

Creating Economic Capacity for Pilgrimage to Jerusalem in the Byzantine Period

Discussion of the economy of pilgrimage during the Byzantine period can be approached from various directions. The significant cost of individual pilgrimage, whether the transportation, the accommodation, sustenance, guidance, indulgences or other expenses, had to be met by the pilgrims themselves¹. While the wealthy had the means to cover their own costs, the less affluent, and probably often the more pious, would presumably have had to live off the land on their arduous journey to the Holy Land. This paper, however, will concentrate on a second aspect, that is the manner in which the economy of Jerusalem and its hinterland coped with the influx of pilgrims. The central issues to be addressed will be the economic capacity necessary to support an increasing population, including large numbers of pilgrims and what were the provisions made to handle the task, especially given the low economic capacity that characterised the hinterland of Jerusalem prior to Constantine's conversion and the subsequent injection of imperial funds into the region from the fourth century².

The Population of Jerusalem

Discussion of the economy of Jerusalem and its hinterland must start with demography. This contentious issue is the foundation of understanding the subsistence strategies in any period. As Broshi³ and Geva⁴ have summarised, the numbers of residents surmised for the Roman and Byzantine periods swings wildly. Given the limitations of space, I will not go into the various coefficients utilised to calculate ancient populations⁵, but from a high population during the Herodian period for Jerusalem of anything between 20,000 to 90,000, the population of Aelia Capitolina would plunge to a low of only 4,000 according to Geva⁶, a figure which may even be an over-estimate⁷. The following Byzantine period would be a period of major population growth, a fact demonstrated

through the huge expansion of the urban area of the city, with Eudocia's new city wall now encompassing Mount Zion in addition to the earlier enclosed areas⁸. According to a series of coefficients, the Jerusalem would grow to around 36,000-50,000 people in the sixth century, with a further 60,000-100,000 living in the rural district⁹. After the expulsions that followed the two Jewish revolts, Jerusalem lacked an indigenous local population, Christian or otherwise, of any significance, so this population growth can only be accounted for by influx founded on pilgrimage.

Certainly, the wide spread of origin of the pilgrims is attested to by the range of accounts of pilgrimage to Jerusalem and the holy sites in a multiplicity of languages. Some writers exhibited amazement at meeting Christians from the east who formed the largest ethnic group of pilgrims¹⁰, but with little in the way of *itineraria* in Greek, Armenian, Syriac or Georgian, we can only rely on the third-party impressions of their pilgrimage or its scale. Egeria, for example, depicts the celebration of the dedication of the Holy Sepulchre as having been attended by believers from many lands, speaking different tongues, including up to fifty bishops with large retinue¹¹. In the mid-fifth century we learn specifically of the group pilgrimage of 400 Armenian monks who visited the monastery of Euthymius on their voyage to Jericho to immerse themselves in the Jordan¹². This was by no means an isolated case, evidence existing for many groups of Armenian pilgrims throughout the Byzantine period¹³.

But this can only hint to the magnitude of pilgrimage, for every visitor had to be accommodated and fed. Beyond the provision for the residents of the area, the agricultural economy of the district had to be able to provide autarkic sustenance for the large visiting population of transient pilgrims and itinerant laborers. Furthermore, service opportunities arose to guide visitors, provide them with icons and souvenirs and even rob them of their possessions. For many modern nations tourism can form a major share of the economy, the

1 Sumption, *Pilgrimage 185-192*. 204-205; Limor, *Holy 12-15*; Bell/Dale, *Medieval 619-622*.

2 Seligman, *Absence 112-113*.

3 Broshi, *Population*; Broshi, *Estimating*; Broshi, *Western Palestine*; Broshi, *Agriculture*; Broshi, *Methodology*.

4 Geva, *Estimating*.

5 Broshi, *Population 6*; Broshi, *Estimating 10*; Broshi, *Western Palestine 1*; Packer, *Housing 84-86*; Frankfort, *Town Planning 103-104*; Wilkinson, *Ancient Jerusalem 49*; Gulick, *Tripoli 190*.

6 Geva, *Estimating 59*.

7 Seligman, *Absence 112*.

8 Broshi, *Population 13*; Broshi, *Estimating 14-15*; Tsafirir, *Topography 285*; Geva, *Estimating 60*.

9 Broshi, *Western Palestine 3-6*; McCown, *Density 436*.

10 Jerome, *Epistolae 46, 10*; *Itinerarium Egeriae 49*; Arculf, *Adamnani de locis sanctis 225*.

11 *Itinerarium Egeriae 47-49*.

12 Cyril of Scythopolis, *Vita Euthymii 17, 27, 8-10*; Stone, *Pilgrimage 95-97*.

13 Stone, *Pilgrimage 109-110*.

impact in the Byzantine era probably being similar, if reduced in magnitude. Significant economic prospects were open to both the clerical and secular sections of Byzantine society, so assessing the scale of pilgrimage during this period is of major importance. Unfortunately, the *itineraria* are of little use as a source for judging the numbers of pilgrims, or their actual social composition. As the preservation of *itineraria* is sporadic at best, their content focusing on the journeys of the western literate elite, they can only hint at the general experience.

Though a small number of Christian pilgrims, mainly drawn from the clerical elite, had arrived in Jerusalem prior to 324, it was its metamorphosis into a Christian city and the building of imperially sponsored major shrines that would ignite a mass movement of pilgrims¹⁴. Partially because of the slow pace of conversion of the local population to Christianity, pilgrimage would become the main source of manpower for the monasteries of Palaestina and a fundamental factor for the Christianisation of the country¹⁵. While we learn of the existence of local clergy, such as Eusebius of Caesarea, Cyril of Jerusalem and Procopius of Caesarea, the vast majority of monastic leaders and monks were former pilgrims, who either through decisions prior to their arrival, or as a result of the spiritual impact of their visit, resolved to settle in the country. A disproportionate number of these immigrating pilgrims were drawn from the clerical and secular elite, some of whom found sanctuary in the Holy Land as refugees from the threat of Vandal attack in Italy or as political exiles from the court of Constantinople¹⁶. Many would establish their own institutions in Jerusalem, the hinterland and the Judean Desert, often exhausting huge personal funds in the process¹⁷, monies that would be drawn into developing the local church and economy. Furthermore, the cosmopolitan nature of this migration is immediately apparent, with immigrating pilgrims drawn from the Latin speaking west, the Greek speaking Asia Minor and Syria, Armenia, Georgia, Mesopotamia and Arabia.

Though we have no real idea of actual statistics for pilgrimage, or immigration, to Jerusalem, there can be no doubt that the numbers were considerable, especially during the major festivals – Encaenia, the commemoration of the dedication of the Holy Sepulchre, Epiphany and the Holy Week of Easter. The flow of pilgrims increased into the fifth and sixth centuries, exemplified by the expanded capacity of Christian churches, hostels and monasteries through Eudocia's patronage of huge new basilicas for St. Stephen, north of Jerusalem's walls, on Mount Zion and at the Pool of Siloam and Justinian's construction of the Nea Church of the Theotokos, dedicated in 543.

Beyond the *itineraria* which clearly illustrate this phenomenon, it is the mass programme of church and monastery building, sponsored to a large degree by imperial and private donation¹⁸, that further indicates the magnitude. Their size, close proximity to each other and concentration in Jerusalem, Bethlehem, Jericho etc. indicates that their congregation must have been drawn for populations far larger than local Christian communities could provide. Indeed, the architecture of the larger edifices, such as the Holy Sepulchre and the Nativity Church, was specifically designed to accommodate sizeable groups of pilgrims. This included expansive atriums in front of the churches in which groups could congregate. Inside substantial basilicas provided space for the celebration of mass, while the accepted actual locus of the celebrated event and its associated liturgical processions were a unique spectacle conceived to emotionally impress on the one-time visitor, religious exultation and spiritual euphoria.

Though withdrawal from the temptations of general society was a primary aim of monasticism, the hosting of travellers was also a basic tenant of faith¹⁹. Hostels, catering to the lodging requirements of pilgrims built and operated by monasteries beside places of worship, some of which have been excavated, epitomise the phenomena. By creating specialised accommodation, the pilgrim was placed in the spiritual environment deemed suitable for pilgrimage. The economic benefit reaped from this travel, through generous donations given by pilgrims, both for services offered and religious guidance, became a major source of income for the ecclesiastical establishment in the Holy Land. Furthermore, we can accept that the efforts and resources invested in setting up a service network of hostels would not have been executed without the demand created by mass pilgrimage. As the Byzantine period continued into the sixth and seventh centuries, the flow of pilgrims must have increased, a fact exhibited archaeologically through the dedication of hundreds of new churches²⁰ and the pilgrim's written narratives that emphasise the existence of many churches and monasteries²¹. Given these large numbers, Bar's assertion²² that the economic importance of Pilgrimage in Palestine was secondary, and would not have influenced the countryside beyond the pilgrimage sites, could not have been true for Jerusalem and its hinterland.

It is also clear that it was not only pilgrims who were making Palaestina their home. The dearth of trained local manpower forced Constantine to import trained artisans, masons and master craftsmen to adorn his monuments²³. Many would have settled permanently, enriching Jerusalem and its surroundings with technical know-how²⁴. The influence of

14 Limor, Holy 6; Limor, Christian 395-398.

15 Geiger, Diffusion 231-232; Rubin, Diffusion 235-246; Perrone, Rejoice 150; Bitton-Ashklelony/Kofsky, Monasticism 264-265.

16 Avi-Yonah, Economics 43-45; Tsafirir/Di Segni, Ethnic.

17 Jerome, Epistle of Paula 15,30; Jerome, Epistolae 66,14; Vita Melaniae Iunioris 15,30,35; Cyril of Scythopolis, Vita Sabae 25,109,10-15.

18 Avi-Yonah, Holy Land 101; Armstrong, Imperial; Hunt, Holy Land 221-248; Bar, Population 307.

19 Rom. 13,13; Benedicti regula 53.

20 Ovadiah, Corpus.

21 Limor, Holy 8.

22 Bar, Population 315.

23 Eusebius, Vita Constantini 3, 32; Binns, Ascetics 94.

24 Avi-Yonah, Economics 42.

their skills on future generations of builders and craftsmen can be clearly tracked through the construction of hundreds of churches throughout the Byzantine period.

Nutrition

The land of Canaan may have been the elysian »Land of Milk and Honey«, the land of the biblical nutritional triad of wine, olive oil and grain²⁵, but we should consider how this utopian vision matched up to the realities of the difficult topography of the hill country, the long rainless months and the oppressive insolation of the summer sun. Indeed, wine, olive oil and grain were the daily dietary staple of the classical world²⁶ in general and of Byzantine Palestine specifically²⁷. Of the three, cereal was so important to the diet that its yields and consumption have formed the basis for much scholarly discussion of economy, society and population of the ancient world.

The seeming abundance of the agriculture of Byzantine Palestine was remarked upon by visitors. In the late sixth century the anonymous pilgrim from Piacenza expresses in euphoric terms his impression of the Galilee as a »paradise« with corn, fruit, wine, oil, apples and millet, superior to that grown in Egypt²⁸. As this impression is probably overstated, we are better served by hagiographical sources that describe the sometimes strange, but probably well-balanced diet, of the desert monks²⁹, a diet probably also made available to passing pilgrims. The »Lives« of the monks of Cyril of Scythopolis and Leontius of Neapolis itemise the banqueting meal, which by definition is an isolated case, but does express the dietary potential of the monasteries and their ability to transport exotica to their often isolated locations³⁰. The festive menu, often donated by devotees, included fresh white wheat bread, rye bread, wine, olive oil, cheese, eggs, honey, meatballs, pancakes, jam and even fish³¹.

While bread was the monks and pilgrims staple we also learn from the sources of other foods that would have added protein and other essential nutrients to the diet. Vegetables, pulses and to a lesser degree fruit, were a common part of the menu that including lupine, peas, kidney beans, pumpkin, carobs, dates, figs and olives³².

From a variety of sources we can assess the contribution of specific food stuffs to the diet. Roman and Byzantine peoples

imbibed between half to one litre of wine daily³³; around 50 to 100 grammes of olive oil, representing some 1000 calories³⁴; and consumed a daily average of 550 grammes of grain, roughly half of the calorific intake³⁵. It is more difficult to assess the calorific value of other food ingredients, such as meat, vegetables, pulses, fish and dairy products.

The Importance of Olives, Olive Oil and Associated Products

Given that this is a wide-ranging subject, let us look briefly at the economic possibilities provided by olive oil production in the hinterland of Jerusalem as an example. Olives are particularly suited to the dry farming typical of ancient Palestine. Furthermore, the fact that the resulting products were easily stored, made them an essential part of a diet, especially when the preservation of food during the less productive months was difficult. Furthermore, the use of olives and olive oil went beyond its nutritional value – oil was exploited for lighting, soap, cosmetics and perfumes, anointing and rituals such as the pouring of oil through reliquaries, bathing and personal hygiene; the amurca (lees) for manuring of fruit trees, as a weed killer, as an insecticide, to grease leather and hides, to treat and polish wood, to improve the health of cattle; and in the production of building plaster and the combustion of the olive pomace and olive wood for fuel.

Beyond the nutritional and economic value of olive oil, it also occupied an important place in the cultural, especially the ritual, traditions of the Byzantine world. The blessing of the oils, always olive oil, is a ceremony central to Christian faith, celebrated on the Holy Thursday of Easter in the Catholic and Orthodox churches³⁶. These symbolically draw from the actual uses of olive oil; providing spiritual nourishment, curing spiritual ailments and diffusing spiritual light.

As the status of olive oil was so important to the economy, an understanding of the yields is crucial to understanding its place in Jerusalem's hinterland. Unfortunately, this proves both complex and elusive. Various attempts have been made to assess production, surplus, consumption and export, utilising the economic study of prices and quantities from the writings of Varro³⁷, Cato³⁸ and Pliny³⁹, who specifies the superiority of Syrian and Palestinian strains over those found in Italy⁴⁰,

25 Deuteronomium 28,51.

26 Foxhall/Forbes, *Sitomereia*.

27 Patlagean, *Pauvreté* 36-44; Kaplan, *Hommes* 28-30. 503-506.

28 *Itinerarium Piacenza* 5,162.

29 Hirschfeld, *Judean* 82.

30 Cyril of Scythopolis, *Vita Sabae* 58,160,2-7; Leontius of Neapolis, *Vita Symeonis Sali* 158,23-24; 159,1-2; 164,4-6.

31 Hirschfeld, *Judean* 90-91; Patrich, *Judean* 159. 172; Dauphin, *Plenty* 42; Di Segni, *Cyriel* 68-69.

32 *Vita Gerasimi* 5,6; *Vita Georgii Chozebitae* 7,102; 12,107-108; 19,118; 43,336-337; Cyril of Scythopolis, *Vita Cyriaci* 19,234,2; Theodore of Petra. *Vita Theodosii* 19,25-26; 74,3.

33 Cato the Elder, *De Agricultura* 57; West/Johnson, *Byzantine Egypt* 180-181. 225-229; White, *Roman Farming* 496 n. 55; Dar, *Landscape* 160; Tchernia, *Vin* 13-27; Thomas/Hero, *Foundation Documents* I 109-110; Talbot, *Mealtime* 115.

34 Dembinska, *Diet* 459 table V; Amouretti, *Pain* 181-183. 287; Mattingly, *Olea* 159; Frankel, *Wine* 44.

35 Broshi, *Diet* 41-43; Broshi, *Methodology* 421.

36 Sullivan, *Externals* 180-181.

37 Varro, *De Re Rustica* 1,24,3.

38 Cato the Elder, *De Agricultura* 10.

39 Plinius Secundus, *Naturalis Historia* XV 4,14-16; 15,6,23.

40 Frank, *Notes*; Mattingly, *Megalithic* 184-185; Thurmond, *Handbook* 102-103.

the price edict of Diocletian⁴¹, the Mishnah⁴² and Tosephta⁴³; analysis of the archaeological evidence drawn from installations and land holdings⁴⁴ and anthropological research of traditional oleoculture.

Drawing on the demographic figures, Byzantine Jerusalem had a population of between 100,000 to 150,000 dwelled in Jerusalem and its region, though this does not take into consideration the additional requirement needed for visiting pilgrims. Calculated up, the stated population required some 20 to 25 million litres (18,000 tonnes) of olive oil per-annum, the requirement for the Jerusalem area alone being 2 to 3 million litres (1,800-2,700 tonnes). So without going into this too deeply, if this is the requirement, and if the average production, for a single press is a plausible 4,800 or 10,000 kg, then we would expect there to be 180 to 270 oil presses just to provide local needs, though only 119 have been discovered so far during excavations in the hinterland of Jerusalem. At 100 trees per hectare, producing an average of 400 kg of oil, each press required between 25 hectares or 2,500 trees to supply it for maximum function, while the total Jerusalem region was planted with 4,500 to 6,750 hectares of olive plantations. All these figures are entirely feasible and match similar estimates in North Africa and Spain where it is specified that the presses located by survey and excavation are probably only half or a third of the original amount⁴⁵. Still the number of variables are great – the number of daily pressings, the efficiency of the pressing, the amount of olive pulp pressed in each processing, the number of trees per hectare, the volume of oil produced by a specific quantity or variety of olive etc. This renders the calculations educated estimates at best, that we will accept for want of other data. In a similar fashion we can calculate wine production and the requirement for other food stuffs.

How Much Land is Required for the Subsistence of Jerusalem, its Hinterland and Pilgrimage?

Utilising individual consumption, calculated through demographic statistics we can extrapolate up to assess land requirements for individual crops. This can be compared with regional resources and the capacity of Jerusalem's hinterland to supply food for the city, the surrounding region and for pilgrims. Was there, for instance, the necessary agricultural land, or was the import of food an obligation? Two tables are presented, the first (**table 1**) pools the available land, and based on the percentage judged as used for terraced agriculture that characterised the Jerusalem hills, gives an

assessment of the potential land area exploitable for cropping. The second table (**table 2**) collates the nutritional information for oil, wine, grain, meat and milk, to gauge if there is sufficient land to reach the subsistence level essential to supply Jerusalem and its hinterland⁴⁶.

While none of the quoted figures should be viewed as absolutes, they do provide us with a generalized picture that serves as a framework for consumption, necessities and potentials. From the tables we learn that approximately half or less of the cultivatable area (118,694 hectares) was actually needed for agriculture (41,737 to 65,212 hectares) and that plenty of land was vacant for pasture. Jerusalem was able to feed itself from its own hinterland without recourse to imported products, even from adjacent regions.

We should mention that these calculations have dealt only with providing food for the local population. However Jerusalem was also a magnet for a large transient group of pilgrims of unknown numbers. While we have no way to assess the supplement necessary to feed pilgrims; the actual numbers, and the potential agricultural surplus, probably indicates that the city and region had no problem to cover the additional requirement.

Elsewhere I have shown that the expected village settlement pattern did not formulated in the Jerusalem area after the removal of the village population during the Jewish revolts⁴⁷. Of the 37 villages identified in the sources as village settlements, only eight have remains that can be unambiguously accepted as belonging to a village. Even if we accept the fickleness of archaeological and survey methods, we would still expect, based on the quantity and quality of the data, for many more villages to have been found in the field.

Still, a number of villages did formulate. The village remains of Jerusalem that developed all occupy the same topographical and geographical niche, on the eastern edge of the cultivated band of the central highlands, right up against the margins of the Judaeian Desert. Not only were these the only villages in the Jerusalem area, they are also the only villages specifically referenced in the »Lives« of Cyril of Scythopolis. Still, the area west of the line of desert margin villages was not void of settlement. Here crown lands were granted to private individuals and to especially to ecclesiastical institutions. The areas between Jerusalem and the Shephelah became the domain of agricultural coenobia and farms. To bridge the economic gap in agricultural production, the authorities would turn to the monasteries. Monasteries would soon become major land owners, exploiting land not only directly, but also through tenants who farmed the land for the monastic institutions.

41 Duncan-Jones, *Economy* 366-369.

42 Mishna, Tractate Kettubot 5,8; Mishna, Tractate Shevi'it 4,9; 5,7; Mishna, Tractate Pe'ah 8,5.

43 Safrai, *Economic* 121.

44 Amouretti et al., *Pressoir; Dar, Landscape* 182-187; Mattingly, *Megalithic; Mattingly, Olive Boom; Mattingly, Maximum; Mattingly, Regional; Ben David, Olive Presses; Seligman, Mikva'ot* 149-154. 164-165.

45 Mattingly, *Olive Boom* 38.

46 For detailed discussion see Seligman, *Rural Hinterland* 414-421.

47 Seligman, *Villages*.

Potential land resource	area – hectares	terrace cover – hectares	source
Jerusalem Hills (inside Green Line, incl. City)	31,600	17,822	Israel CBS
Jerusalem District (outside Green Line)	27,450	15,482	Palestinian Authority CBS
Ramallah District	85,500	48,322	Palestinian Authority CBS
Bethlehem District	65,900	37,168	Palestinian Authority CBS
Total	219,450	118,694	

Table 1 Land Resource Potential for the Jerusalem Hinterland.

Product	(a) potential demand for 100,000	(b) potential demand for 150,000	(c) yield hectare/year	(d) land requirement for 100,000 – hectare	(e) land requirement for 150,000 – hectare
Grain	20,000kg	30,000kg	600 kg	33,500	50,250
Olive Oil	1,800,000kg	2,700,000kg	400kg	4,500	6,750
Wine (litres)	27,375,000l	41,062,500l	5,000-10,000 l	2,737-5,475	4,106-8,212
Meat	c. 365,000kg (10 gm/p/day)	c. 550,000kg (10 gm/p/day)	7 kg	c. 52,500	c. 78,700
Milk (litres)	7,300,000l	10,950,000 l	123.2l		
			Total (including pasture)	94,237 to 96,975	139,806 to 143,912
			Cultivated Total	41,737 to 44,475	61,105 to 65,212

Table 2 Potential Land Resource Requirement for Agriculture and Herding for the Jerusalem Hinterland.

- (a) potential annual demand for product for regional population of 100,000
(b) potential annual demand for product for regional population of 150,000
(c) annual yield of product per hectare
(d) annual hectare land requirement for product for population of 100,000
(e) annual hectare land requirement for product for population of 150,000

Bridging the Sustenance Gap

While desert monasticism relied greatly on limited local resources, but largely on the patronage of society's elite and donations given by passing pilgrims, then it would be what I denote as the Agricultural Coenobia that would generate the agricultural surplus that could feed and maintain the unproductive residents of Jerusalem and the many pilgrims who passed through the city and the holy sites. In this regard, and contrary to Bar's view⁴⁸, these monasteries were, in my opinion, the harbingers of economic expansion and not an economic consequence.

If we rely only on the hagiographic sources, then the agricultural monasteries were only of marginal importance⁴⁹. Given the plethora of writings concerning the daily lives of the monks of the desert, those of the arable areas have left us with little more than a murmur. However, the archaeological evidence seems to exhibit the significance of monasteries and their associated farms not only in the environs of Jerusalem, but also in other regions of Palestine. Certainly, many of these establishments would have had multiple purposes, marking holy sites in the countryside, tending services to passing

pilgrims along the roads, and even operating as outposts of state and ecclesiastical power. However, these functions were never secondary to their economic *raison d'être*, as the main source of agricultural produce for the entire region⁵⁰. The designation of rural or agricultural monastery applies to monasteries that display the following features:

- 1) Monasteries located in the sown or desert fringe regions, in areas of agricultural settlement. For Palestine this includes the Galilee, Beth Shean valley, the Samaritan highland, the coastal plain, Gaza and north-western Negev, the Judaeian Shephelah and the Judaeian Hills up to the line of settlements along the margin of the desert⁵¹.
- 2) Monasteries situated outside urban centres and villages, on level areas or moderate slopes.
- 3) Monasteries that small or medium in size, few larger than 3,000 m².
- 4) Monasteries that relied on cultivation for their livelihood, containing agricultural production installations and/or animal pens within their walls, or in the adjacent countryside.

48 Bar, Pilgrimage 316.

49 Wipszycka, Monachisme 3; Perrone, Monasticism 90-91; Di Segni, Monks 35-36; Bar, Rural 50.

50 Bar, Rural; Taxel, Rural Monasticism; Taxel, Khirbet es-Suyyagh 194-198; Seligman, Rural Hinterland.

51 Taxel, Khirbet es-Suyyagh 196-197.

These monasteries functioned as estate farms, continuing the tradition of such farms that existed in previous periods.

While the desert monasteries used donations, and a limited amount from their own economic activity to support their livelihood, the agricultural monasteries were the major producers in the countryside around Jerusalem, producing wine, olive oil and probably grain in large quantities. Almost all the large wine and oil production facilities operating in the hinterland of Jerusalem were associated with monasteries, or probably operated on their estates. The scale of production went far beyond self-sufficiency, showing that these monasteries were involved in industrial production of commodities for sale in the region, especially to the large »non-productive« population in Jerusalem, liturgically requirements and for pilgrims.

Discussing the agricultural *coenobium* at Bir el-Qutt, Brenk makes the assertion that: »[...] only monasteries that were financially poorly-endowed engaged in agricultural production and kept animals actually inside the monastery walls. Bleating goats and spiritual exercises side-by-side cannot have been inspiring«⁵².

However, Bir el-Qutt was no less able to mobilise resources than other monasteries in the region. It was blessed with a well appointed church and unusual cloister decorated with mosaics, oil and wine presses and lands. Moreover, the *coenobia* belonged to the Georgian community, drawing pilgrims from Georgia to visit it and presumably they would have preferred to offer their donations to their »own« monastery. The construction of Bir el-Qutt was of no lesser quality than other monasteries in the nearby countryside, or for that matter in the adjacent urban monasteries of Jerusalem and

Bethlehem. In my opinion, the Byzantine agricultural *coenobia* were consciously the replacement of the estate farm of the Roman elite, in many cases physically set within the ruins of earlier agricultural settlements. This monastic settlement form was no default, for this was the premier foundation of the agrarian economy, with the ability to provide the surpluses needed to feed a city in a region where village life had been reduced to only a few villages along the desert edge.

Conclusion

The influx of large groups of pilgrims to Jerusalem would have challenged the local economy to supply the goods and services required. Jerusalem and the surrounding region had failed to fully recover from the expulsion of its population after the two Jewish revolts. The agricultural sector was especially limited in scope, with few villages and a small number of farms. Village life failed to socialise through much of the Byzantine period, leading the ecclesiastical authorities to turn to the monastic organisation to fill the sustenance gap. Given the relatively small indigenous Christian population in Jerusalem and its district, it was most probably the pilgrims themselves who provided the manpower to populate these new monasteries. While this immigration is clearly documented for the monasteries of the Judean Desert, there is no reason to suspect that this was different for the agricultural monasteries. Utilising this economic strategy, the region of Jerusalem could remain autarkic, providing for both permanent residents and for the many, many thousands of pilgrims drawn to the city.

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52 Brenk, Monasteries 469.

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Zusammenfassung / Summary / Résumé

Bereitstellung von ökonomischen Kapazitäten für die Pilgerfahrt nach Jerusalem in der byzantinischen Zeit

Jerusalem war in der byzantinischen Zeit eine relativ isolierte Stadt mit nur wenigen Einwohnern, die für große Zahlen von Pilgern sorgen musste. Dieser Beitrag diskutiert das Ausmaß der Pilgerreisen nach Jerusalem und die Strategien, die genutzt wurden, um dieses Phänomen zu bewältigen. Dabei liegt der Fokus auf den Produktions- und Ernährungskapazitäten der Stadt sowie auf den Versuchen, die Lücke in der landwirtschaftlichen Produktion zu füllen, die durch die Aufgabe vieler Dörfer infolge der Jüdischen Revolten im 1. und 2. Jahrhundert entstanden war. Tatsächlich verbesserte die Gründung von Landwirtschaft betreibenden Klöstern in der Peripherie der Stadt die Situation maßgeblich. Die Klöster beschäftigten die Arbeitskräfte, die durch den Pilgerbetrieb selbst nach Jerusalem kamen, und sorgten so dafür, dass die Stadt in der byzantinischen Zeit meist von einer autarken landwirtschaftlichen Produktion leben konnte.

Creating Economic Capacity for Pilgrimage to Jerusalem in the Byzantine Period

Through the Byzantine period, Jerusalem was a relatively isolated and lightly populated city that was required to cope with large numbers of pilgrims who all needed to be provided for. This article discusses the scale of pilgrimage to Jerusalem and the strategies used to manage this process. It focuses on nutrition and production capacities, and the approaches adopted to bridge the gap in agricultural production that was a consequence of the abandonment of villages that followed the Jewish revolts of the first and second centuries. This situation was alleviated through the establishment of agricultural monasteries in the rural periphery of the city that were founded on the manpower provided by pilgrimage itself and allowed Jerusalem to rely mostly on autarkic agricultural production through the Byzantine period.

Création à l'époque byzantine de capacités économiques pour le pèlerinage à Jérusalem

A l'époque byzantine, Jérusalem était une ville relativement isolée avec peu d'habitants, mais qui devait accueillir de très nombreux pèlerins. Cet article aborde l'ampleur des pèlerinages à Jérusalem et les stratégies mises en œuvre pour contrôler ce phénomène. L'attention se porte particulièrement sur les capacités de production et d'approvisionnement de la ville, et sur les tentatives de combler les déficits de la production agricole dus à l'abandon d'un grand nombre de villages suite aux révoltes juives des 1^{er} et 2^{ème} siècles. La fondation de monastères, à la périphérie de la ville, qui pratiquaient l'agriculture ont effectivement amélioré la situation. Les monastères occupaient de la main d'œuvre attirée à Jérusalem par les activités liées aux pèlerinages et assuraient ainsi à la ville une existence basée sur une production agricole autarcique.

Traduction: Y. Gautier