4. SETTLEMENT AND DAILY LIFE
IN THE MONASTIC COMMUNITY OF MOUNT NEBO

Taking into consideration daily life in the monastery of Mount Nebo, it is natural to wonder how monks were able to settle in an environment that was often hostile with a minimum of food resources at their disposal. However, this idea of a monastic life, which rejects superfluous goods in favour of extreme isolation, is frequently influenced by hagiographic accounts. The monastic foundations were effectively not only places of contemplation and hesychasm but also large estates that could ensure the survival of the monks who lived there.

This chapter concentrates on those social and economic issues which contributed to the development of the coenobitic community, dwelling in particular on the case of Mount Nebo. Beginning with a general description of the complex of the Memorial of Moses, which allows rethinking the old excavation data with the new discoveries shown in the first two chapters, the analysis studies in depth the organizational aspects of the monastery, the agricultural production in the area of Mount Nebo and the relative connections between the nucleus of Siyagha and the colonies of monks who lived in the surrounding valleys. These elements help outline a new reflection on the possible income of the monastery, on the forms of religious and secular euergetism and on the role played by money inside the monastic community.

4.1 THE COENOBIUM OF SIYAGHA: FRAMING THE MONASTIC SPACES

The monastic complex standing on the top of Mount Nebo (Ras Siyagha) is the result of a long series of building developments which followed on one another over the centuries around the shrine of Moses. Literary sources suggest that the primitive monastic community in the region of Mount Nebo was made up of a group of hermits who lived in the caves in the valleys of ‘Uyun Musa. The pilgrim Egeria describes in her travelogue a meeting she had with a group of ascetic monks who lived in cells close to the Spring of Moses⁵¹³. She also mentions a small church that was probably intended for the liturgical functions of the community.

The territorial surveys carried out in the ‘Uyun Musa together with the analysis of the archive photos and the reading of the travel reports of the first modern explorers made it possible to document numerous rocky cavities – often artificially closed with masonry, but unfortunately little preserved today – which have internally some benches⁵¹⁴ (Fig. 137). These caves had a peculiar view of Mount Nebo and they were placed at a certain height from the ground to allow the perfect isolation necessary to reach the ascetic virtues of immateriality and apathia⁵¹⁵. The same settlement pattern is found in a series of rock cavities discovered beyond the boundary of the later monastic complex⁵¹⁶.

Two hermitages have been identified on the western ridge of Mount Nebo (Fig. 138). On the northwest slope S. Saller discovered the hermitage nos. 106–109 made up of two rock

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⁵¹³ It. Eg. 10, 9; 11, 1–3. On the rock hermitages in the province of Arabia, see Piccirillo 1992, 18 and Hamarneh 2014.
⁵¹⁴ Musil 1907, 340–346.
⁵¹⁶ In particular, the group of rooms nos. 106–109, located on the north-western slope made up of two rocky cavities and two rooms with mosaic floors. Remains of other hermitages have been identified by the author on the so-called summit of Agri Specula. See Saller 1941, 187–193.
caves and two rooms that opened on a central space with mosaic floor. The two caves were later used as a cistern and burial chamber. On the southwest ridge there is the hermitage of the Abbot Procapis dated between the 5th and the first decades of the 6th cent. A.D. The small and completely independent building consists of several rooms (some paved with geometric mosaics) built on two floors with a cistern for the water supply.

Whilst enjoying a form of particular independence, it has to be emphasized that the hermitages depended administratively on a laura or on a monastery located in their vicinity. The isolated life led by the monks during the week alternated with a community meeting at the main monastery for the celebration of the Sunday Eucharist and the supply of food.

In A.D. 430 and 477 Peter the Iberian, Bishop of Maiumas in Gaza, made two journeys to Mount Nebo. The text by his biographer John Rufus reports that Peter met an ascetic monk who lived as a recluse in one of the many monastic dwellings built around the sanctuary of Moses. The source not only attests the presence of recluses in the Mount Nebo region (Fig. 167), but also provides a detailed description of a cell lived in by a monk, about 5 cubits long and not very well lit.

The excavations of S. Saller proved that the monastic complex at Siyagha consists of a series of courtyards with buildings grouped around them (Figs. 139–140). Considering the excavation

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517 Saller 1941, 186–193.
520 For more on this topic, see in particular Rousseau 2000, 749 and the relative bibliography.
521 Peter the Iberian met an Egyptian monk, who escaped from the attacks of the Mazices at the monasteries of Sketes. See Saller 1941, 110; Piccirillo 1998b, 193–194; Piccirillo 2002, 100–102.
523 Joh. Rufus. V. Petri lb. 85.
finds, the scholar suggests that the oldest monastic cells dated to the 5th cent. A.D. were those built around the atrium facing the façade of the church (nos. 14–28)\textsuperscript{524}. Some cells had mosaic floors with white tesserae and stone benches, perhaps used as beds by monks\textsuperscript{525}. It is possible to imagine that these rooms were destined for the dwelling of the monks. Rooms nos. 16 and 17, initially connected in a single room, had a mosaic decorated with geometric motifs\textsuperscript{526}. Due to their large size, S. Saller suggests that they could be used for the community life, perhaps as the refectory and the pantry kitchen of the monastery. Room no. 24 with its dimensions and mosaic floor was also not the cell of a monk, but a community room.

Noteworthy is room no. 21 located in the centre of the western wing and directly opposite to the main entrance of the basilica. Under the mosaic floor of the room, three tombs containing the bones of ca. one hundred bodies were found\textsuperscript{527}. The position of the funerary room could be related to the burial placed in the middle of the church’s nave, as well as the three burials situated in the funeral room located behind the church presbytery\textsuperscript{528}. In the tombs no funeral objects were found, but only some coins, a ring, tacks or rivets and buckles with crosses which suggest that the buried individuals probably belonged to the monastic clergy. The other rooms of this group, located near the narthex of the basilica were probably intended for some liturgical functions performed inside the ecclesiastical building. Examination of masonry stratigraphy of these rooms suggest that further building phases were made in the second half of the 6th cent. A.D.

\textsuperscript{524} Saller 1941, 117–131; Piccirillo 1998b, 204. The northern entrance of the atrium of the basilica was discovered in August 2016.
\textsuperscript{525} Rooms no. 14 and 15 have fragments of mosaic floor, while rooms nos. 26–27 are surfaced with mortar. Saller 1941, 118–121. 130.
\textsuperscript{526} For the analytic mosaic analysis, see Saller 1941, 241–244.
\textsuperscript{527} Saller 1941, 126–127; Sanmori 1998, 414.
\textsuperscript{528} For an updated study of the burials of the monastic complex of Mount Nebo, see Bianchi 2018.
Fig. 139  Memorial of Moses. General plan of the monastic complex.
The Coenobium of Siyagha: framing the monastic spaces

Fig. 140 Memorial of Moses. Aerial photo of the monastic complex (© APAAME).
The northern wing of the monastery develops on the slopes located on the northern side of the basilica and atrium. The rooms nos. 36–37 have a quadrangular shape and a threshold facing the valley. The excavation of S. Saller and the subsequent survey carried out by A. Accocci and N. Grande indicates that these rooms, probably monastic cells, can be dated to the middle of the 5th cent. A.D.\textsuperscript{529}. After the destruction which occurred during the second half of the 6th centuries, the cells were covered by the rubble from the apse of the church and were no longer rebuilt.

After the renovation of the basilica, in the second half of the 6th cent. A.D.\textsuperscript{530}, new sectors of the monastery, including groups of two or four rooms connected with one another, were built on top of a series of artificial terraces along the northern and western sides of the complex\textsuperscript{531}. The loci nos. 40–49 arranged on terraces of different levels have at least three construction phases from the end of the 5th to the end of the 6th cent. A.D.\textsuperscript{532}. With the exception of the room no. 40, which has a mosaic floor, the other rooms seem to have been intended as workshops, as shown by the ovens and fireplaces found in rooms nos. 44 and 43. The north wing of the monastery also includes enclosures nos. 45–48, 50, which have been interpreted as places for cattle breeding\textsuperscript{533}. In the same years, the western wing was enlarged with the construction of courtyards, water drainage systems and rooms including the room no. 56 (6 × 40.60 m) characterized by a series of round arches already identified by S. Saller as a possible hospice or shelter for pilgrims visiting the shrine of Moses\textsuperscript{534}. The long room is situated on the edge of the monastic complex and has entrances facing outwards, favouring the access of pilgrims, and the privacy of the monastic community. It should be emphasized that the room no. 61, located at the southern end of the room n. 56, is the only one with two floors\textsuperscript{535}. It is possible to suggest that the structure allowed the connection between the room no. 56 and the group of rooms nos. 60–63.

Another monastic sector, only partially excavated, was built north-east of the Basilica, along the slope of Mount Nebo\textsuperscript{536}. It consists of a series of rooms (nos. 800–804) dated to the 6th cent. A.D. and then abandoned after the collapse of the apse of the basilica occurred after the second half of the 6th cent. A.D.\textsuperscript{537}.

The southern wing of the monastery was characterized by a dynamic development of the space. The western sector consists of a courtyard (no. 68) cells (nos. 64–67, 69–77, 75–78), some paved with mosaic floor and others with stones, a walled area (no. 73) and passages\textsuperscript{538}. In the south-western corner of room no. 75, a single burial with typical female grave goods was found\textsuperscript{539}. Unfortunately, the lack of an anthropological bone analyst does not allow us to confirm the identity of the deceased, but the particular type of funeral equipment consisting of few glass bracelets, some beads and a spatula would suggest the burial of a female donor. The eastern section of the monastery preserves evidence of many construction phases, the most recent of which date back to the Umayyad period, probably after the earthquake of A.D. 749 as evidenced by the last archaeological investigations into the room no. 103\textsuperscript{540}. The rectangular

\textsuperscript{529} Saller 1941, 135–140; Accocci – Grande 1995, 499–503.
\textsuperscript{530} More in detail for the new interpretation of the architectonic phases, see Chapter 1, 70–80.
\textsuperscript{531} Saller 1941, 144–186.
\textsuperscript{532} In particular, the rooms nos. 42–43 have walls that overlap the walls of rooms nos. 36–37.
\textsuperscript{533} Saller 1941, 144.
\textsuperscript{534} This room is the largest in the monastery and measures 6 × 40.60 m. It was excavated in 1933 and continued in the 1986–1987 campaigns directed by M. Piccirillo and by G. Vannini. See Saller 1941, 155–160; Piccirillo 1986, 349. For the study of the pottery from this room, see Vanni Desideri 2012.
\textsuperscript{535} For the description of rooms nos. 60–61, see Saller 1941, 160–163.
\textsuperscript{536} Pappalardo 2010.
\textsuperscript{537} Callegher 2012.
\textsuperscript{538} Saller 1941, 164–169.
\textsuperscript{539} Saller 1941, 168.
\textsuperscript{540} Already S. Saller reported two employment levels in the southern monastic sector; Saller 1941, 169. For the results of the latest excavation surveys see Chapter 2, 100–108.
The Coenobium of Siyagha: framing the monastic spaces

module of the cells fostered a sequence of organized growth that allowed best advantage to be taken of the pre-existing structures and facilitated roofing the rooms. As for the structure of the rooms, during the excavations, not only many monastic cells (nos. 81–82, 84–85, 95–98) were found, but also remains of workshops with basin-lavatory (no. 89), areas for preparing and serving food and bakeries with ovens (nos. 93, 103–105). The monastic sector with rooms nos. 201–221 was identified by E. Alliata during the 1983–1985 campaigns, including a stratigraphic excavation and the analytical study of the pottery. This wing of the monastery, which constitutes a unitary group surrounded by a wall, extends to the southeast of the complex. The southern entrance leads from the outside to the central courtyard through a covered vestibule with two stone benches along the walls (no. 202). The courtyard was surrounded on three sides by a large portico overlooking the rooms. The room no. 201 is the only one with a mosaic floor with white tesserae dated back to the late 5th cent. A.D., while other rooms were built in the second half of the 6th cent. A.D. On the northern and southern sides of the portico there were three monastic cells (nos. 203, 215–216) and a storage-room (nos. 17); on the eastern side a large pillared hall (ca. 25 m long). Although the function of the hall remains unknown, E. Alliata suggests that these rooms could be used as an accommodation for pilgrims or as the infirmary for sick monks. Some restorations in the hall took place in the first half of the 8th cent. A.D., showing an occupation of this sector even in the Umayyad period. The Umayyad pottery sherds from the hall are of the same type as those found in the most recent stratigraphic layers of the south-eastern wings (especially in room no. 103) and under the synthronon. These data suggest that the last restoration of the complex dates after the earthquake that struck the region in A.D. 749.

Another archaeological record that suggests the continuity of the monastic life at Mount Nebo at the beginning of the Abbasid era is the content of the mosaic inscription found in the southern nave of the church of St Stephen in Umm er-Rasas (dated to A.D. 758). The text recalls the donation of Kaioum, monk and priest of Phisga (the name of Mount Nebo used in the Hebrew Bible) thus confirming the presence of a community of monks up to the 9th cent. A.D. (Fig. 162).

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541 Saller 1941, 169–186.
542 Alliata 1990a.
543 Alliata 1990a, 464.
544 E. Alliata’s excavation did not provide other information about the phase context. See Alliata 1990a, 463.
545 E. Alliata takes into consideration both the dimensions of the hall and the comparanda found in the monasteries of the region. See Alliata 1990a, 464–465.
546 In this phase the hall was divided into smaller rooms, perhaps destined for workshops as shown by the stone benches found in rooms nos. 209 and 2014; see Alliata 1990a, 465–466.
547 Chapter 2, 106–108.
548 Cf. what is stated in Chapter 1, 80.
549 Piccirillo 1994a, 251–252.
550 Κύριε μνήσθι τοῦ δούλου σου Καηουμ μοναχοῦ πρεσβύτερου Φισγα. (Remember, Lord, your servant Kaioum monk and priest of Phisga). For the edition and comment of the epigraphic text, see Piccirillo 1994a, 251–252.
551 Numerous epigraphic elements which confirm a continuity of life in the monasteries up to the 9th cent. A.D. are recorded in the complexes in the province of Arabia. In particular, the restoration activities of the mosaic pavements, dated to the 8th cent. A.D., are attested in the monasteries of Mar Liyas near Tishbe, in the complex of Deir ‘Ain ‘Abata and above all in the monastery of Aaron on Jabal Haroun. See in detail Di Segni 2006, 579–580; Politis 2012, 115–158 and Rajala – Fiema 2008, 240–241. On the questions relative to the transition between the Umayyad and the Abbasid periods, see Hamarneh 2003, 223–229; Walmsley 2005; Haldon 2006 and Hamarneh 2012.
4.2 THE MANAGEMENT OF THE MONASTERY

The monastery of Mount Nebo was not only an important religious centre for monks and pilgrims, but it was also involved in the management of farming land and agriculture. Although mainly devoted to prayer, the daily life of monks was marked by a series of activities linked to their sustenance and the possible accommodation of pilgrims. Hagiographic sources recall many monks with specific skills, who carried out these practical activities\(^552\). The various monastic offices assigned on 1\(^{st}\) September generally lasted for one year, but in some cases they could be reiterated for longer\(^553\). The monks’ services included those of the baker, the cook, and the head of the infirmary and guesthouse and of the mule tracks\(^554\). The liturgical responsibilities, on the other hand, were entrusted to a canonarca (responsible for the celebration of the Divine Office) and a cimeliarca (custodian of the sacred vessels and vestments)\(^555\).

Although no literary source refers to the tasks performed by the monks of Mount Nebo, the epigraphs of the mosaic floors give some data about the titles of the monks. The monks (whose Greek appellative was μοναχός or μοσάζων), some of whom could also be deacons (διάκονοι) and/or presbyters (πρεσβύτεροι) were ruled by an hegumen (ἡγούμενος – πατὴρ ἡμῶν)\(^556\).

One important monastic office related to the management of the monasteries was that of the oikonomos (οἰκονόμος). This steward was in charge of the income of fields and properties of a diocese on behalf of the bishop, or of the administration of an individual church or monastery\(^557\). Although the term oikonomos does not appear in any text in the Siyagha Monastery, in the mosaic inscription found in the monastery of Kayanos at ‘Uyun Musa the oikonomos Salaman is recalled\(^558\). Despite the fact that it is not possible to state whether Salaman was a monk or acted on the behalf of the Madaba bishopric, he gave material and financial support to build the monastic church of Kayanos.

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\(^{552}\) See for example the monastic duties of Cyriac in the Laura of Suka (V. Cir. 7).

\(^{553}\) Perrone 1990, 43.

\(^{554}\) Schwartz 1939, 228, 304.

\(^{555}\) Perrone 1990, 43.

\(^{556}\) For the analysis of epigraphs, see Di Segni 1998, 466–467.

\(^{557}\) Palestinian lauras had their own stewards already in the 4\(^{th}\) cent. A.D. Di Segni 1998, 440. 451, note 49. On the occurrences of the term oikonomos in the provinces of Palaestina and Arabia, see Meimaris 1986, 256–259.

\(^{558}\) Di Segni 1998, 453.
4.2.1 The monastic landscape

For a definition of the monastic landscape of the Nebo region it is important to point out that from the second half of the 5th cent. A.D. many monastic complexes in the provinces of Palæstina and Arabia became agricultural estates well integrated in the growing rural economy of the region. Papyrus documents found in the excavation of the Byzantine church in Petra show that the ecclesiastical organizations obtained income from farming land and that in some cases the land was leased according to a perpetual formula. The Arabic adjective haram or aram which, in the testaments or legal documents of dispute often accompanied the name of some land properties, seems to allude to the Greek ἱερα-γῆ (hiera-ge) and therefore may refer to possessions of the Church or administered on behalf of the diocese. More specifically for the monasteries, some parallels with the Egyptian context show how the pieces of land often came within the donations to the monastic complexes, which were usually administered in order to draw great profit from them. Some lands could, on the other hand, be purchased with a standard contract between a member of the clergy and a private seller. Agriculture was often practiced by monks in fields that in some cases belonged to their monastery. Although they are later textual sources, the byzantine typika mention the monastic gardens and orchards as paradises on Earth where the abbot as a spiritual gardener could nurture the monks’ spiritual growth.

The juridical and topographical analysis of the Mount Nebo region is not an easy task, due to the obvious lack of written accounts on it and because the archaeological surveys were mainly concentrated on the study of the individual building structures, but not on the interrelations between the monasteries and the rural landscape. To approach this question, it is important to focus on the material culture which provides a memory to the ancient farming environment of Mount Nebo.

The agricultural activities for the production of vegetables and cereals, crops widely used in the monastic diet, were practiced in the cultivated plots that extended along the slopes of Mount Nebo near the Siyagha monastery (Fig. 141). The land exploitation system often required two important components: the construction of retaining walls to regularize the arable surface of the mountain and the proximity to seasonal wadis. The latter flowed down widely on the slopes of Mount Nebo: on the east is the Wadi Afrit, with its offshoots the Wadi el-Kanisah and the Wadi Judeideh; on the north are the Wadi en-Naml and the Wadi ‘Uyun Musa. Part of the water could be channelled into two large cisterns (nos. 122 and 136) and used to irrigate the fields (Fig. 143). A closer parallel is found at the sanctuary of Lot at Deir ‘Ain ‘Abata where a large cistern built at the southern tip of the monastery conveyed the water from a local wadi (Fig. 132).

559 The growth and prosperity of the rural settlements in the areas of Transjordan can be traced back to the 4th cent. A.D., when the imperial policy encouraged those who had financial resources to invest in the private property of the land and its development. On the Diocletian reorganization of the tax system, see Sexton 1946, 280; Jones 1964, 1, 61–65; Carrière 1994; Kuhoff 2001, 484.
560 On this topic, see Hamarneh 2010, 62–63.
563 The papyrus of Petra no. 25 shows a deed of purchase between a presbyter of the church or monastery of St and Martyr Theodore of Ammatha, and a deacon for a piece of cultivable and well irrigated land (γεωργία) defined epoikon in the village of Augustopolis. The transaction was recorded in the archives of hypodektai of Petra in the years A.D. 558–559. See Arjava et al. 2007, 79–80 quoted in Hamarneh 2010, 63.
564 Hagiographic sources mention that the Monastery of St Saba and Choziba had private gardens and orchards used to grow vegetables. On this topic, see Di Segni 1991, 128–129 and Hamarneh (forthcoming).
566 Saller 1941, 2.
567 Saller 1941, 201–202 fig. 25, table 22, 1.
568 Saller 1941, 204–206 figs. 3, 26; table 160.
569 Politi 2012, 115–123.
Fig. 141 Memorial of Moses. Aerial photo of the rural landscape of Mount Nebo.
Fig. 142  Memorial of Moses. Aerial photo of Ras Siyagha.

Fig. 143  Memorial of Moses. Plans of the farming structures identified after the excavation by SALLER (1937) (after Saller 1941, 4).
Regarding the retaining wall, S. Saller reports the existence of some rows pertaining to a regular wall developed south of the monastery and probably used as a support for agricultural tillage (no. 117 in Fig. 143). Similar walls were built on the southern slope of the mountain perhaps in order to protect cisterns and water supply systems of the complex\(^{570}\) (no. 119 in Fig. 143). Despite the fact that the recent building work on the southern slope of Siyagha prevented recognizing the traces documented by S. Saller, it is possible to identify this area as the main agricultural sector of the complex (Fig. 144). The soil composition of this land partially protected by the strong winds coming from the northern and western sides of the mountain seems to have been the most suitable for the cultivation of crops.

Due to the lack of papyri and ostraca no document provides data on what form, and how many cultivated plots belonged to the monastery of Siyagha. In addition, the absence of boundary markers or specific epigraphic references does not allow an understanding of the division between the lands and fields cultivated by the monastic community and those by the peasants of Khirbet el-Mukhayyat, a village located only 4.8 kilometres away\(^{571}\).

However, the relationship between the monastery and the rural communities could be interpreted according to a form of social interrelation in which the monks exercised spiritual guidance over the lay inhabitants of the area and the settlements often contributed to the sustenance of the monastic clergy\(^{572}\). It is worth noting that the rural lands were included in the territorial jurisdiction of the diocesan centres and the local clergy was directly involved in the management of the land exploitation\(^{573}\). The bishop, as shown in the papyri of Petra, was not only active with

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\(^{570}\) Saller 1941, 199–207.

\(^{571}\) For the parallel cases, see Dragon 1979; Walmsley 2005.

\(^{572}\) In the western Galilee and Jordan, numerous small monasteries have been identified equipped with production facilities in the immediate vicinity of rural villages, suggesting that the two realities were often connected in land use. See Hamarneh 2012; Ashkenazi – Aviam 2013.

the management of the monastery

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Fig. 145 Memorial of Moses. View of the northern slope of Mount Nebo from ‘Uyun Musa.

his ecclesiastical patronage, but also exercised a civil authority in regulating the deeds of sale, in the application of wills and in territorial disputes between the peasants.\(^{574}\)

The analysis of the land exploitation system in Mount Nebo region should take into consideration the relationship between the *coenobium* of Siyagha and the small monasteries in the surrounding valleys. At ‘Uyun Musa there are two springs that flow from the northern side of Siyagha; today, the water is used to irrigate gardens, as it most likely would have been in Late Antiquity. The valley of ‘Uyun Musa has a mild climate, fertile soil and the presence of a perennial water source that supports the cultivation of crops (Fig. 145). Egeria mentions that the oldest monastic community that accompanied pilgrims to the Memorial of Moses resided in the valley.\(^{575}\) In addition, the mosaic inscription in the monastery of Kayanos bears the name of Rabebos, who was most probably the hegumen mentioned in the dedicatory inscription of the funerary chapel at Siyagha.\(^{576}\)

As far as farming production is concerned, it seems that the monastic structures of the valleys enjoyed a relative degree of self-sufficiency. The monastic complexes often had their own wine presses or grain mills as shown by the production facilities of the monastery of el-Kanisah in the Wadi Afir.\(^{577}\) It is therefore possible that the monastic complex of Siyagha was not at the centre of an expansion of the centrifugal type, but simply supervised a small network of interconnected monasteries.

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\(^{574}\) Hamarneh 2003, 237.

\(^{575}\) It. Eg. 12, 2–3.

\(^{576}\) L. Di Segni suggests the name Rabebos was influenced by the phonetic change of O for A, common in many inscriptions of the province of *Arabia*. Di Segni 1998, 451 no. 58. On the monastery of Kayanos in the valley of ‘Uyun Musa, see Piccirillo – Alliata 1989. For the Greek inscription in the Robebos funerary room, see Di Segni 1998, 347–348 no. 34.

\(^{577}\) In this monastic complex a press, a small mill for wheat and an oven were found. Piccirillo 1998b, 205–209.
The productive independence of the monasteries, even of small dimensions, seems to be confirmed by the study of the wine-producing systems of the monasteries in the provinces of Arabia and Palaestina Tertia. For the diocese of Madaba, presses were found in the monasteries of Ain Qattara, Deir er-Riyashi, and in the so-called complex of the tower of the styline and in the monastery of Umm er-Rasas.

Distance between the monastic complex of Siyagha and the monasteries in the valleys

<table>
<thead>
<tr>
<th>Distance</th>
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<tbody>
<tr>
<td>‘Uyun Musa</td>
<td>3.2 km</td>
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<tr>
<td>Khirbet el-Mukhayyat</td>
<td>4.8 km</td>
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<tr>
<td>Monastery of the Theotokos in the Wadi ‘Ain el-Kanisah</td>
<td>7 km</td>
</tr>
<tr>
<td>Monastery of el-Kanisah in the Wadi ‘Afrit</td>
<td>8 km</td>
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4.2.2 The production facilities and the dietary aspects

After the analysis of the monastic territorial organization and the exploitation of the soil, attention should be turned to the archaeological remains of the production facilities found in the monastery of Siyagha. The winepress of the monastic complex has been identified on the northwestern slope of Mount Nebo (rooms nos. 110–115). The production facility was made up of a central mosaic room with a central stone for the vertical pole of the press, three small rooms at a higher level, and two drainage basins to collect the must (Fig. 146). The winepress was filled up after the excavation and it was not possible to estimate the facility’s production, but the winepress found in Khirbet Yajuz, eleven kilometres north-west of Amman, with a production

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579 Piccirillo 1989a, 249–250.
580 Piccirillo 1989a, 260.
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Fig. 147  Khirbet el-Mukhayyat. Church of Saints Lot and Procopius, detail of the pressing of the wine.

Fig. 148  Khirbet el-Mukhayyat. Church of Saints Lot and Procopius, detail of the grape harvest.
capacity of about 69 litres of must per hectare is a good parallel. As the wine-press of the Siyagha monastery was one-third smaller than the one of Khirbet Yajuz it is possible to suggest that the wine production of this facility was limited to meeting only the needs of the monastic complex. However, S. Saller mentions a second winepress near the road between Siyagha and Khirbet el-Mukhayyat that could have belonged to the monastery and so increased the wine production of the complex.

Viticulture in the Mount Nebo region was certainly widespread and wine production was a widely practiced activity by local peasants, as shown by the scenes in the mosaic floor of the church of Saints Lot and Procopius found in the nearby village of Khirbet el-Mukhayyat (Figs. 147–148). The grape harvesting and pressing scenes testify to the activities carried out by the villagers probably in the vineyards that extended a short distance from the Siyagha monastery or in the valleys below (Fig. 149). It is worth noting that the highest concentration of presses in the Madaba region occurs around Mount Nebo showing that the wineries were widespread in this area.

Wine played a vital role in the monastic community due to its religious and liturgical meaning in the Eucharist sacrament. Concerning the dietary consumption, the rules for drinking wine varied depending on the monastic community but in general the hegumens tried to limit its use. From the end of the 6th cent. – beginning of the 7th cent. A.D., a more rigid monastic discipline imposed fasting from food and wine on the days of Wednesday and Friday while it was allowed on the other days of the week and in particular on Sundays.

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584 On the installation of wine production of Khirbet Yajuz, see Khalil – al-Nammari 2000.
585 On the parallels of presses in Israel and on the method of calculating the production of wine, see Ashkenazi – Aviam 2013, 276–281. More in general on this subject, see Frankel 1997; Hirschfeld 2005 and Taxel 2008.
586 Unfortunately, it was not possible to verify the presence of this production facility. See Saller 1941, 195, note 2.
587 Piccirillo 1993, 152–158.
588 The Madaba Plains Project recorded eight Byzantine wine presses. On this topic, see Decker 2009, 140.
The management of the monastery

The preparation and baking of bread for Eucharist and consumption purposes was mainly concentrated in the south-eastern sector of the monastic complex where the bakery of the complex was probably located. The excavations in this area revealed three ovens in rooms nos. 93, 103, and 105 (Figs. 150–151). Two more ovens were found in rooms nos. 43–44 in addition with two other ovens located a little further to the south of the monastic complex, near the modern Franciscan monastery (Fig. 152). Another oven was found in room no. 93. It is not

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591 See the study of pottery in Chapter 2, 106–108.
593 Saller 1941, 170–174; 181–182.
possible to state whether these ovens were all active in the same chronological period, however the examination of the ceramic finds suggests that the ovens of the southern sector were also used in the Umayyad period. If the room no. 56 is considered the hospice for pilgrims, the two ovens located outside the monastery and near this room could perhaps be used for the baking of bread for pilgrims. However, no bread moulds were discovered in the Mount Nebo region. Although no grain crusher has been identified in the monastic complexes of Nebo, local processing cannot be excluded.

594 It. Eg. 11, 1. For a reflection on the activity of the ovens in the monastic communities, see Corbo 1958.
595 For a list of the wheat mills discovered in the monastic complexes of Jordan, see Hamarneh 2003, 304–308.
During the 2012–2014 campaigns, numerous seeds were recovered during the excavation of the synthronon which suggests interesting information on the possible diet of the monks. In particular, olive and date stones, pistachio shells, grains of wheat and barley have been identified, together with bones of animals with signs of slaughtering, the meat of which, following the numerous monastic dietary restrictions, was probably only for monks who were ill and pilgrims visiting the monastery (Figs. 153–154). The archaeobotanical finds recovered in the monastic complex of Siyagha agree with what is reported in the monastic hagiographic sources. The weekly diet followed by the monks included simple food such as bread, water and dates. The Life of St Saba and the Life of John the Hesychast also mention carobs. In particular cases the sources recall that the monks could eat simple oat soups and semolina porridge (ῥοφή and σεμίδαλιν). During Sunday lunches, the meals could be enriched with various vegetable preparations (λάχανον), legumes (ὐσπριον), ψευδοτρόφιον, bean dishes (φάβα) as πισάιον and squash dishes as κολοκύνθια. The anachorets who lived in isolation in the valleys of Mount Nebo and who usually joined the community only once a week, may have eaten fresh vegetables from their gardens or pulses cooked in water. In the Life of St Mary of Egypt, Sophronius recalls the supplies that the monks used to take with them during their peregrinations in the desert, such as figs, dates and various pulses. During the anachoretic rites it was not unusual for the monks to dedicate themselves to collecting herbs or wild roots necessary for their survival. The plants recorded by Cyril of Scythopolis include μαλῶα, μαννούθιον, μελάγρια and καρδία καλάμων. From some sources we learn of strict regulations on the consumption of a hot beverage by the coenobite monks, called εὐκράτιον and made by fermenting pepper, cumin and aniseed.

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596 On the regulation of the diet in Byzantine monastic documents, see Thomas et al. 2000, 1696–1716.
597 Io. Mosch. prat. 65.
598 Patrich 2015, 130.
599 V. Sab. 76, 182; V. Jo. Hes. 25, 107.
600 V. Jo. Hes. 19, 215.
601 V. Geor. 43, 336.
602 V. Sab. 44, 135.
603 V. Sab. 40, 130.
605 See in this regard the example in V. Cyr. 16, 232.
606 V. Marie Aeg. 74.
607 V. Euth. 50, 72; 56, 77.
608 V. Sab. 8, 92; 40, 130.
609 More in detail on the consumption of melagria by anachoretic monks, see Rubin 2002.
610 V. Sab. 13.
611 V. Jo. Hes. 19, 216.1.
The same products are attested in the travel accounts of the Arab geographers Ya’qubi, Baladhuri and al-Maqdisi, thus proving that the Balqa’ region continued to be used for the cultivation of cereals, almonds, fruit and for raising sheep even under the subsequent caliphal administration.

4.2.3 The water system

The need for water was not only limited to farming uses, but also and perhaps above all to meet the primary needs of the monks, pilgrims and all those who frequented the shrine. The importance of water and its collection can be deduced from the significant echo that this topic had in the hagiographic texts of the Lives of the Palestinian monks. For example, in the writings by Cyril of Scythopolis the search for water is associated with the sagacity of man and divine synergy.

The stratigraphic surveys carried out in the site have documented the existence of a well-structured system of supply, made up of various hydraulic components, such as pipes, sedimentation tubs, basins and collection cisterns. The main reserve of water of the monastery was made up of two cisterns, dug out directly under the level of the atrium opposite the basilica. Cistern no. 8 was excavated in 1996. The rainwater that came from the roof of the narthex and of the neighbouring roofs was conveyed into this cistern by means of a drainage channel which came from a small basin of sedimentation found in room no. 28. This basin was used to eliminate the impurities from the water and thus make it suitable for drinking (Figs. 155–156).

Cistern no. 9, also obtained by cutting the rock of the mountain, had masonry walls and was faced with waterproofing plaster. The cistern was not excavated by S. Saller because the Bedouin workers were intimidated by the presence of human bones inside the structure.

In the north-western part of courtyard no. 83, S. Saller unearthed a drainage channel faced with ceramic slabs, which extended to a cistern on the southern side of the courtyard. The channel, 2.82 m long, is made up of nine ceramic pipes (33 cm long and with a diameter of 30 cm) of which only one is preserved in its entirety. Unfortunately, during the recent assays it was not possible to check the end of the pipe, but its orientation from the basilica suggests also in this case it was to channel rainwater from the roof. Cistern no. 83, as well as being a tank for drinking water, was used by the monks to draw the water necessary for some productive activities, as suggested by the ovens found in the south-eastern sector of the monastery, one of which came to light during the latest surveys, and the basin in room no. 88.

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613 On this subject, see Walmsley 1997.
614 Interesting episodes are shown in the Life of Euthymius, in which it is recalled how one monk, after having prayed to God, excavated and was able to find the water necessary to quench Saba’s thirst (V. Euth. 38); or the passage in which Saba himself, needing water for the inhabitants of his community, made a plea to God and immediately he heard the sound of a wild donkey intent on digging in the soil; he picked up the sign and imitated the animal, finding the yearned-for source of water (V. Sab. 17).
615 On the topic, see Perrone 1990, 16–17.
616 For more details on the functioning of the water systems in antiquity, see Hodge 2000, 21–34.
617 Cistern no. 8 and cistern no. 9. See Saller 1941, 77; pl. 49, 1–2; Alliata 1996, 394.
618 See Chapter 2, 109–112.
620 Saller 1941, 130–131.
621 Saller 1941, 77.
622 Saller 1941, 169–170; pl. 76, 3.
623 Ovens no. 93 and no. 105; see Saller 1941, 170–172. 181–182.
624 See in this regard the study in Chapter 2, 100–105.
625 Saller 1941, 176–178; pl. 74, nos. 1–2.
Fig. 155  Memorial of Moses. System of water channelling of cistern no. 8.

Fig. 156  Memorial of Moses. The basin and conduit in the northern part of room no. 28 (after Saller 1941, 131, fig. 19).
Cistern no. 116 was built outside the walls of the monastery, near room no. 56\footnote{saller1941}. This cistern was probably intended for those who used this room, perhaps the pilgrims who visited the Memorial of Moses\footnote{piccirillo1986}.

For the proper functioning of the water systems, some particular elements to check the correct flow of water and identify potential problems that could arise in the system, were indispensable\footnote{wilson2000}. These components are the so-called inspection boxes, one of which, faced with slabs of earthenware, was excavated near passage no. 74\footnote{saller1941}. Two portions of pottery pipes, recovered close to the ditch, were fitted with specific countersinks made so that the portions of the pipe could be inserted within one another reducing the loss of water to a minimum\footnote{saller1941}.
As well as providing water, the monastery of Mount Nebo also had a system for its disposal. Two drainage systems have been identified in the western sector of the monastic complex, most probably in this area to take advantage of the slope of the mountain (Fig. 157). The excavations of room no. 22, looking directly on to the atrium of the basilica, have identified a channel plastered with a good mortar with a thickness of 2–4 cm which allowed the water to flow towards the western wall of the room and from here to drain into the western courtyard of the monastery.\textsuperscript{631} (Fig. 158). Thanks to the slight slope of this open area, the water flowed towards a drainage channel which went through rooms nos. 60 and 62, finally allowing the water to flow outside the monastic complex.\textsuperscript{632} (Fig. 159). A similar system of drainage also characterized the north-western wing of the monastery where in room no. 17 a drainage channel was identified which flowed into room no. 53.\textsuperscript{633}

\textsuperscript{631} Saller 1941, 127–128; pls. 22. 161.
\textsuperscript{632} Saller 1941, 163.
\textsuperscript{633} Saller 1941, 123–124; pls. 17. 51, 2.
4.3 ECONOMIC AND SOCIAL COMPONENTS

4.3.1 Religious and lay euergetism

Archaeological and epigraphic records recovered in the monasteries of Mount Nebo reveal acts of religious and lay euergetism. Three categories of people contributed financially to the development of the monastery of Siyagha: pilgrims, affluent laymen and the bishops of Madaba. The presence of the first subjects is intrinsically linked with the religious devotion for the shrine of the prophet Moses. As already mentioned, from the beginning of the 5th cent. A.D. pilgrims, welcomed by local monks, began to visit the Memorial of Moses on Mount Nebo. Religious hospitality addressed the five primary needs of the pilgrims: food, water, shelter, liturgies and guidance to the local sacred places. In their turn, the monasteries benefited from the possible donations and began to produce architectonic structures adequate to meet the growing needs of the community. The association between these two elements contributed to the lasting life of the monastic institutions even in the Abbasid period.

The other two categories of donors are also epigraphically attested in the mosaic inscriptions laid in the ecclesiastical buildings of the Nebo region. The inscriptions mention thirty-four donors and benefactors. Of these twenty-three are men (one deacon and one priest), while eleven are women.

The social pattern is particularly interesting. Among the lay people mentioned in the mosaics most of the wealthy benefactors bear Greek names, while people from the lower class (including workers and local villagers) seem to have Semitic onomastics, both Aramaic and Arabic. A clear example is the inscription recalling the euergetic act of Stephen and Elijah, sons of Comitissa, in the church of Saints Lot and Procopius and in the church of St George in the village of Khirbet el-Mukhayyat. Regarding specific profession, the text of the mosaic in the north diakonikon of the basilica of Siyagha (dated to A.D. 530/531) mentions the name of three advocates (σχολαστικόι): Muselius with his wife Sergius, Philadelphus, and Gothus (Fig. 160). The portraits of the euergets are well attested in the church of the Nebo region (Fig. 161).

Euergetism of the bishopric of Madaba is also showed in the mosaic inscriptions of the monastic complex. Bishop Elias (A.D. 531–536) is mentioned in the mosaic inscription of the northern diakonikon of the basilica, Sergius I (A.D. 576–598) in the southern baptistery and

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634 On the phenomenon of pilgrimage in the monasteries of Transjordan, see Chapter 3, 125–132.
635 One interesting parallel with the monasteries of Samaria was recently underlined in the study by Taxel. See Taxel 2008, 67. On the same subject Patrick 2004; Di Segni 2001, 36 and Limor 2006, 332–333. For the Egyptian area, see Bagnall 2001.
637 A practical example of donation is provided by the legacy of a faithful to the monastery of the high priest Aaron on Jabal Haroun near Petra. See Frösén – Miettunen 2008, 12.
638 On this, see Chapter 5.
Fig. 160  Memorial of Moses. Mosaic floor in the north diakonikon (dated to A.D. 530/531).

Fig. 161  Khirbet el-Mukhayyat, Wadi ‘Afrit. Detail of the mosaic in the Chapel of the priest John (dated to 6th cent. A.D.) illustrating the faces of two donors: a priest and a matron.
Leontius (A.D. 603–608) in the chapel of Theotokos\textsuperscript{644}. In addition to the usual honorific function, we can imagine a direct involvement of the bishop through the investment of diocesan funds for the construction works of the monastery\textsuperscript{645}.

<table>
<thead>
<tr>
<th>Hegumens</th>
<th>Bishops of Madaba</th>
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<tbody>
<tr>
<td>Alexis (4\textsuperscript{th}–5\textsuperscript{th} cent. A.D.)</td>
<td></td>
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<tr>
<td>Procapis (end 5\textsuperscript{th}–beginning 6\textsuperscript{th} cent.)</td>
<td>Fidus (end 5\textsuperscript{th}–beginning 6\textsuperscript{th} cent.)</td>
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<tr>
<td>Robebo (end 5\textsuperscript{th}–beginning 6\textsuperscript{th} cent.)</td>
<td>Cyrus (end 5\textsuperscript{th}–beginning 6\textsuperscript{th} cent.)</td>
</tr>
<tr>
<td>Elias (A.D. 530–[...])</td>
<td>Elias (A.D. 531–536)</td>
</tr>
<tr>
<td>Martyrius (A.D. 597–[...])</td>
<td>Sergius (A.D. 576–598)</td>
</tr>
<tr>
<td>Theodorus (A.D. 603–[...])</td>
<td>Leontius (A.D. 603–608)</td>
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</tbody>
</table>

The following diagram shows how a high percentage of the donations to the ecclesiastical institutions in the diocese of Madaba, attested by the term Προσφορά (offering), are concentrated precisely in the geographic area of Mount Nebo.

The donations by pilgrims and euergetes and the commissioning of architectonic work mean that presumably money circulated and flowed into and out of the coffers of the monastery\textsuperscript{646}. However, due to the lack of written documents, it is not possible to establish the monetary use of the monastic community of Nebo. During the excavations of S. SALLER one hundred eighty-eight coins were found, to which are added other one hundred ninety-seven coins discovered between 1967 and 1996\textsuperscript{647} and the coins mentioned in Chapter One. Most of the coins were found scattered in the rooms of the monastery, or in layers sealed beneath the mosaic floors. It is not possible to establish to whom the coins belonged, whether to the monks, pilgrims or workers.

\textsuperscript{644} For the relative epigraphic studies, see Di Segni 1998, 430–434.
\textsuperscript{645} On this subject, see Feissel 1989 and the more recent studies by Rapp 2000 and Rapp 2005.
\textsuperscript{646} Callegher 2016, 151.
\textsuperscript{647} Gitler 1998, 550–551.
Noteworthy is a coin hoard of two hundred and thirty copper coins (*Folles* in particular) found hidden in the wall of a cell dated to the 6th cent. A.D. and hundreds of sub-units in isolated finds. B. Callegher suggests that the hoard has a value of about two gold *tremisses*. He supposes that this amount could be a small reserve for the payment of a worker engaged in building work during the 6th cent. A.D., or a votive accumulation by a monk.

4.3.2 The social composition of the monks

No archaeological data allow us to establish the number of monks who constituted the monastic community of Mount Nebo. Although many bones have been found in the burials of the Siyagha monastery, most of them were found at the time of S. Saller and were not studied analytically with modern anthropological analyses. However, burial practices could suggest the hierarchy of the monastic community. Indeed, the position of the individual tombs related to the empty tomb found along the axis of the church and the number of buried people may reflect the rank of monks. The graves containing only one individual (no. 70 and no. 73) and situated under the presbytery certainly had to be destined to some hegumen or to a member of the high clergy. The tombs no. 72 and no. 74, despite being polysomic, contained the remains of eight individuals, who, being buried *ad sanctos*, could also have been prominent members of the community. The tomb located under the presbytery of the monastic church of Kaianus in the Wadi ‘Uyun Musa would also appear to be a privileged burial. However, most of the monks were buried in polysomic tombs and later their bones were placed in collective ossuaries.

To the east of the *coenobium* of Siyagha the funerary chapel of Robebus (ca. A.D. 530) was designed for the burial of a few chosen dead. Below its floor there was a large crypt. The burials were carefully studied between 2007 and 2010 by M. Judd. The crypt contained skeletons of at least seventy-three adult men, presumed to have been monks, but also included youths. Careful examination revealed damage to ear bones. Although dimorphic cranial features were ambiguous in some cases, one female may have been present at Mount Nebo (skeleton 30B).

The etymological analysis of the names of the clergymen found on the mosaic inscriptions of the Nebo region shows that in the 5th cent. A.D. a large number of priests bear Greek names, with the sole exception of the priest and hegumen Robebos, while during the 6th and 7th centuries the Semitic names are also attested, in equal number to those of Greek origin. However, due to the predominance of Biblical names it is not possible to trace back to the ethnic background of the clerics.

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648 Callegher 2012. On the other coins found in the monastery, see Gitler 1998 and Callegher 2010.

649 Callegher also suggests that this sum corresponds to the value of a twice-monthly payment expressed in gold coins, but made with bronze sub-units. See Callegher 2012, 325.

650 Callegher 2012, 327. Some parallels referred to the price of everyday goods in Egypt between the 4th and the 7th centuries A.D. can be inferred from the *Life of John the Almsgiver*, written by Leontius of Neapolis. See Morrisson 1989 and Hamarneh 2016, 134 note 22.


652 Bianchi 2018, 42–43.


654 Both literary sources and archaeological and epigraphic evidence show that abbots, priests and mere monks often had separate burial. See Di Segni 1998, 437–438 no. 34, note 38.


656 Judd *et al.* 2019, 457.

