 7 million victims.

A revealing and significant indicator of the famine’s toll is the decline in the population of Tehran. As noted, based on daily bread consumption, its population was about 400,000 in 1910. Based on the number of votes cast in the elections of 1917, its population had surpassed 500,000, a figure that is also given in a report submitted to the League of Nations (NARA, RG59, State Department Decimal Files, 891.00/924, October 10, 1917, and 891.51/229, January 12, 1922). The population of Tehran had declined from 500,000 in 1917 to 200,000 in 1920, a 60% decline. The Tehran police had reported that 186,000 persons had died in the city of famine and disease during March 21, 1917, to March 20, 1918 (Majd, 2013: 48). And the famine had

1. For a documented account see Mohammad Gholi Majd, *The Great Famine & Genocide in Iran, 1917-1919*, 2nd ed. (Lanham, MD: University Press of America, 2013). Using American diplomatic and military records, British official sources, memoires of British officers who were in Iran during World War I, memoires and diaries of notable Iranians, and a wide array of Iranian newspaper reports, the book provides a detailed account of the famine and its causes.

continued for another year. Attention has been drawn to the similarities between the Iran and the Irish famine of 1845-1850 (Walsh, 2010: 4-7).

World War II Famine and Typhus Epidemic

Occupied Iran in World War II became the primary route for the transfer of Lend-Lease aid to the beleaguered Soviet Union, and the principal source of fuel to the Allied forces. The Allies also brought 300,000 Polish refugees fleeing the Soviet Union, most of whom spent the war years in Iran. Article 7 of the Anglo-Soviet-Iran Treaty of Alliance, signed on January 29, 1942, reads: “The Allied Powers jointly undertake to use their best endeavours to safeguard the economic existence of the Iranian people against the privations and difficulties arising as a result of the present war.” (NARA, RG59, State Department Decimal Files, 741.9111/36, January 24, 1942). Despite their treaty pledge, as the voluminous correspondence and documents in the American and British diplomatic and military records indicate, and the 1942-1944 famine and typhus epidemic attest, the Allies did not deliver food and medicine in sufficient quantity and in a timely manner. They provided just enough aid to enable the Iranian government to maintain relative tranquility essential to the uninterrupted flow of vital supplies to the Soviet Union, and to avoid a calamity on the scale of the 1917-1919 famine (Majd, 2016: 526-77, and 689-92).¹ Although relatively mild by the standards of the previous two famines, the 1942-1944 famine and typhus epidemic had nevertheless claimed 3 to 4 million, or a quarter of the population.

Although the famine had supposedly ended and the food situation had been stabilized in the fall of 1943, starvation and disease had continued unabated. In October 1943, General Patrick Hurley, an advisor to President Roosevelt, who had recently returned from Iran, reported that “He had seen corpses in the streets and had heard women and children crying over their dead.” (NARA, RG59, State Department Decimal Files, 123 Hurley, Patrick J./109 ½, October 5, 1943). Traveling from Tehran

1. The book is based on American diplomatic and military records. The American military records, that is those of the Military Intelligence Division (MID) are particularly useful because they contain many reports by the Office of Strategic Services (OSS), and reports prepared by the British intelligence agencies in Iran and Iraq and shared with the American military in Iran, including letters of private persons seized by the British censor.

to Būšehr in 1944, Ann K. S. Lambton of the British Legation “was struck by the poverty of the people on the road side and in general ... The older people were in many cases emaciated and the children with swollen bellies ... Eye diseases were common. Beggars were numerous. The people were dressed in rags; many of them almost naked.” (Jackson, 2018: 241). Similar observations were made by Alan Moorehead, an Australian journalist: “as a population, the people were in rags and the swollen bellies of the children I had seen in the villages showed how far famine and disease was spreading.” (Jackson, 2018: 241). A British general had reported widespread starvation among the peasantry (Jackson, 2018: 241). Observing the poor physical condition of the Iranian army recruits in 1944, the British Consul in Shiraz had stated that “the peasants have been underfed for years, and malaria is rampant.” (Jackson, 2018: 241). Similar observations had been made by Colonel H. Norman Schwarzkopf, American advisor to the Iranian Gendarmerie, in his report on his inspection trip to Kuzestān in October 1942 (NARA, RG59, Military Intelligence Division-Iran (MID-Iran), 4540, October 20, 1942). Little had changed in the interim, the supposed end of the famine notwithstanding.

While starvation remained widespread in 1944, it was typhus that had exacted a greater toll. An Office of Strategic Services (OSS) report dated October 28, 1943: “The first of the fall typhus cases have appeared in Tehran ... The outlook for the coming winter is not good ... Conditions causing last winter’s cases remain, such as undernourishment, crowded bread and kerosene lines, and inadequate clothing.” (NARA, Office of Strategic Services (OSS), Report 49320, October 28, 1943). An OSS report on conditions in Mašhad dated December 3, 1943: “According to the American Mission doctors in Meshed, there is a large increase this year in the number of sick people and several cases of typhus have already appeared.... The doctors anticipate a large number of deaths in the area this winter due to the fact that the large majority of the people cannot afford to buy either adequate food or clothing; nor can they buy fuel.” (NARA, RG59, MID-Iran, 5060, December 3, 1943). On the situation in Tabrīz dated February 8, 1944: “Typhus has been on the increase in Tabrīz ... the Director of Public Health’s telegram for money and drugs have been ignored; there is no hospital accommodation available.” (NARA, RG59, MID-Iran, 2400, February 8, 1944.). The

American Military Attaché, Tehran, March 7, 1944: “Statistics published by the Iranian Ministry of Public Health have shown a sharp rise in the number of typhus cases over the past few weeks.” (NARA, RG59, MID-Iran, 2400, March 7, 1944.). The American Chargé d’Affaires, Richard Ford, in a report titled “The Typhus Situation in Iran,” dated April 29, 1944: “While the number of cases reported during the winter just passed was not as large as the number reported during the preceding winter, there was still a considerable incidence of typhus, and outbreaks of moderate severity occurred in Tehran, Semnan, Damghan, Kashan, Resht, Pahlevi, Shiraz, Abadan, Sari, and in the area around Kerman.” (NARA, RG59, State Department Decimal Records, 158.919/40, April 29, 1944.). He had neglected to mention Mašhad, Tabrīz, Isfahan, Hamadān, and Sāveh, and areas that had been mentioned in other reports. The situation in the rural areas must have been dire.

The Toll in World War II

The 1925 population of Iran is given at 12 million and that of Tehran at 250,000 by A. C. Millspaugh, the American Administrator General of Finance, the same as it was in 1900 (NARA, RG59, State Department Decimal Files, 891.51/381, June 15, 1925; Millspaugh, 1926; Gilbar, 1976: 149).¹ Millspaugh’s 12 million population for 1925 is close to 11.78 million given by Bharier for the same year. In fact, the population figures for 1925 to 1941 found in State Department records are very close to those given by Bharier. For instance, the 1930 population is given at 13 million by Charles C. Hart, the American Minister in Tehran (1929-1933), while that of Bharier is 12.59 million; Louis G. Dreyfus, Jr., American Minister (1940-1943) gives the 1941 population at 15 million, and Bharier gives 14.76 million. The population growth rate during 1925-1941 is indicated at 1.4% per year. Thereafter, the two diverge: while the 1945 population is estimated at 15.66 million by Bharier, the figure reported in American diplomatic and military records is 10 to 12 million.

The circumstance surrounding the discussion of Iran’s 1944 population is illuminating. Following long simmering Anglo-American tensions over the lamentable situation in Iran, in 1944 a dispute had

1. Gilbar gives the 1900 population of Tehran at 250,000.

arisen between the American and British officials in Tehran over Iran's sugar import quota. In a letter dated May 8, 1944, to Colonel D. R. Hobson, the Tehran representative of the Middle East Supply Center (MESC), the Cairo-based British agency tasked with determining wartime import quotas for the countries of the region under Allied occupation, and arranging for the delivery of all the supplies, the official in charge of Iran's food distribution and a person of long experience in Iran, A. C. Millspaugh, had strenuously objected to the sugar tonnage assigned to Iran. Specifically, Millspaugh stated that the MESC's assigned quota was based on a population of 10 million, whereas Iran's actual population was 12 million (NARA, RG59, State Department Decimal Files, 891.24/5-1044, May 10, 1944). Given that Millspaugh sought to maximize imports while MESC sought to minimize the same, it is safe to assume that the actual population in 1944 was at most 12 million.

At 12 million in 1925 and growing at 1.4% per year, Iran's population should have been 15.8 million in 1945. Compared to an actual population of 12 million, it follows that 3 to 4 million were lost in the 1942-1944 famine and typhus epidemic. Other countries in Asia, notably India, China, and Indo-China also experienced famine in World War II. Of these, the best known and most discussed in the literature is the 1942-1943 famine in Bengal in which 3 to 5 million perished (Mukerjee, 2010).¹ Although the two famines coincided and exacted a similar toll, India's population was 300 million while that of Iran was barely 15 million. Moreover, the Iran famine has been ignored by British historians of World War II. For instance, a much acclaimed 2012 book on the strategic role of food in World War II allocates much space to the Bengal and Indo-China famines, but does not even mention Iran. Lend-Lease food aid to the Soviet Union is discussed at length, but remarkably there is no mention of Iran, the principal route by which this food was

1. Another book quotes Winston Churchill as having said on numerous occasions that famine was an excellent way to "cull the surplus population of the coloured and inferior races" (Richard Toye, *Churchill's Empire: The World that Made Him and the World He Made* [New York: Henry Holt, 2010], quotation from review of the book by Johann Hari, "Not His Finest Hour: The Dark Side of Winston Churchill," *Independent*, October 28, 2010, <https://www.independent.co.uk/news/uk/politics/not-his-finest-hour-the-dark-side-of-winston-churchill-2118317.html>).

delivered (Collingham, 2012).¹

Conclusion

The combined population loss due to the three famines during 1869-1944 was 25 million. The long term population loss, however, was far greater. At 17 million in 1869 and growing at 1.5% annually, Iran's potential population in 2020 would be 160 million, nearly twice the actual population of 83 million. With zero population growth for 1840 to 1945, Iran was a classic case of a Malthusian catastrophe. Despite the heavy toll, only recently these famines have received some attention by historians. Only after World War II was Iran finally able to shake off the Malthusian trap into which it had fallen for more than a century. While Iran had no population growth for 1900-1945, in contrast it had rapid population growth during 1945-1990. The 1990 population was reported at 54.6 million, an average growth rate of 3.42% during 1945-1990. During 1976-1986, the decade of revolution and the Iran-Iraq war (1980-1988), population had increased by 16 million (Aghajanian, 1991: 703-15).²

1. Given that the author is well acquainted with the British diplomatic archives, and given the large amount of correspondence between the Foreign Office and the State Department over the food situation in Iran, it is difficult to believe that she remained unaware of the famine in Iran. Similarly, Jackson's 2018 book, *Persian Gulf Command*, makes no mention of famine in Iran during World War II.

2. The author notes that some of the increase was due to the influx of Afghan refugees in this period.

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