Mamluk Investment in Transjordan: a "Boom and Bust" Economy*

The fourteenth century witnessed a flurry of economic activity not only in Egypt but also in the most remote and previously neglected of the Mamluk provinces, such as Mamlakat Karak and the southern districts of Mamlakat Dimashq. This region, which constitutes today’s Hashemite Kingdom of Jordan, benefited from intense capital investment from Cairene sources, as well as an expansion of the local military and administrative apparatuses. From the reinstatement of al-Nāṣir Muḥammad to the sultanate in 1310 until the end of the century the agriculture of geographical Transjordan prospered. Yet, in spite of this prosperity and the obvious financial benefit gained by the Egyptian state from this region, large parts of the Transjordan were abandoned by the fifteenth century.

The handful of historians who have written on Mamluk Jordan and the much larger number of archaeologists working in the region’s “Middle Islamic” period have largely agreed on the factors behind this phenomenon.1 They regularly cite natural disasters (earthquakes, droughts, locust infestations, and floods), plague and other epidemics, currency devaluation and changing trade and transport routes, political factionalism in Cairo, and the region’s unruly bedouin, who are said to have been eager to devour villages once the garrisons protecting them pulled out, as creating the conditions for the economic collapse of the fifteenth century.2 They describe this collapse as total, affecting the entire region, and permanent, a financial,
political, and demographic ruin from which the region recovered only briefly in the sixteenth century. Their conclusions are based largely on contemporary Egyptian sources and interpretations of archaeological surveys in the region now twenty or more years old. They are regularly cited in both the historical and archaeological literature and have colored the way both groups of scholars “read” their respective sources.

The economic decline of Transjordan should be understood as part of the larger pattern of political, financial, social, and environmental decline of Greater Syria and the Mamluk empire as a whole. Its local conditions, however, must also be considered in any debate about the agricultural and demographic shifts of the late Mamluk period. Transjordan was unique in many respects. Outside of Kerak in the south (the nursery of sultans and a provincial capital) and the smaller administrative center of ‘Ajlūn to the north, it had no large or permanent official centers. Although the structure of Mamluk administration throughout Syria was irregular, the Transjordan seemed to have been particularly susceptible to shifts in district capitals, fluid administrative borders, and frequent changes in the ranks of its local governors, phenomena perhaps reflecting the state’s precarious relationship with the region’s large bedouin population. Moreover, investment by the state and state officials had an ambiguous effect on the fortunes of this region. While the location of the hajj and caravan routes through its interior certainly benefited Jordan, the plantation-style development of the Ghôr (Jordan Valley) for growing and processing cane sugar and the conversion of some of the best farmland in the well-watered northern highlands and central plains to vast, grain-producing iqṭā’āt may have contributed to uneven development of the region, favoring particular districts over others. In addition, much of this land was made waqf for institutions outside of Jordan. Many of these endowments, and the farms that supported them, survived well into the Ottoman period. This was not necessarily the case with the agricultural properties in the Ghôr, a large portion of which belonged to the sultan as part of his personal estate (khāṣṣ). In the absence of a strong, centralized government, irrigation canals fell into disrepair, there was no longer any direct supervision of sugar manufacturing and transport, and many industries were abandoned, to be replaced by new agricultural projects.

A general over-reliance on written sources from Egypt has obscured many of

4See the discussion of the Ottoman tax registers for northern Jordan below.
5In his archaeological survey of the northern Jordan Valley, Kareem began to document the rise and fall of the local sugar industry through mill sites, storage facilities, canals, and road systems (Kareem, Settlement Patterns in the Jordan Valley, 9 ff).
these developments. What was true for Egypt was not necessarily true for the Transjordan, as a reading of Syrian sources seems to indicate. Among the chronicles of the period, those of Ibn Qaḍī Shuhbah (who died in 1448) and Baybars al-Dawādār (Zubdat al-Fikrah fi Tārīkh al-Hijrah) are illustrative of the kind of data available on local agriculture. Ibn Qaḍī Shuhbah’s Tārīkh includes regular excerpts of letters exchanged between this judge and his colleagues posted in other cities throughout Syria. These letters often discuss how crops are doing that year in villages under the judges’ jurisdictions, occasionally mention the prices of agricultural goods, and lament the cold spells and floods that have ruined local harvests. Significant in this regard are passages describing farms in northern (the village of Hibrās) and central (the village of Ḥisbān) Jordan. The Mamluk amir Baybars al-Dawādār served as the governor (nā’ib) of Kerak from 1286 to 1291. While this source is primarily concerned with political events and military campaigns, the author makes the occasional reference to towns and villages in southern and central Transjordan and the road networks that connect them. The Syrian geographies of the period are also a rich source of information about the location of towns and villages, the topography of the region, water resources, and agricultural specialization. Most significant in this regard are Al-Aʿlāq al-Khatḥarah of Ibn Shaddād (d. 1285) and Nukhbat al-Dahr fi ‘Ajāʿib al-Barr wa-al-Bahr of al-Dimashqī (d. 1327). In addition, the secretary’s manual of Amir Khalīl al-Zāhirī, who served at Kerak in 1437, not only describes the administrative structure of Greater Syria in his day but also describes, however irregularly, the topography, climate, and crops that characterize each region.

These sources are very general and treat the smaller villages of the region in only a cursory fashion. Mamluk waqfiyyāt and early Ottoman tax registers (defters) are much richer sources of information on demographics, the size of farms, ownership of rural estates, crops grown in the smallest of villages, and the revenues they yield. With one exception, the waqfiyyāt remain in manuscript form; several from the Dār al-Wathāʾiq and Wizarat al-Awqāf in Cairo are presented publicly for the first time in this study. Many of the Ottoman registers in Istanbul relevant to Jordan have been published and translated into Arabic by Muḥammad ‘Adnān

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8These sources, however, should be used with caution. They often combine data from much older sources with contemporary descriptions, not always specifying the time period to which they are referring. In order to locate rural sites from archival sources (such as waqfiyyāt), one should combine the medieval geographies with a reading of more modern travel accounts.
9They are listed at the end of this paper.
Bakhīṭ and charted into map form by the historical geographers Hütteroth and Abdulfattah. These are a gold mine of detailed data on Mamluk agriculture and rural endowment practices, because the Ottomans inherited the Mamluks’ local tax apparatus and applied it with little alteration in the sixteenth century and the registers make regular reference to awqāf in the region dating back to the Mamluk period. In the absence of any comparable Mamluk tax records, these sources are priceless for this kind of research. The picture of Jordanian agriculture that emerges from these documents is one of continuity. While it is clear that many villages were abandoned during the fifteenth century and that there was some level of decline in agriculture throughout Jordan, some areas, particularly the north, continued to be relatively productive throughout this period and grew rapidly in population in the first half of the sixteenth century.

In addition to the underutilization of these textual sources, there are archaeological reasons for reconsidering the phenomenon of decline in Mamluk Jordan. A refinement of ceramic chronologies during the last fifteen years has resulted in the identification of many Middle (or Ayyubid and Mamluk) and Late Islamic (Ottoman) occupational levels and sites that were mistakenly assigned to other time periods. This, combined with an intensified effort at regional surveys

10These are the registers published by Bakhīṭ and used for this study: three registers for Nāḥiyat Bānī Kinnānah (Tapu Defteri #430 of 930/1523, #401 of 950/1534, and #99 of 1005/1596–97) and two for Liwā’ ‘Ajlūn (Tapu Defteri #970 and #185 of 1005/1596). There is no date given for #970 in the manuscript used by Bakhīṭ, but he suggests a date of roughly 1538, based on the year of service for an amir named as an iqtā’ recipient in one entry (Muḥammad ‘Adnān Bakhīṭ, Nāḥiyat Bānī Kinnānah [Shamāl al-Urdunn] fī al-Qarn al-‘Aṣḥīr al-Hijrī/al-Sādis ‘Aṣḥīr al-Mīlādī [Amman, 1989], 9). Hütteroth and Abdulfattah use the following: defter-i mufassal of Liwā’ Quds al-Sharīf (#112), Nablus (#100), Gazu (#192), Lajjūn (#181), ‘Ajlūn (#185), Saḍaf (#72), and Shām al-Sharīf of Hawrān subprovince (#99) (Wolf-Dieter Hütteroth and Kamal Abdulfattah, Historical Geography of Palestine, Transjordan and Southern Syria in the Late 16th Century [Erlangen, 1977], 4). Bakhīṭ also used two of these registers. They date to 1005/1596–97 and reflect the results of the “new census” taken at the end of the century, which was the last the Ottomans administered in the Arab provinces.

11The Ottomans levied the ‘ushr on charitable awqāf. This is why they appear as a source of revenue for khaṣṣ, timar, and za‘āmāt holders in the registers.

and the excavation of late medieval sites, is forcing archaeologists working in the
country to rewrite the occupational history of late Mamluk and early Ottoman
Jordan. On the basis of archaeological data alone it is becoming clear that while
certain regions were abandoned by the fifteenth century (such as much of the
Kerak Plateau), much of the remainder of the country was still occupied and
retained viable local markets and a productive agricultural base.

The most damaging evidence against general economic decline in Jordan at
the end of the fourteenth century is the numerous endowments of productive
agricultural land located throughout the country and dating to the third quarter of
the fourteenth and the first half of the fifteenth centuries. Thus, Jordan’s overall
economy, as it can be measured from awqāf alone, would appear to be thriving at
the very time that the Mamluk economy was in “decline.” Among the published
testimony of the endowment of rural land in Jordan by sultans are: the endowment
by Barqūq of the villages of Nimrīn, Kafrīn, and Zarā’ah in the Jordan Valley and

manufacture, is generally acknowledged by archaeologists to be Ottoman to modern in date (B.
Mershen, ‘Recent Hand-Made Pottery from Northern Jordan,’ Berytus 33 [1985]: 75–87) or twelfth-}
century to modern (Dr. Roberta Tomber, Museum of London and Wādī Faynān Expedition,
personal communication, citing parallels from Petra and Gharandale; the Wādī Faynān pottery is
as yet unpublished). For a general downdating of several Mamluk wares to the Ottoman period,

13An important survey in this regard is that of Wādī Faynān (interim reports have been published
in recent issues of Levant; see also previous note and forthcoming monograph Archaeology and
[Amman]). For excavated sites, see Brown, ‘Summary Report’ (Shobak); A. M. McQuitty, M. A.
Sarley-Pontin, M. Khoury, M. P. Charles, and C. F. Hoppe, “Mamluk Kibrat Fāris,” ARAM 9
(1997): 181–226 (Kibrat Fāris); and B. J. Walker and O. S. LaBianca, “The Islamic Qusur of Tall

14J. Maxwell Miller, Archaeological Survey of the Kerak Plateau (Atlanta, 1991); Brown, “Late
Islamic Settlement Patterns,”

15Walker and LaBianca, “Islamic Qusūr of Tall Ḥiṣbān”; Walker, ‘Mamluk Investment in Southern
Transjordan Across the Islamic Centuries,” in Village, Steppe and State: The Social Origins of

16Endowments of rural properties are only one measure of economic health. Other factors that are
quantifiable or can be documented textually or archaeologically, and which will be examined in
my forthcoming Life on the Mamluk Frontier, Transjordan 1260–1516 A.D., are minting and
exchange of coins, prices, distribution and longevity of industrial sites (copper smelting, sugar
processing, textile factories, etc.), continuity of local and regional markets, maintenance of roads
and caravansaries, evidence of continued exchange of luxury goods (certain categories of glazed
wares, imported semi-precious stones, exotic building materials), and educational facilities and
programs.
several properties in Egypt, Palestine, Jordan, and Syria for his mosque-madrasah complex in Cairo; the endowment of a mazra'ah (isolated plot) in the Ghôr and the villages of Marw and Harhar in northern Jordan for his madrasah in Cairo; and Sha'bân’s endowment of the village of Ādar and a bathhouse and garden in Wadi Kerak in 777/1375.

The following is a preliminary discourse on the success of Mamluk agricultural investment in Jordan in the fourteenth century and its apparent failure by the fifteenth. The oft-repeated wholesale abandonment of this region at the end of the century is far from proven. It remains to be determined to what degree Jordan really was abandoned by the Mamluk authorities and subsequently depopulated and what factors account for this. Was this image of a “boom and bust” economy true for the entire country or only parts of it? What were the Mamluk state’s administrative and agricultural objectives in the region and what impact did they have on Transjordanian society, in terms of its economic health and settlement patterns, and the local environment?

In order to assess the regional differences, if any, in settlement history or agricultural development, I have selected individual villages in four different districts in Jordan as case studies: Malka and Ḥibrās in the Sawād (northern Jordan, between the Yarmouk River and Irbid and southeast of the Sea of Galilee); Nimrīn and Kafrīn in the Lower Ghôr (central Jordan Valley); Ḥīsba in the Balqā` (central Jordanian highlands, the Madaba Plains); and Ādar (a suburb of Kerak in the Shīra`) (southern Jordanian highlands) (Fig. 1). All six villages are


18No date—Bakhīt, Nāḥiyat Banī Kīnānah, 45 and 57; M. A. Bakhīt and N. R. al-Hammūd, Daftar Muṣaṣṣal Liwā` ‘Ajlūn: Tāhī Daftarī Raqm 970 (Amman, 1989), 187; and idem, Tāhī Daftarī Raqm 185, 32.


20Jordan in Mamluk times was administratively divided between the southern section (saftāqah) of the Province of Damascus (Mamlakat Dimashq) in the north and the Province of Kerak (Mamlakat Karak) in the south (Nicola Ziadah, Urban Life in Syria Under the Early Mamluks [Beirut, 1953], 13; Aḥmad ibn Faḍl Allāh al-‘Umarī, Al-Taʿrīf bi-al-Muṣṭalah al-Shārīf, ed. M. Mas‘ūd [Cairo, 1894], 177–81). The northern half of the country consisted of five regions (‘amal): the Balqā` (its
attested historically, having appeared in medieval geographies and been recorded in some detail in Mamluk waqfiyāt or Ottoman tax registers or both. All have been either excavated or surveyed and appear in formal archaeological reports. A combined analysis of all of these sources indicates that each village experienced the mixed benefits of an uneven investment in local agriculture by the Mamluk state. Moreover, two were local administrative centers and enjoyed some political prominence: Hibrās was one of the largest villages in the Sawād in the Mamluk and Ottoman periods, and Ḥisbān served as the capital (a wilāyah) of the Balqā’ (an ‘amal) for roughly the first half of the fourteenth century.\(^{21}\)

I am most concerned in this article with determining when and where (and under what circumstances) agricultural investment in Jordan began by Mamluk officials; quantifying that investment (and determining to what degree that system was exploitative); and identifying when it came to an end, why it did. These questions can only by fully addressed by using all the sources available, that is to combine textual, archival, and archaeological data. The data gleaned from archaeological surveys, in particular, are ideally suited to a rereading and fleshing out of medieval waqfiyāt and tax registers. All three sources are concerned with historical and economic geography, their coverage overlapping with and complementing each other in various ways. This is an experiment in methodology that I believe is beginning to bear fruit.

NORTHERN JORDAN

One of the richest agricultural regions in Jordan is the “Sawād,” the rolling hills and deep wadis located between the Yarmouk River and Irbid. Because it is so close to the border with modern Syria, the Sawād fell under the administration of either Syria or Jordan through the medieval and early modern periods. This location placed it at the crossroads of communications and commerce; an extensive network of roads connected the regional center, Irbid, with the markets of medieval Damascus, Baghdad, Jerusalem, and Cairo. This region occupies a high plateau (800–900 meters above sea level) above the eastern slopes of the northern Jordan Valley and enjoys temperate weather and good soil. It is well watered, with an average annual rainfall of 376 mm, or 15” (heaviest in the winter), wadis with running water for at least part of the year, and numerous springs. In the Middle Ages the region was known for its forests of oak, evergreen, and cypress. During the Mamluk and Ottoman periods the Jordanian Sawād specialized in wheat, barley, and olives; today it produces some of the best olive oil in this part of the Middle East. A variety of summer crops are also grown, such as lentils, chickpeas, and carobs. The rolling hills and low grass cover, moreover, make for excellent grazing: sheep and goats were a significant

22In the thirteenth century Kūrat Sawād was part of Jund Urbunn, a subprovince of the Province (jund) of Damascus (Muḥammad ibn ‘Alī ibn Shaddād, “Al-A’lāq al-Khaṭīrah fī Dhikr Umarā’ al-Shām wa-al-Jazīrah,” published as Liban, Jordanie, Palestine: Topographie historique d’Ibn Saddad, ed. Sāmī Dahhān [Damascus, 1963], 123, citing Yaʿqūb). By the fifteenth century Iṣṣām Baysān fell under the authority of Maʿāmilat Dimashq of Mamlakat Shamīyah (Ghars al-Dīn Khalīl ibn Shāhīn al-Zāhirī, “Kitāb Zubdat Kashf al-Mamālik wa-Bayān al-Tūrūq wa-al-Masālik,” published as Zoubdat kachf el-mamâlik: Tableau politique et administrative de l’Égypte, de la Syrie et du ʾḤidjâz sous la domination des soultans mamloûks du XIII au XV siècle, ed. Paul Ravaisse [Paris, 1894], 44). During the sixteenth century the Ottomans, as part of their administrative reorganization of Bilâd al-Shām, defined this area as a nāḥiyah (district) in the southern region of Qadāʾ Hawrān (Bakhīt, Nāḥiyat Banī Kinānah, 3).

23Gḥawānimah, Ṭārisk Ṣharqī al-Urdunn, 39. This was true for the Roman period, too.

24Most of the region lies at 400–500 meters above sea level (JADIS entries for Khirbat Malkā and Ḥibrāṣ). Temperatures of the last ten years have ranged from a balmy 39.3°F in the summers to 32°F in the winter, with an annual average of 68°F (www.dos.gov.jo/env/annual/environment_2001). The relatively cool temperatures, high rainfall, high water table, and high percentage of humus in the soil makes this region ideal for agriculture (Kareem, Settlement Patterns in the Jordan Valley, 6).

25George Adam Smith, The Historical Geography of the Holy Land (New York, 1898), 612–13, describes the extensive wheat fields as they existed in the late nineteenth century. For references to olive groves and presses in the vicinity of Malkā in the fourteenth century, see Waqf|yah 9/51, fol. 18, l. 18, and fol 19, l. 22. Ottoman taxes on olives, olive oil, and presses have been published in Bakhīt, Nāḥiyat Banī Kinānah.
part of the tax base in this region during the sixteenth century. It has always been a densely settled region, with numerous small villages that experienced marked population growth in the fourteenth and the middle of the sixteenth centuries. Because of its continued prosperity into the nineteenth century, the region was among the first in Transjordan to fall under the jurisdiction of the Tanzimat administrators.

The Sawād was, moreover, richly provided with public institutions, financially supported through endowments of largely local farmland. Zāwiyahs for Companions of the Prophet, pre-Islamic prophets, and local Sufi shaykhs and small village mosques punctuated the landscape, as they do today. The remains of a barrel-vaulted mosque still stand in the largest village of the region, Hibrah; the minaret of another mosque, which once carried an inscription that can be dated to 686/1287, was either dismantled for building material or collapsed at some point during the

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26 These taxes, like all others, are published on numerous pages throughout Bakhīt, Nāḥiyat Banī Kinānah.


30 Among these are the zāwiyahs of Shaykh ‘Uthmān al-Ḥamāmī and Shaykh Ḥisā in Malkā and those of Shaykh Mismār, Bānī Ḥamīd, and Shaykh Samādī in Hibrah (Table 9 in Bakhīt, Nāḥiyat Banī Kinānah, 36–37). Eight zāwiyahs are listed in Bakhīt’s tax registers as having been supported by properties in Nāḥiyat Banī Kinānah (ibid., 16). How many of the zāwiyahs, and not just the mawāqif, were located in this region cannot be determined from these registers alone. Biographical dictionaries of the Mamluk period also describe the careers of individuals trained in such local mosques (and perhaps madrasahs). For references to shaykhs and fiqh scholars from Hibrah, Malkā, and other smaller villages in their vicinity, see Ghawānimah’s lists of names compiled from these sources in his Al-Taʿrīkh al-Ḥadīrī li-Sharq al-Urdunn (Amman, 1982), 128, 134, 181, 182, and 185–86. (He relies heavily on Ibn Qaḍī Shuhbah, al-Sakhāwī, and Ibn Kathīr.)
last eighty years. According to the defter–i mufassal #99, there were three muezzins and three khatibs serving perhaps two mosques in the same village. Large landholdings by Mamluk sultans and amirs account for the cultivation of cash crops (such as olive oil) and the withdrawal of tax revenues levied on them for awqāf. According to the early Ottoman defters of Nāḥiyat Bani Kinānah, some of the most productive villages (or parts of them) were endowed for institutions located outside the region. Sultan Khushqadam endowed three shares of the village of Marw (population of 28 households) and three shares of Harhar (38 households) for his madrasah in Cairo. The annual revenues for each of these villages in 950/1534 were 9900 and 9100 aqja respectively. For Harhar the revenues came entirely from tax on wheat, the yield of which was among the highest in the region. Although the size of the fields was not mentioned in any of three defters for this nāhiyah, those of Marw amounted to 12 feddans (approximately three acres or 1.5 hectares). Although the Ottomans continued to recognize Khushqadam’s endowment, they made the rest of the remaining shares of the two estates the private property (khāṣṣ) of the provincial governor.

Parts of three other villages were endowed by amirs for various purposes: Bulūqs (population of 3 households in 1005/1596–97) for al-‘Izzīyah madrasah in


32Bakhit, Nāḥiyat Bani Kinānah, 111. This register names properties in Hibra that were made waqf for two mosques, but whether these mosques were also located in the village, as Bakhit asserts, is not clear (ibid., 15).


34Bakhit, Nāḥiyat Bani Kinānah, 38 and 45.

35Only Hibra produced as much wheat for that year.

36Bakhit, Nāḥiyat Bani Kinānah, 45.

37The registers do not provide the date the endowments were originally made. Amirs are generally not named, so it is far from certain that the awqāf are Mamluk in origin. While this seems to generally be the case, Bakhit suggests that the Bulūqs and Dullūzah endowments are Ayyubid (ibid., 15, n. 36). Nonetheless, the mawāqif were still productive and the endowments recognized as such by the Ottoman authorities.
Damascus, Dullūzah (14 households in 950/1534) for the same institution, and Ḥawar (17 households in 1005/1596–97) for an unnamed recipient; all three were timars in the mid-sixteenth century. The highest revenues of any recorded year from each of the villages (2400, 2950, and 8220 aqja respectively) are primarily from grains; olives also figured prominently among the revenues from Ḥawar (2579 aqja in 950/1539). The field size for Dullūzah and Ḥawar were recorded at six (ca. 1.5 acres or .3 hectare) and ten feddans (ca. 2.5 acres or 1.25 hectares), respectively.

The village of Hibrâs, located eight kilometers northeast of Bayt Rās and twelve kilometers north of Irbid, was one of the largest villages in Mamluk Jordan’s Sawād and the largest of the Ottoman’s southern Ḥawrān. Archaeological surveys have documented continuous occupation at the site from the Byzantine through Ottoman periods. The remains of two contemporary mosques, both dated by inscriptions to 686/1287, have stood in the modern village of the same name until modern times. The one, comprised of enclosure walls enclosing a small nine-bay mosque of later date, can be attributed to the Mamluk period on account of an inscription that once adorned its minaret, destroyed in the 1970s, and its construction; nine-bay mosques, with the aisles running parallel to the qiblah wall, pointed arches, reused basalt columns (often from Byzantine churches), and deep mihrabs can be found throughout northern Jordan at thirteenth- and fourteenth-century sites. Hibrâs does not seem to appear in contemporary written sources

38Ibid., 21–22.
39Ibid., 170, 62, and 92.
40Dullūzah: p. 42 (930/1523); Ḥawar: p. 126 (1005/1596–97). In 1005/1596–97, Ḥawar’s revenues had dropped to 5600 aqyr.
41Bakhit, Nāḥiyat Banī Kinānah, 15.
42JADIS site #2223.007.
43The twelve-meter high minaret that carried the dated inscription is now gone, but it was recorded in the 1920s by Steuernagel ("Der ‘Adschlu[n [1926]," 155–56). The inscription, not fully translated in the survey report, was apparently an abbreviated endowment text that carried the name of the donor, Caliph ‘Umar ibn al-Khaṭṭāb II. Steuernagel attributes the minaret, on this basis, to 686/1286 (ibid., 156). The mosque to which this minaret was attached was no longer standing at the time of the survey.
44The inscription has been reproduced in Yusuf Ghawānimah, Madīnat Ibrīd fī al-‘Aṣr al-Islāmī (Irbid, 1986), 59.
45A published floor plan of this mosque can be found in ibid, 55. Mamluk mosques at Tabaqat Fahl, Amman, and ‘Aẓraq (Walmsley, “Settled Life in Mamluk Jordan,” 134, Figs. 3–5; 137, Fig. 6; and 137, Fig. 7) and several in the vicinity of Ḵālān are of roughly the same scale, construction, and design (Yusuf Ghawānimah, Al-Masājid al-Islāmīyah al-Qādīmah fī Miṣṣaqat ‘Ajlūn [Irbid, 1986]; N. MacKenzie, “Ayyubid/Mamluk Archaeology of the ‘Ajlūn Area: A Preliminary Typology,” Annual of the Department of Antiquities of Jordan 46 [2002]: 615–20).
until the middle of the fourteenth century, when historians note it for its connection to scholarship and agriculture. The village continued to grow throughout the Mamluk period and into the Ottoman. The village had a large population by 950/1534 (at 90 households, two “bachelors,” and two imams) and has been described as “crowded.” It also was a market center, one on the same scale as Kerak, Salt, ‘Ajlun, and Irbid; the market taxes were paid directly to the provincial governor. Taxes on wheat and barley supported, in part, local zawiyas and mosques.

The much smaller village of Malka, eight kilometers west of Hibras and seven northwest of Um Qeis, figures prominently in an unpublished manuscript in Där al-Wathā’iq in Cairo. In this lengthy waqf|yah of 796/1393, Sultan Barquq has endowed several of his personal properties throughout Egypt and Syria for his madrasah complex on the Bayn al-Qasrayn in Cairo. These include businesses in Cairo, all of the district of Bahriyah and entire villages in the district of Kursiyah in Egypt, villages near Jerusalem, villages around the south shore of the Sea of Galilee, villages in the Golan, and a share of rural properties in the district of Ma’arrat Nu’mân. The section of this manuscript that concerns this study deals with villages in the Lower Galilee, specifically one called “Hay Malka.” Here is described a hilltop settlement hedged in on all sides by deep wadis, a tight network of villages and hamlets, and well-traveled roads. The land around Malka, according to the waqf|yah, is full of vineyards, olive trees and presses, smaller villages, mazra’s (isolated plots of farmed land), and shrines. The only evidence in the waqf|yah of economic decline is the occasional reference to an outlying settlement in ruins (kharāb), fields that have been abandoned, or presses (ma‘āsir) that are no longer working (bat’āl). This is remarkable, given the fact that the endowment dates to the end of the fourteenth century. Clearly this part of Jordan was still densely settled and economically viable then.

46Neither Ibn Shaddād nor Baybars al-Dawādār, two local sources for the late thirteenth and early fourteenth centuries, make any reference to this village (Ibn Shaddād, Liban, Jordanie, Palestine; Baybars al-Dawādār, Zubdat al-Fikrah fi Tārikh al-Hijrah). On the other hand, in passages cited above from Ibn Qadhar Shuhbah’s chronicle, Hibras emerges in several annual entries, including one for 761/1359 in which the village’s qadi is said to have drowned in a flood there that year, and in an obituary for 762/1360, when a religious scholar by the name of Ahmad ibn Mūsá, a companion of Ibn Taymiyah, dies in the village.

47Bakhit, Nāhiyat Bani Kinānah, 23 and 8.

48Hütteroth and Abdulfattah, Historical Geography, 87, Fig. 8, and 199.

49Bakhit, Nāhiyat Bani Kinānah, 14.

50Ibid., 37, 59, and 111.

51Waqf|yah 9/51. I will publish the Malka section of the manuscript in my forthcoming Life on the Mamluk Frontier.

52Fols. 18–21 of this manuscript.
The occupational and agricultural history of Malkā provides the perfect example of the intensified investment in the region by the Mamluks in the fourteenth century. Contemporary Arabic sources do not mention this village until the late fourteenth century, when scholars using the niṣbah “al-Malkāwī” appear in the biographical entries of Syrian chronicles. The relative prosperity alluded to in the waqfiyah of 796/1393 seems to have continued into the sixteenth century. Its revenues in “summer crops” (melons, beans, and vegetables) and “trees” (here olive groves are likely) were among the highest in the region, according to the defter of 1005/1596–97. It had its own mosque by mid-century, and its population had doubled in size by the end of the century. The village was still occupied in the late mandatory period and is today a thriving center of olive oil production.

CENTRAL JORDAN—THE BALQĀ’

The Balqā’, a highland plateau situated between Wādī Zarqā’ and the Sawād in the north to Wādī Mu’jib and the Kerak Plateau in the south, has historically been one of the bread baskets of Jordan. Its annual rainfall (350–440 mm) is sufficient for dry farming, and the high clay content of the local soils allow for a harvest even in drier seasons. Although never a densely settled region, the Balqā’ sustained a political importance as a communications corridor. The Mamluks retained the classical period ‘King’s Highway’ as the caravan route through Syria and placed 56 their pigeon, postal, and pilgrimage routes, which led travelers from Damascus to

53 Neither Ibn Shaddād nor Baybars al-Dawādār mention Malkā, even though they do write about other villages in Jordan (for passages on Nimrīn and Kafrīn, for example, see Baybars al-Dawādār, Zubdat al-Fikrah fi Tārīkh al-Hijrah, 180).

54 For tax entries for Malkā in 950/1534 and 1005/1596–97, see Bakhīt, Nāhiyat Bani Kinānah, 88 and 162. See also Hütt eroth and Abdul fattah, Historical Geography, 202 (entry MZ65).

55 Hütt eroth and Abdul fattah, Historical Geography. Archaeological surveys in this region 1885–1914 and during the 1920s and 1960s documented many of the sites discussed above (Siegfried Mittmann, Beiträge zur Siedlungs- und Territorialgeschichte des nördlichen Ostjordanlandes [Wiesbaden, 1970]; Steuernagel, ‘Der ‘Adschlūn [1926]”; idem, ‘Der ‘Adschlūn,” Zeitschrift der Deutschen Palestinien Vertrag 47 [1925]: 206–40 and Zeitschrift der Deutschen Palestinien Vertrag 48 [1925]: 1–50, 121–34). (For Malkā, see Mittmann, Beiträge zur Siedlungs- und Territorialgeschichte, 24–25 and 257; Steuernagel, ‘Der ‘Adschlūn [1926],” 118–19; and JADIS site #2223.016—‘Khirbet Malkā.”) The results of these surveys indicate that occupation was most intense during the Roman, Byzantine, and Mamluk periods. Renewed fieldwork in the Malkā region by Oklahoma State University in October, 2003, aimed at updating the database of these earlier surveys (see the author’s upcoming field report, ‘The Malkā-Hiibrās Survey: Archaeological Investigation of Mamluk Agricultural Policy”).

56 The Balqā’ was also known for its fruit and walnut groves.

either Cairo or Mecca, in this, Jordan’s heartland. The region was also of political importance to the state, as local tribes actively participated in the internal power struggles among the Mamluk elite. The capital of this district (Wilāyat Balqā’) from early in the fourteenth century until 1356 was the town of Ḥisbān. At 895 meters above sea level, this hilltop site commands a view of the Madaba Plains and the northeast end of the Dead Sea and offers a glimpse, on clear days, of Jerusalem and Jericho. According to al-Zāhīrī, Ḥisbān was the center of an agricultural district that included over 300 villages. It was also strategically located on several important communications corridors: on the barid and interior pigeon routes of Syria and just off the hajj road from Damascus.

Phase II excavations at Tall Ḥisbān, begun in 1998, are contributing to our knowledge of the Mamluks’ official presence in Transjordan in the fourteenth century. Most of the architecture standing on the tell dates to this period, when a citadel occupied the summit. This complex consisted of what has been identified as the residence of the governor of the Balqā’ (a building loosely based on a

58 For the role of the tribes of the Balqā’ in Baybars’ campaigns against the local Ayyubid princes and in reestablishing al-Ẓāhir Muḥammad on the throne for his third reign, see Walker, “Mamluk Investment in Southern Bilād al-Shām.”

59 Ḥisbān was the capital of the southernmost district of Mamlakat Dimashq (al-Qalqashandi, Ṣubḥ al-’asha’, 4:200–1). For documentation of its rise and decline as a rural capital, see Walker, “Mamluk Investment in Southern Bilād al-Shām.”

60 Al-Zāhīrī, Zoubdat kachf el-mamālik, 46.

61 Yūsuf Ghawānimah has compiled lists of postal, pigeon, and pilgrimage stops from brief references in al-‘Umarī, al-Qalqashandi, Ibn Shāhīn, al-‘Aynī, and Ibn Aybak in his Al-Tārikh al-Ḥadār, 64 and 69.

62 The most recent excavation reports and historical studies related to the project can be found in O. S. LaBianca, P. J. Ray, Jr., and B. J. Walker, “Madaba Plains Project, Tall Ḥisbān, 1998,” Andrews University Seminary Studies 38, no. 1 (2000): 9–21; B. J. Walker, “The Late Ottoman Cemetery in Field L, Tall Ḥisbān,” Bulletin of the American Schools of Oriental Research 322 (2001): 47–65; idem, “Mamluk Administration of Transjordan”; idem, “Mamluk Investment in Southern Bilād al-Shām”; and Walker and LaBianca, “The Islamic Qusūr of Tall Ḥisbān.” For on-line overviews of the project and weekly field reports, consult the following web sites: history.okstate.edu/depttour/histarch/index.html (Oklahoma State University) and www.quonic.com/~hisban (Andrews University). The Tall Ḥisbān excavations are under the senior direction of Dr. Øystein LaBianca of Andrews University. The author is Co-Director and Chief Archaeologist of the project. Andrews University began fieldwork at the site in 1968. For a full bibliography of this Phase I work, see B. J. Walker, “Militarization to Nomadization: The Middle and Late Islamic Periods,” Near Eastern Archaeology 62, no. 4 (1999): 202–32. Tall Ḥisbān is registered in JADIS as site #2213.001.

63 To date I have found only one name of an amir who is said to have served at Ḥisbān: Jarkas al-Jalālī (d. 791/1388) (Ibn Qadd al-Shuhbah, Tārikh, 4:308). The source does not specify the years he served at this post, only that he was a mere junki when he served as wālī at Ḥisbān and was...
The architectural remains of the citadel and the objects recovered from its storeroom attest to Hîsbân’s role as an administrative center, garrison, and sugar transport point in the fourteenth century. Both tell and town, however, were all but abandoned by the middle of the fifteenth century. The Ottoman defters of the sixteenth century suggest that the population of Hîsbân had been reduced to a small village. The register of 1538 states that Hîsbân was the only village between Na‘îr and Wâdi Mu‘îb and that it had a population of only seven households. The only tax category was “olive oil and grapes.” By the end of the century (1005/1596), there was no permanently settled population living there (khâlı). The village was not resettled until the late nineteenth century.

Later promoted to an “amir of 100, commander of 1000” and transferred.

Earthquakes in the vicinity of Hîsbân are historically attested for 1341, 1343, 1366, 1403–4, and 1458 (Ghawâmîmah, “Earthquake Effects”).

The inscriptions are formulaic and generic: no historically attested name of amîr has yet been deciphered. The two most common are: “Among the things made [on order] of the amîr (mîmmâ ‘umila bi-rasm al-amîr) and ‘Glory, good fortune, achievement, and happiness [to the owner]’ (al-‘izzah wa-al-iqâlah wa-bulûgh al-âmâl wa-sa‘âdah).

Walker, “Mamluk Investment in Southern Bilād al-Shām.”

There is no evidence for sugar production or processing at the site. However, water mills (of questionable date and use) have been identified during archaeological surveys (Robert D. Ibach, Jr., Hesban 5: Archaeological Survey of the Hesban Region [Berrien Springs, MI, 1987], 194). Moreover, the proximity of the tell to the Jordan Valley, its location on important transport routes, and the large quantity of sugar jars found in the storeroom (too many to serve the dietary needs of the garrison alone) suggest that Hîsbân served as a sugar distribution point.

The absence of fifteenth-century pottery at the site suggests this.

Bakhît and al-Hammûd, Tāḥû Daftarî Raqîm 970, 100.

Ibid., 33.

Bakhît and al-Ḥammûd, Tāḥû Daftarî Raqîm 185, 149 (entry #138) and Hütteroth and Abdul fattah, Historical Geography, 169 (entry P138).

Walker, “Late Ottoman Cemetery.”
CENTRAL JORDAN—THE LOWER GHÔR

The agriculture of the Jordan Valley received considerable attention from Mamluk officials over the course of the fourteenth century. High temperatures (surpassing 45° C in the summers) and an abundance of water ensured that iqtā’āt located here would be productive. Many factors contributed to the growth of large towns and villages in this region during the late thirteenth and early fourteenth centuries: the destruction of Tiberias and Baisan during the Ayyubid-Crusader wars, the new geographical division and administration of the Jordan Valley by the Ayyubids and Mamluks, security, the barīd system of Sultan Baybars (the routes of which now passed through the Ghôr), and the sugar industry. In the Jordan Valley new villages emerged and others were transformed into agricultural storage places (for grains and sugar), industrial sites (primarily for sugar), and centers of large “plantations” for large-scale production of grains. Some of the most lucrative iqtā’āt were located here, and many of these were made waqf for sultanic institutions in Cairo.

As quickly as the Jordan Valley benefited from official investment, however, it suffered from its gradual withdrawal. The plague of 748/1347 may have been the initial cause of this decline. Maqrīzī is only one of many sources that describe this event in Jordan. He claims, "According to the news that I have received, the people of al-Ghôr and Baisan find the lions, wolves, wild asses, and other wild animals dead and on them the trace of the bubo." The heat and crowded living conditions may have made the effects of the plague worse than in other parts of Jordan. The Ghôr, unlike other regions of the country, did not recover; many villages were abandoned, and the sugar industry eventually collapsed.

It is possible to trace these developments through textual and archaeological sources. Ottoman tax registers for Liwā’ ‘Ajlūn make reference to two villages in the central Jordan Valley endowed by the Mamluk sultan Barquq for his madrasah-mausoleum complex in Cairo. Nimrīn (185 m below sea level) and Kafrīn appear to have been sugar distribution sites.

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the turn of the fourteenth century. By the end of the century they were lucrative enough for the sultan to have set aside the entire village of Nimrin and shares of Kafrin for his Cairo complex. Excavations at Tall Nimrin and surveys of the region have documented a long history of occupation in the area that peaks in the Mamluk period. Evidence of sugar production in the form of water mills and abaleeg (sugar jars) has been identified here and in the region. The Ottoman authorities respected Barquq’s endowment in both of these villages, at least through the end of the sixteenth century. They invested in the Ghôr in order to rejuvenate their tax base in the area. While Nimrin remained a small village throughout, the population of Kafrin grew to 43 households, which oversaw 20 feddans of some of the richest grain fields in central and southern Jordan. Cotton and sesame replaced sugar cane as cash crops; the Mamluk sugar industry was never revived.

**Southern Jordan—Kerak Plateau**

Southern Jordan was dominated by Kerak Castle, which was the capital of its own province (Mamlakat Karak), a favored place of exile for deposed sultans, and the

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77 Bakhīt and al-Hammūd, Ṭābū Daftarī Raqm 970, 23.
79 See Ibach, Archaeological Survey of the Hesban Region, and Kareem, Settlement Patterns in the Jordan Valley, for a list of sites.
80 Bakhīt and al-Hammūd, Ṭābū Daftarī Raqm 185, 125. For a chart comparing the yield of wheat and barley among villages in Liwā’ Ajlūn, see p. 52.
81 Ibn Taghrībirdī provides the last historical account of sugar production in the Jordan Valley in 802/1399 (Kareem, Settlement Patterns in the Jordan Valley, 17).
nursery of sons of sultans during the Mamluk period. This is one of the most inhospitable regions of Jordan; it is crisscrossed by deep canyons, is mostly desert, and, for the period under discussion, was frequented by nomadic groups who had a reputation for attacking trading and pilgrimage caravans and local villages. Contemporaries emphasized how difficult travel was there and how little water there was. Nonetheless, villages, mills, mazārs, and mashhads were numerous on the Kerak Plateau under Mamluk suzerainty. Many of these fell into ruin, however, over the course of the fifteenth century, as villages were abandoned for the security of the hills on the western and southern fringes of the plateau. The withdrawal of Mamluk troops from the local garrisons, which protected these villages and the road system, quite likely contributed to this state of affairs.

A partially published waqfiyah in the Dār al-Wathāʾiq in Cairo describes the endowment by Sultan Shaʿbān of the village of Ādar and a bathhouse and farmland in its vicinity in 777/1375. The document describes a large and thriving farming community of 140 households (both Muslim and Christian), where a variety of foodstuffs were produced (including walnuts, fruit, wheat, olives, and cheese), and there was local industry (flour mills and oil and wine presses) and public services (mosque, madrasah, bathhouse). However, the waqfiyah also bears witness to some degree of economic decline: 10 of the 83 houses in the village were uninhabited, as were several cisterns. By the early Ottoman period Ādar had been

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82 Both al-Nāṣir Muḥammad and Barquq lived here during their periods of exile from Cairo, and it was from here that they plotted the return to their thrones. Al-Nāṣir Muḥammad, moreover, grew up at Kerak, as did the sons of Baybars. For an archaeological description of the Mamluk palace in the citadel, see R. M. Brown, "Excavations in the 14th Century A.D. Mamluk Palace at Kerak," *Annual of the Department of Antiquities of Jordan* 33 (1989): 287–304.

83 Al-Zāhirī, *Zoubdat kachf el-mamālik*, 43.

84 Brown, "Late Islamic Settlement Patterns on the Kerak Plateau"; R. Brown, "Late Islamic Ceramic Production and Distribution in the Southern Levant: A Socio-Economic and Political Interpretation," Ph.D. diss., SUNY-Binghamton, 1992, 363–467. Archaeological surveys attest to the widespread abandonment of settlements during this period (Miller, *Archaeological Survey of the Kerak Plateau*). Jeremy Johns argues, however, that the farmers of the Kerak Plateau shifted from a market to a subsistence economy as early as the thirteenth century. For his argument, based entirely on ceramic production, see his "The Rise of Middle Islamic Painted Ware" and "The Longue Durée."

85 For a recent reassessment of this period, see Shawkat Ḥujjah, *Al-Tārikh al-Siyāsī li-Miṣṭaqat Sharqī al-Urdūn min Janūb al-Shām fī ʿAṣr Dawlāt al-Mamālik al-Thānīyah* (Irbid, 2002), which attributes much of Jordan’s social and economic decline in the fifteenth century to amiral rebellions.

86 Waqfiyah 8/49, sections published in Ghawānimah, "Al-Qaryah fī Junūb al-Shām," and idem, *Tārikh Sharqī al-Urdūn*, 243–44. The name of the recipient of this endowment is missing from the extant manuscript.

87 Ghawānimah estimates a total population of some 700 people (Ghawānimah , "Al-Qaryah fī Junūb al-Shām," 364).
reduced to a mere mazra‘ah: an isolated, cultivated field, with no permanent settlement.  

**Conclusions**

I have come across three Mamluk waqfiyyāt that record sultanic endowments of agricultural land in Jordan.  

They are roughly contemporary, dating to the end of the fourteenth century. All three describe a relatively healthy economy and thriving village structure in different parts of the country. These, combined with references to Jordanian villages in contemporary sources and evidence from archaeological surveys and excavations, indicate that in terms of population and agricultural production, Jordan was doing very well throughout the fourteenth century. While there is evidence of decline in some regions of Jordan fifty to a hundred years later (villages are abandoned, certain industries disappear), this is far from true for the country as a whole.

If the Black Death of 748/1347 was the catalyst for economic decline across the Mamluk Empire, why was there an agricultural flowering in Jordan in this very period? What do the flurry of endowments, population growth, and continued market activity mean? Perhaps the importance given to this single event has been exaggerated, and attention should be paid, instead, to other factors, such as environmental change, agricultural diversity, and the peculiarities of Mamluk administration of the Transjordan. Pollen analysis of cores taken throughout Jordan indicates that the higher precipitation that allowed for increased intensive agriculture in the thirteenth and fourteenth centuries began to decrease during the fifteenth. This would have heavily impacted water-intensive crops, such as cane sugar, and would have diminished overall agricultural yields for areas without irrigation.

Political problems may have been an indirect factor in the abandonment of villages in southern and central Jordan. In northern Jordan, where local farming did not have to rely on state support (to repair irrigation canals, for example) and had a diversified agricultural base (not a plantation economy), there is very little evidence of real economic or social decline. On the other hand, administrative centers (and especially those garrisoned with Mamluks, such as Hisbān) and “plantation farms” (Nimrīn and Kafrīn) seemed to have suffered the most from

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90 777/1375, 796/1393, and 792/1389, respectively.

economic and political problems in Cairo, which drew away locally-based soldiers and administrators. The affluence of the fourteenth century and general impoverishment in some of these regions in the fifteenth may be related to the successes and failures of the *iqṭāʾ* system, after its reorganization by al-Nāṣir Muḥammad during his *rawk* of 1313–25.92 While it is dangerous to base even preliminary assessments on only a handful of villages, such a pattern of regionally based growth and decline is generally supported by archaeological surveys, which document hundreds of sites.

The traditional views on Mamluk “decline,” culled largely from Egyptian chronicles, do not do justice to the complexities of economic developments and settlement cycles in Jordan. Here economic trends are not so easily explained by epidemics, changes in trade routes, the depredations of soldiers in urban streets, and abusive taxation practices. Mamluk investment in Transjordan was exploitative and short-term, but only in some districts did it produce a “boom and bust” society for the period under consideration.

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92 Sato Tsugitaka, *State and Rural Society in Medieval Islam: Sultans, Muqta’s and Fallahun* (Leiden, 1997), 237.
ABBREVIATIONS FOR SOURCES

MANUSCRIPTS
Waqfiyah 8/49 Sijill 49, maliff 8, Hujjaj ‘umarā’ wa-salāṭin, Dār al-Wathā’iq, Cairo (Sultan Sha‘ban’s endowment of 777—lands in Egypt and Syria, name of recipient missing from manuscript)—mawqūf of village of Ādar and its dependents, also published in Ghawānimah 1982 and 1979: 243–44.

Waqfiyah 9/51 Sijill 51, maliff 9, Hujjaj ‘umarā’ wa-salāṭin, Dār al-Wathā’iq, Cairo (Sultan Barquq’s endowment of 796—lands in Egypt and Syria for his madrasah complex on the Bayn al-Qasrayn in Cairo)—mawqūf of village of Malkā and its dependents, fols. 18–21.

Waqfiyah 704 Sijill J.-704, Wizārat al-Awqāf, Cairo (Sultan Barquq’s endowment of 792—miscellaneous rural properties, locations throughout southern Syria).

ELECTRONIC SOURCES
JADIS: Jordan Antiquities Database and Information System (courtesy of the Department of Antiquities office, Amman, Jordan; also available on-line at www.nis.gov.jo/anti).
Fig. 1. Agricultural map of Mamluk Jordan.
Fig. 2. Mamluk mosque in Ḥibrāş. Built in two phases and reused in modern times, this mosque has never been formally excavated. A recent architectural survey by Oklahoma State University indicates that the central building, a late Ottoman or Mandate-period mosque, was built within the remains of a larger thirteenth–fourteenth-century mosque.

Fig. 3. Interior view of later Ḥibrāş mosque. This small, three-aisled mosque is typical of constructions in northern and central Jordan. Like many historical mosques in the region, it had no minaret: a staircase of basalt steps engaged in the exterior face of the qiblah wall led to the roof, from where the muezzin called the faithful to prayer.
Fig. 4. Modern village of Malkā. Malkā produces some of the highest quality olive oil in the region, as it did in the Mamluk period.
Fig. 5. Network of wadis surrounding Malkā. Sultan Barqūq’s waqfiyāh of 796/1393 lists numerous wadis, watercourses, springs, and hills that demarcated his estate in Malkā. It is difficult to identify the nearby wadis today with those detailed by Barqūq’s scribe: the residents of Malkā today know the river beds by a variety of names, and there is little consensus among them.

Fig. 6. Tell and grainfields in Ḫisbān. Once the administrative capital of the Balqā’, Mamluk Ḫisbān was known for its wheat fields, orchards, gardens, and market. Grains and olives dominate the villagers’ agricultural production today.
Fig. 7. Qa‘ah of Mamluk “governor’s complex” at Tall Hisbān. When first excavated in the 1970s, the flagstones of the central courtyard were in pristine condition, and some walls were preserved to a height of a meter and a half. Although greatly dilapidated today, it remains one of only two Mamluk palaces in Jordan. It is currently undergoing restoration.

Fig. 8. Mamluk sugar jar. The Mamluks produced several different sugar products, each of varying degrees of fine or coarse crystallization and priced accordingly. Sugar cane was cut and boiled and then dried in ceramic cones, where crystallization occurred. The final product was eventually stored in cylindrical or hourglass-shaped ceramic jars for storage and transport. Sugar cones are found in production sites, primarily in the Ghōr. Sugar jars (abaleeg) are associated with both production sites and administrative centers, which may have doubled as redistribution points.
Fig. 9. View of Jordan River Valley. The Jordan River and the wadis that flow into it were the focus of intensive sugarcane cultivation during the thirteenth and fourteenth centuries. The industry then largely disappeared in Jordan, as epidemics decimated the workforce and the local *iqṭāʾ* system that supported the industry collapsed. By the sixteenth century cotton and indigo became the main plantation crops in the Ghôr.
Fig. 10. Wādī Muʿjib. This deep canyon, the largest in Jordan, made transport to and from Kerak Castle quite difficult. In spite of this, parts of the Kerak Plateau were fairly densely settled in the Mamluk period with well-to-do farming villages.
Fig. 11. Village of Ādar. Sultan Sha$bān endowed this village for a charitable purpose, according to a partially published waqfiyah of 777/1375. Nothing of the Mamluk village remains, however; the core of the modern village is Ottoman. Today Ādar is a prosperous village of wheat farmers, a large percentage of whom are Roman Catholic.

Fig. 12. ‘Ajlūn in the springtime. ‘Ajlūn is located in one of the best watered and richest agricultural regions of Jordan. Unlike other areas, this part of northern Jordan appears to have been continuously occupied and agriculturally productive from the Middle Islamic period until today.