

VI

AGRICULTURAL CONDITIONS IN THE CRUSADER STATES

Agriculture played a large role in the life of those states born of the crusades. This aspect of their history has often been overlooked — somewhat surprisingly, since in large part the fate of the different states hinged on their agricultural capacities. We shall try to determine the extent to which each could feed itself, or had to rely on other countries for essential imports. It is also important to determine which of them had so productive an agriculture as to contribute to international trade, and thus acquired the wealth which made them stronger than their neighbors. Agricultural productivity, however, will not be our only concern. The study of the agrarian regime is closely bound up with that of agriculture proper, and cannot be ignored. Finally, to complete our examination of agricultural conditions we shall consider how the soil was exploited by the crusaders' descendants.

There are two recent studies: Claude Cahen, "Notes sur l'histoire des croisades et de l'Orient latin, II: Le régime rural syrien au temps de la domination franque," *Bulletin de la Faculté des lettres de Strasbourg*, XXIX (1950-1951), 286-310, and Joshua Prawer, "Étude de quelques problèmes agraires et sociaux d'une seigneurie croisée au XIIIe siècle," *Byzantion*, XXII (1952), 5-61; XXIII (1953), 143-170, which refers principally to the *memoriale possessionum* drawn up in 1243 by Marsiglio Zorzi, the Venetian bailie of Acre, published by Tafel and Thomas, II, 351-398. Still useful, however, are the following: Helen G. Preston, *Rural Conditions in the Latin Kingdom of Jerusalem* (Philadelphia, 1903); Hans Prutz, *Kulturgeschichte der Kreuzzüge* (Berlin, 1883; repr. Hildesheim, 1964); Emmanuel G. Rey, *Les Colonies franques de Syrie aux XIIe et XIIIe siècles* (Paris, 1883). On geographical conditions see André Latron, *La Vie rurale en Syrie et au Liban* (Mémoires de l'Institut français de Damas; Beirut, 1936), and Félix M. Abel, *Géographie de la Palestine*, I (Paris, 1933). See also Maurice Gaudefroy-Demombynes, *La Syrie à l'époque des Mamelouks d'après les auteurs arabes* (Bibliothèque archéologique et historique, III; Paris, 1923), and Robert Mantran and Jean Sauvaget, *Règlements fiscaux ottomans: Les provinces syriennes* (Institut français de Damas; Paris, 1951). Essentially the sources comprise the charters to be found for the most part in the *Regesta regni Hierosolymitani* of Reinhold Röhrich (2 vols., Innsbruck, 1893-1904; repr. New York, 1960). Cf. also Ernst Strehlke, *Tabulae ordinis theutonici* (Berlin, 1869; repr. Toronto, 1975), and Eugène de Rozière, *Cartulaire de l'église du Saint-Sépulcre de Jérusalem* (Paris, 1849; repr. in *PL*, 155 [Paris, 1880], cols. 1105-1262).

Among those who have assisted me in the completion of this work I must thank, above all, the late Henri Seyrig, then Director of the Institut français d'archéologie in Beirut, who made it possible for me to study present conditions of rural life in the Levant and in Cyprus on the spot.

Agriculture and agrarian organization differed in the three major areas occupied by the crusaders—Frankish Syria, Cyprus, and the Latin empire of Constantinople. Each of these areas will be the subject of a separate section, and for each we shall give as complete a picture as possible of rural life during its occupation by the crusaders.



Moslem pilgrims on their way to Mecca. From the collections of the Bibliothèque nationale

A. *Agriculture in Frankish Syria*

To designate the collection of Frankish colonies established in the territory of the ancient provinces of Syria, Palestine, Phoenicia, and Arabia, the Middle Ages used the generic term *Surie*. The name will serve us to signify the area embracing the kingdom of Jerusalem, the counties of Tripoli and Edessa, and the principality of Antioch. With the exception of Edessa, which did not remain in Frankish hands very long and has left us hardly any documents, this area forms something of a geographic unit because of the two chains of mountains parallel to the coast marching north from the Red Sea up to the edge of the Anatolian plateau. The relatively narrow plain along the shore; the mountains of Lebanon, Jabal Anṣārīyah, and the Amanus range, continuing the hills of Judea and Samaria; an interior valley starting south of the Dead Sea and extending to the valleys of Ghor, al-Biqā', Rugia (ar-Rūj), and the plain of Antioch; and finally the chalk ranges of Transjordan, Anti-Lebanon, and northern Syria—these comprise four separate regions, each of which has quite similar agricultural characteristics from south to north, distinct from those of its neighbors to west or east.

The coastal plain offers a very narrow area for intensive cultivation, which is possible only where a river springs from some gorge cut in the mountains, or where an important water source makes irrigation possible. The mountains of the Lebanese area are carved into terraces which retain cultivable soil while a relatively abundant rainfall assures needed moisture. Elsewhere, as in Judea, the rocky aspect of the mountains and hills gives an impression of barrenness, but how false this is has been shown by travelers like Nāṣir-i-Khusrau and Ludolf of Suchem (Sudheim); provided there is no winter drought, the land there is fertile enough to give a good cereal crop, and to support fruit trees, grapevines, and fig or olive trees.² The situation is similar in the Jabal Anṣārīyah, but with a few variations. As for the interior valley, there are excellent facilities for irrigation because of the rivers, the Jordan, Litani (Leontes), and Orontes, running

2. Ludolf of Sudheim, *AOL*, II-1 (1884), 363-366; *Sefer nameh: Relation du voyage de Nassiri Khosrau*, ed. and tr. Charles Schefer (Paris, 1881), p. 67.

through it, and it is especially fertile because of its alluvial deposits. To the east, the plateaus of Transjordan provide excellent land for wheat, but as one moves farther north the mountain barrier to the west reduces the moisture in the interior. Nevertheless, the vast chalk range of northern Syria still had important plantations of grapevines and olive trees at the time of the crusades.³

Thus natural conditions favored agriculture, at least where there was careful irrigation to develop the fields of the coastal strip and the interior plains. Otherwise, as Moslem authors of the Middle Ages noted, good harvests had to depend on the winter rains, which were only too often unreliable.⁴

The agrarian organization of the Frankish period has been studied by several scholars who have described it in detail.⁵ The basic unit was the village, or *casal*; in effect, rural life was communal and isolated homesteads did not exist. The *casal* comprised a variable number of inhabitants, forming a community the members of which were bound together by the performance of collective services under the direction of chiefs called *ra'ises*. The *casals* included waste lands (*gâtines*), an exact description of which is difficult to come by. They were certainly unoccupied, serving as common pasture or as a reserve of cultivable land where new villages could be built. The arable land of the *casal* was measured in *carucates* (*carrucatae*), a term which had a double meaning. Some of these *carucates* corresponded to the *faddân 'arabî*, the area that a pair of oxen could plow in one day (the word *jornata* was also used); others corresponded to the *faddân rûmî*, the amount of land which one team could cultivate in a whole year (these were called *carrucatae graecae*, a term which appears to be synonymous with *carrucatae francesiae*: one assize gave their measure as 24 cords by 16, or about 75 acres).⁶ It is in this latter sense that the texts ordinarily use the word *carucate*, which may be equated with *mansus*. Like the western manse, the *carucate* was the usual holding of a peasant, although this did not stop some

3. Georges Tchalenko, *Villages antiques de la Syrie du nord* (Bibliothèque archéologique et historique de l'Institut français de Beyrouth, I; 3 vols., Paris, 1953-1958).

4. Gaudefroy-Demombynes, *La Syrie*, p. 24.

5. In particular Helen Preston, Claude Cahen, and Joshua Prawer.

6. Strehlke, *Tabulae*, pp. 26-27; Cahen, "Notes," p. 295. The distinction which Prawer has established between these two kinds of *carucates* corresponds with that made by Latron, *Vie rurale*, pp. 11-16. The very words *carrucata graeca* appear to be an exact translation of *faddân rûmî* (Mantran and Sauvaget, *Règlements*, p. 4 and note). The team is always composed of oxen; the *caballaria* is the fief of one knight and not the land cultivated by a team of horses. The measure of the *carucate*, derived from that of the cord, has been established by Rey and by Prawer (who discusses this text in "Étude," pp. 26-30).

of them from farming more than one carucate. The question whether these carucates were always cultivated by the same tenants or were redistributed by the rural community has not received any final answer.

The peasant, cultivating one or more carucates, was bound to the lord of the casal by obligations the details of which have come down to us in the documents.⁷ Some of these peasants were free, others not; at least, certain documents distinguish between free and unfree carucates, the latter very likely being held by the *homliges*, who no doubt were serfs. The "free carucates" appear to have been burdened only by a fixed rent of two bezants a year.⁸

We know little about the obligations of the free men. The villeins cited in the texts which have been preserved appear for the most part to have been serfs. These were bound to their holdings under conditions varying from place to place. An act of 1258 specified that in the county of Tripoli those who quit the land of a lord in order to establish themselves on the land of another might be seized on the demand of their first master, but it implies that the customs of Jerusalem, Antioch, and Cyprus might well have been different. In fact, there was at least one casal in the principality of Antioch, Pont-de-Fer, where the lords could not get their runaway villeins restored to them.⁹ At Jerusalem, however, the lord's right of pursuit was recognized by the *Assises*, as also the right of *formariage*, which obliged a lord whose male serf married the female serf of another lord to give the latter another female serf.¹⁰

The payments demanded of these peasants were of two sorts, those proportional to the harvest, and *redditus personales* of fixed amounts. This distinction must have continued after the Frankish period: in Mamluk Syria the proportional *kharāj* and the fixed *dīmūz* were distinct, the latter apparently the descendant of the old Byzantine personal taxes (δημόσιον).¹¹ Each of these taxes appears to have had a territorial base, the carucate (the old *jugatio*) serving as the

7. The casal might have several lords, either dividing among themselves the tenures, or possibly sharing among themselves the entire revenue of the village, as happened in the undivided seigneuries between Franks and Moslems; see Jean Richard, "Un Partage de seigneurie entre Francs et Mamelouks: Les 'casaux de Sur'," *Syria*, XXX, 72-82.

8. Preston, *Rural Conditions*, pp. 39, 40, 44; Tafel and Thomas, p. 370; Strehlke, *Tabulae*, pp. 14-15, 28.

9. Strehlke, *Tabulae*, pp. 101; Röhricht, "Syria sacra," *ZDPV*, X (1887), 4, note 3.

10. Cahen, "Notes," p. 298.

11. *Redditus personales*: Tafel and Thomas, p. 371. Cf. Mantran and Sauvaget, *Règlements*, pp. 5 ff., and Abraham N. Poliak, *Feudalism in Egypt, Syria, Palestine, and the Lebanon, 1250-1900* (London, 1939), *passim*.

fiscal unit. A head tax was levied on the Moslems in the region of Tyre, but we do not know whether it fell on all the serfs. The fixed rents paid on each carucate bore the name of "gifts" (*exenia*). Three times a year—at Christmas, at the beginning of Lent, and at Easter—the lord received a hen, ten eggs, a cheese, and a load of wood (or, in some places, wax and honey), or their equivalent in money.¹²

The rent paid in proportion to the harvest (*kharāj*, sometimes latinized as *carragium*) ordinarily consisted of payments to the lord of a part of the harvest varying from one quarter to one half the produce of the fields, but most often a third.¹³ The same proportion applied to grapes and olives. A contract in August 1236, between the Hospitallers of Tripoli and some peasants allowing the latter to plant olives on their lands, fixes the share of the knights at one third.¹⁴ There were other payments as well. In addition to his *partison*, or third of the harvest, the lord might require of the villeins a hogshead of cheese per carucate, and a hen as interest for the seed which he advanced them each year *ut melius terra seminetur*.¹⁵ Finally, we should mention the taxes on livestock, especially that on goats (*computagium*) amounting to one carouble per head, and the tax on bees.¹⁶ The peasants of Syria, however, though heavily burdened, apparently were not forced to perform any very heavy corvées. This suggests that there was practically no seigneurial "reserve," all the lands of the casal being divided among the tenants. Certain plots, however, were reserved for particular purposes, such as the sugar-cane plantations near Tyre cultivated under Venetian control. These plantations were probably worked by tenants fulfilling their corvées as well as by agricultural laborers or even slaves. Joshua Prawer believes that the one day's labor per carucate required from the tenants in this area is one day per week, and so four to six days per month.¹⁷ It is possible that the seigneurial domain was of more importance in some other areas; in the diocese of Acre the Teutonic Knights cultivated lands, vineyards, and olive groves at their own expense.¹⁸

Besides the lord's arable land, which was not very important in

12. Cahen, "Notes," p. 300; Preston, *Rural Conditions*, p. 46.

13. Cahen, *loc. cit.*

14. J. Delaville Le Roulx, "Inventaire de pièces de Terre Sainte de l'ordre de l'Hôpital," *ROL*, III (1895), 84 (no. 249).

15. Strehlke, *Tabulae*, pp. 92–93; Tafel and Thomas, pp. 371, 374.

16. Strehlke, *Tabulae*, p. 28.

17. Preston, *Rural Conditions*, p. 45; Prawer proposes an interpretation which would allow for four to six days corvée a month ("Étude," p. 165). Helen Preston (p. 45) interprets the same quotation as referring to one day's labor per year—a very light burden.

18. Strehlke, *Tabulae*, p. 91.

comparison with the extensive peasant holdings, the seignorial reserve included a certain number of buildings for economic exploitation. Probably the presses where the grapes or olives were brought and the ovens in which the bread was baked were directly controlled by the lord, or else by some intermediary who held them directly of the lord *en apaut*.¹⁹ The lord also owned the mills. Some of them were turned by animal power; some, at least from the time of the Third Crusade, were driven by wind like those at the castle of Safad;²⁰ but the most important mills were run by water power. Those which the Venetians had below Tyre had only one or two millstones, but the mills which Bohemond IV of Antioch had constructed under the walls of Antioch had three, and it was possible to add a fourth. In principle, only the tenants of a lord had the right to use his mill, except when the lord enjoyed a privilege similar to that which Bohemond IV granted the Teutonic Knights, *tel franchise que tuit cil qui voudrunt modre a vostre molin par la dreiture payant, . . . que il faire le poissent*.²¹ These banalities—presses, ovens, and mills—naturally brought to the lord a *droiture*, just as the use of his measures to sell the produce of their lands obliged the peasants to pay him a *mensuragium*. Apparently the owner of the threshing floor on which they threshed their grain exacted the payment of still another fee (*portagium herbarum ad areas*), and in the casals of the Venetians near Tyre the straw remaining on the floor belonged to the lord as well.²²

As in the west, the lord supplanted the village community by taking under his own control the installations serving the entire community and charging a fee for their use. We do not know what part he played in irrigation: a Tripolitan text of 1264 shows that it was up to the lord to maintain certain canals (perhaps only the main ones) and to name the *sergent* who had to watch them, and no doubt oversee the distribution of the water over the fields.²³ The *cysternarius* cited in another document probably had a similar function.²⁴

We know more about other seignorial officers. Aside from the

19. Preston, *Rural Conditions*, pp. 37–38.

20. *De constructione castris Saphet*, cited by Paul Deschamps, *Le Crac des Chevaliers* (Paris, 1934), p. 103. Prutz gives windmills an eastern origin (*op. cit.*, p. 317); but Ambrose writes: "Et lors firent . . . li Aleman . . . le premerain molin à vent que onques fust feiz en Sulie" (*L'Estoire de la guerre sainte*, v. 3227, ed. Gaston Paris [Paris, 1897]).

21. Tafel and Thomas, pp. 369–370; Strehlke, *Tabulae*, p. 50. Cf. also Rozière, *Cartulaire*, p. 222, and the passage concerning the mill of Fierge in the charter of Casal Imbert (Strehlke, *Tabulae*, pp. 1 ff.).

22. Strehlke, *Tabulae*, pp. 92–93; Tafel and Thomas, p. 371.

23. I hope to edit the text of 1264; cf. also Tafel and Thomas, p. 368, and Rozière, *Cartulaire*, p. 277.

24. Röhricht, *Regesta*, no. 533.

provost, to be found on Venetian lands in the thirteenth century under the Italian name *gastaldus*, and the *raʿīs*, the head of the community, it was mainly the *escribeins* and *drogmans* who held true "sergeanty tenures," designated by the words *scribanagium* and *drugumanagium*. The purview of these officials might embrace several casals. Usually their fief included the receipt of a tax paid by the inhabitants of these casals toward their compensation.²⁵ Possibly the *gardagium* cited in a text of 1257 was a tax also, paid by the villagers to reimburse the officers assigned by the lord to watch over their flocks or their fields.²⁶

Within this framework of casal and seignury there was a wide variety of crops. Grain was the most important: wheat, barley, oats, and millet were grown almost everywhere. Even in the south of Judea, around Hebron where wheat was harder to raise, barley was abundant.²⁷ And the fertility of the soil, a century after the departure of the Franks, could still amaze Ludolf of Suchem, who assures us that a sufficient rain immediately after seeding (which was done in September–October) brought a harvest in March or April sufficient to meet their needs for several years, and that after a good harvest one *gros* could buy as much wheat as a person could eat in a month.²⁸

From a careful examination of Venetian texts concerning the seignury of Tyre, Praver has been able to throw some light on the problem of field rotation. He has shown that after a grain harvest the land was left fallow for only a few months. In the following autumn, half the arable land continued fallow, and vegetables were planted in the other half, to be harvested the next spring. The land on which they were grown was then left fallow until autumn, while the other half was sown with summer plants (chick-peas, sesame, sorghum). Thus only two years would elapse between two grain harvests from the same soil, and in the interval a vegetable crop would also have been raised. Field rotation was biennial, and half the land of each casal, at least in the region of Tyre, was always planted with the sort of cereals that yielded up to five- or even seven-fold.

Vegetables were planted in the same soil as cereals. Beans, lentils, peas, and plants of lesser importance certainly played a large part in the diet of the natives as well as of the Franks. We know very little about fodder; however, it was bound to be needed for the Frank-

25. Strehlke, *Tabulae*, pp. 15–16; Cahen, "Notes," pp. 297, 306–307 (who asserts that the functions of the *drogman* and *escribein* were given to the same person, about which it is difficult to be certain).

26. Strehlke, *Tabulae*, pp. 92–93.

27. *Sefer nameh*, p. 103.

28. *AOL*, II-1 (1884), 363, 366.

ish cavalry, since the horses would have no fresh grass except in a few favored places.²⁹

It seems that the Franks sought, wherever possible, to convert cereal lands into more remunerative plantations. At least, we find the Teutonic Knights thinking about growing sugarcane on lands which had to continue paying the tithe to the bishop of Acre in wheat and barley.³⁰ Sugarcane could be planted only on irrigated land. There was hardly any land suitable for it except in the interior valleys (particularly in the Ghor near Baisan [Bethsan], and in the neighborhood of Nablus), and on the coastal plain. In 1036 Nāṣir-i-Khusrau had admired the "immense plantations of sugarcane" near Tripoli, which remained a great center of sugar cultivation in the Frankish period, and also at Sidon.³¹ We know of such plantations around Tyre and Acre as well. Burchard of Mount Sion carefully observed how these *cannemelle* were cultivated: in the spring the young shoots were planted in moist places; in the following February when they were grown they were cut into pieces half a palm in length. These were taken to the press (*mazara*) to have the juice squeezed into bronze vats in which it was cooked until it acquired the consistency of syrup. This was then left to dry in finely woven straw baskets. As it hardened the *mel zucare* or molasses seeped through.³² The presses, a seigneurial possession, often appear in the texts, and the great sugar factory at Acre with its huge vats is described by Arab historians in connection with its destruction in 1187.³³

Sugarcane did not monopolize the lands which were *abeveraiz* (irrigated); there were many gardens.³⁴ The texts tell us little about what grew in these *orti*, which also served as orchards. Palestinian fruits have always been celebrated. Marino Sanudo tells us that they were exported to Egypt, and James of Vitry and other visitors ecstatically reported their variety. Dates, bananas (called "apples of paradise"), figs, lemons, limes used on meat and fish during summer, oranges, pomegranates, and almonds weighed down the trees of these *jardi-*

29. The pasturages noted by Sanudo are the plains of the Krak des Chevaliers, Tortosa, and Arsuf (*Liber secretorum fidelium crucis*, ed. Jacques Bongars, *Gesta Dei per Francos* [Hanau, 1611; repr. Jerusalem, 1972], II, 152, 245).

30. Sanudo, ed. Bongars, II, 93. In this respect we may recall that the tithes were paid to the Latin church only on the revenues of Frankish lords, and not on those of the peasants as in the west.

31. *Sefer nameh*, pp. 40, 46.

32. Burchard of Mount Sion (ed. J. C. M. Laurent, in *Peregrinatores medii aevi quatuor*, 2nd ed. [Leipzig, 1873], p. 87); Strehlke, *Tabulae*, pp. 9, 17; Tafel and Thomas, p. 368.

33. Abū-Shāmah, *Livre des deux jardins* (RHC, Or., IV, 296-297).

34. For a garden irrigated by a spring called Elysium see Sanudo, ed. Bongars, II, 247.

neroiés, as Ambrose called them in describing the orchards of Jaffa.³⁵ Aside from the cooking vegetables known in the west, they grew cucumbers, melons, and gourds, the size of which astounded James of Vitry, who also praised a "sort of thorn" the young shoots of which were edible—asparagus. We also know that the pilgrims besieging Acre in 1189 were saved by locust beans and walnuts.³⁶

Other trees were cultivated outside these gardens: balsam, whence came the *opobalsamum*, on the banks of the Jordan and the Dead Sea, at Jericho and Engedi; fig, in the Judean countryside as well as the rich plain of "Boquée" (al-Buqai'ah) at the foot of Krak des Chevaliers; and especially olive trees. Throughout all of coastal Syria occupied by the Franks the olive was the tree par excellence. Palm trees, more characteristic of the interior, could also be found in the southern oases such as Segor (biblical Zoar), or on the coast where we know of the palm grove of Haifa. The olive crop went primarily into the making of oil, and Sanudo tells us that at the beginning of the fourteenth century Egypt imported from Syria not only oil for eating purposes but soap made from the oil of an inferior olive called *souri*.³⁷

Besides olives there were grapes, to be found in the same general areas, in particular between Antioch and Latakia, in the region of Tortosa and Tripoli, near Acre and Tyre, in Galilee, near Nablus, and as far as the vicinity of the Dead Sea (Bethlehem, Engedi, Jericho).³⁸ The vineyards seem to have become more extensive after the crusades began. Indeed, in the region of Nablus there were some *vineae quas Franci coluerunt* which might well have been cultivated by Frankish settlers; there can be no doubt, however, in the case of the extensive arable area converted into vineyards around 1220 in the neighborhood of Tyre.³⁹ Frankish domination certainly brought with it a considerable increase in wine drinking (Moslems for the most part only ate the grapes or raisins); this wine, which caused deaths among the ill who drank it at the siege of Acre because of their weakened state,⁴⁰ was highly enough prized in the west that even after the end of Frank-

35. Sanudo, ed. Bongars, II, 53; James of Vitry, ed. Bongars, *op. cit.*, I, 1099; Ambrose, *op. cit.*, v. 3941.

36. Ambrose, *op. cit.*, v. 4361.

37. Sanudo, ed. Bongars, II, 53; Prawer, "Étude," p. 57.

38. Rey, *Colonies franques*, p. 250.

39. Ferdinand Chalandon, "Un Diplôme inédit d'Amaury I, roi de Jérusalem, en faveur . . . du Temple-Notre-Seigneur," *ROL*, VIII (1900-1901), 314; Tafel and Thomas, p. 379. See Richard, "Le Comté de Tripoli dans les chartes du fonds des Porcellet," *Bibliothèque de l'École des chartes*, CXXX (1972), 363, 366.

40. Ambrose, *op. cit.*, vv. 4361 ff.

ish domination we can find cargoes of ten tuns of Tripolitan wine on a single ship.⁴¹

Plants of importance in the manufacture of textiles appear to have been widely cultivated following the crusades. Cotton was the most important, and in 1140 the cotton of Antioch was being exported to Genoa.⁴² Cotton was grown primarily throughout northern Syria (near Cilicia and in the valley of the Orontes), but it could also be found in Palestine. Gilbert of Lannoy saw much cotton around Tyre, although Marsiglio Zorzi's Venetian *memoriale* of 1243 makes no mention of it.⁴³ Mulberry bushes to raise silkworms were mostly to be found near Tripoli.⁴⁴

We know very little about animal husbandry. In the region of the steppes the beduins continued to herd their camels or sheep without paying any attention to boundaries, except to pay rent to the Frankish lord on whose lands they grazed their herds. Baldwin III's seizure of the herdsmen who had obtained from him the right to pasture their animals (and in particular three excellent horses) in the "forest of Banyas" in 1156 is a well-known incident. It was also in this forest that the Hospitallers proposed to raise herds of cows and sheep.⁴⁵ The grazing land in the hills of Judea and Samaria, of Lebanon and the Antioch range lent themselves equally to the raising of cattle, sheep, or goats, but water buffalo were to be found only in the lower regions. Donkeys, mules, and camels served for transportation, but the crusaders appear to have had great difficulty in procuring real war-horses strong enough to bear the weight of a fully equipped knight, and it was probably necessary to import them from the kingdom of Sicily and possibly also from Moslem countries.⁴⁶ The cows and the *bestes menues* furnished the milk foods which formed a large part of the diet of peasants and lords alike (taxes could be paid in cheeses), and their hides were used in the tanneries which were to be found throughout the area. There appears to have been an abundance of poultry.

Hans Prutz, who had no admiration for the crusaders, blamed them for bringing about a decline in the cultivation of Syrian lands.⁴⁷ This

41. Genoa, Archivio notarile, Antonio Fellone, filza I, fol. 28^v.

42. Cahen, *La Syrie du nord à l'époque des croisades et la principauté franque d'Antioche* (IFD, BO, I; Paris, 1940), p. 476, n. 39.

43. Ghillebert de Lannoy, *Oeuvres . . .*, ed. Charles Potvin (Louvain, 1878), p. 150.

44. Cahen, *La Syrie du nord*, p. 475.

45. Preston, *Rural Conditions*, pp. 28-29, 48; William of Tyre, XVIII, 11-12 (*RHC, Occ.*, I, 836-837).

46. Prutz, *op. cit.*, p. 322.

47. *Ibid.*, p. 329.

is by no means certain. In fact, the texts indicate a great effort in rural colonization. There was colonization by "Syrians" arriving from other areas: around 1120 the Frankish kings drew to their kingdom of Jerusalem a number of Christians from Transjordan. But even in 1115 Ekkehard of Aura was amazed by the revival of agricultural life. A spontaneous movement, no doubt, led the dwellers on the frontiers to establish themselves in the casals under Frankish domination.⁴⁸ Be that as it may, new villages were established, for example the "casal d'Aleman, so named after its founder, in the region of Caesarea,"⁴⁹ which raises the question whether each of the many casals bearing the name of Frankish landholders did not owe its origin to the initiative of some knight who had attracted settlers to his lands. The movement for the foundation of villages was flourishing in the west at the same time and might have influenced the crusaders in their new domains. Several casals bore the names of townsmen of Jerusalem, some of whom were wealthy enough to have been able to take an active part in the movement.

Christian Syrians, and Moslem prisoners bound to the land of those to whom they had been sold, were not the only ones to settle in the Frankish estates. Latins also came to settle and to work the land in "villes neuves" reminiscent of those of the west because of the charters of freedoms which they were given. The settlers of Casal Imbert, for example, were required to pay only a seventh of their harvest, a quarter of the produce of their gardens and vines, and two thirds of their olives, and to use the lord's oven (one loaf out of fifteen), the mill of Fierge, the exclusive use of which they had for half the time, the wheat measures, and the bath; and they were exempt from taxation on food sold in the market of Acre. The native peasants who supplied Jerusalem had benefitted from a similar privilege because of the difficulties of victualing the holy city in 1121.⁵⁰ The twelfth century saw the creation of a moderate number of these free towns, which did not survive the conquest of Saladin and apparently failed to reappear in the thirteenth century.

Would these efforts to found new villages (which indicate how sparse agricultural settlement was before the arrival of the crusaders) assure Frankish colonies the eventual means for self-support? Prutz's reply

48. William of Tyre, XI, 27 (*RHC, Occ.*, I, 500-501; cf. Prawer, "The Settlement of the Latins in Jerusalem," *Speculum*, XXVII [1952], 496); Ekkehard of Aura, *Hierosolymita*, ed. Heinrich Hagenmeyer (Tübingen, 1877), XXXVI.

49. Chalandon, "Un Diplôme inédit," p. 314.

50. Strehlke, *Tabulae*, p. 1; Prawer, "Colonization Activities in the Latin Kingdom of Jerusalem," *Revue belge de philologie et d'histoire*, XXIX (1951), 1063-1118 (esp. pp. 1115-1117).

was that since the only really fertile regions, the coastal plains, were devoted to market gardening and the growing of cotton, grapes, and sugarcane, there was always a shortage of cereals. The matter, however, is not that simple.

In discussing the capture of Ascalon in 1154, William of Tyre described the famine which struck the Holy Land in that year. The price of a hogshead of wheat (nearly five bushels)⁵¹ had risen to four gold bezants, and only the great store of provisions to be found in Ascalon, the frontier place where supplies had been collected for fifty years, kept the *menue gent* from starving to death. But the taking of the town had another result. By getting rid of the danger of Egyptian brigands, it allowed an extended area to be brought under cultivation, land which had lain fallow since the First Crusade and in which the yields were very high.⁵² A little later, the construction of the fortress of Darum allowed the area of cultivation to be extended even farther.⁵³ All danger of famine was thus apparently dispelled. William of Tyre considered the kingdom of Jerusalem practically self-supporting by the middle of the twelfth century.

It had not been so when the Russian Daniel and the Englishman Saewulf visited the Holy Land. The fields lay deserted, the lands barren. Even around 1120 locust plagues, invasions of field mice, and a persistent drought brought on a famine, which was one of the reasons for convoking the council of Nablus.⁵⁴

Except for these early years, the kingdom of Jerusalem throughout the twelfth century was at its greatest extent. Embracing all the highlands of Judea, Samaria, and Galilee, the Ghor, the plateaus of Transjordan and the land of as-Sawād, it benefitted from the possession of large fertile areas together with revenues from districts which, though under the Moslems, nevertheless had to pay not less than half their harvests to the Franks. The county of Tripoli and the principality of Antioch were just as well off. The large towns of these three Frankish states had sufficient wheat fields in their hinterlands to avoid famine in normal times, although Antioch would find itself in trouble after the conquests of Zengi and Nūr-ad-Dīn (1144-1150).

After 1187, however, Frankish possessions were limited to the coast, that is, to several important towns without a sufficient agricultural hinterland. The attempts at reconquest which went on from 1189 to 1248 succeeded for some years in obtaining an extension of territory,

51. Prawer, "Étude," pp. 59-61.

52. William of Tyre, XVIII, 1 (*RHC, Occ.*, I, 816-817).

53. *Idem*, XX, 19 (*ibid.*, I, 973-975).

54. Mansi, *Concilia*, XXI, 262.

but this did not last. The granaries of the kingdom—the plains of Galilee, the area around Hebron and Ascalon—were gone, and with them the rich alluvial land of the Ghor. After 1263 the Mamluk reconquest aggravated the difficulty even more, by reducing Frankish possessions to the coastal towns alone, the “seigneuries” of which had to share their yields with the Moslems; thus the revenues of the hundred casals which depended on Tyre had to be brought to one spot where the representatives of the sultan and those of the lord of Tyre proceeded to divide them equally.⁵⁵ The county of Tripoli and the principality of Antioch, which had not been severely affected by the disasters of 1187, now met with a similar fate. The years of scarcity, the *caristie*, reappeared: in 1280, a hogshead of wheat cost six *livres* at the beginning of winter, which would indicate that it might go as high as ten *livres*.⁵⁶ But even aside from these years of poor harvests, what remained of Frankish Syria was certainly incapable of supporting itself.

Of course, the Franks could lean on Moslem Syria. When in 1185 the drought, together with Saladin’s devastation, aroused fear of a *caristia*, Raymond III of Tripoli obtained a truce during which the Saracens brought so much wheat into Frankish Syria that its price dropped considerably.⁵⁷ But Moslem Syria had also known bad times. The last years of the twelfth century and the first years of the thirteenth had been years of perpetual Franco-Moslem warfare; the sultans had evacuated whole areas and razed their fortresses, and it was only in the time of Baybars that Moslem Syria began to be resettled. Even so, the Mongol ravages had been a serious strain. Furthermore, the years of warfare came frequently enough that one could not always count on Moslem supply.

John of Joinville, who spent several years at Acre, tells us how he provided for the welfare of his men. Around October 1 he bought some hogs and sheep, flour and wine, to last the whole winter, since food grew dearer during the winter because of the storms which made the sea more dangerous than in the summer. In this he was only doing what others did.⁵⁸ The essential role of import by sea is confirmed in other sources. There is an allusion in the *Règle de Temple* to the dismissal of the “commander of the *Voute d’Acre*” who had

55. Richard, “Un Partage de seigneurie,” p. 75.

56. Thomas Rymer, *Foedera* (Record Commission, London, 1816), I, part II, 188–189.

57. Ernoul, *Chronique*, ed. Louis de Mas Latrie (Société de l’histoire de France; Paris, 1871), p. 124.

58. John of Joinville, *Histoire de Saint Louis*, ed. and tr. Natalis de Wailly (Paris, 1868), pp. 179–180.

failed to check up on the condition of a wheat cargo from overseas, and the complaints of Ambrose on the scarcity of grain which prevailed around Acre until the arrival of the first barge after the winter storms.⁵⁹

At first the Byzantine empire had figured among the principal exporters of wheat to the crusader states. During the First Crusade Genoese, Greek, and English ships carried foodstuffs from Cyprus and the Archipelago, and in 1110 a Greek vessel was captured by the Egyptians off Haifa while carrying merchandise and food *de regno Grecorum*.⁶⁰ The role of the Greek empire would lose its importance, however, especially when Cyprus and Cilician Armenia broke away from it. Cyprus and Armenia continued to furnish wheat to Frankish Syria, which came to depend on their shipments in the second half of the thirteenth century.⁶¹

It was necessary, however, to seek additional imports from the chief wheat producer of the Mediterranean, the kingdom of Sicily. In 1104 a grain ship left Otranto for Antioch (which Byzantium may have refused to supply), and the countess Adelaide of Sicily when she married Baldwin I brought ships loaded with wheat, wine, oil, and salted food.⁶² This commerce reappeared with the sharp decrease of grain production in the Holy Land. In 1197–1199 the monastery of St. Mary *Latine* got from the ruler of Sicily permission to send abroad 200 *somma* of wheat; in 1240 Frederick II sent to Tyre a ship carrying 2,000 *somma* for the payment of his knights; in 1280, a famine year, large cargoes of grain, barley, salted food, cheese, beans, and peas left for Acre.⁶³ These examples could be multiplied.

The importance of the Sicilian role in provisioning must not be underestimated. In 1280 the vicar of patriarch Elias of Jerusalem wrote to king Edward I of England about the disturbing situation of the Latin kingdom: there was a famine in Cyprus and in Cilician Armenia, which had been devastated by locusts, and it was feared that

59. Ambrose, *op. cit.*, vv. 4215, 4347, 4483; *Règle et statuts secrets des Templiers* (ed. Maillard de Chambure, Paris, 1840), p. 471.

60. Albert of Aachen, XI, 27 (*RHC, Occ.*, IV, 675–676); Adolf Schaube, *Handelsgeschichte der romanischen Völker des Mittelmeergebietes* . . . (Munich and Berlin, 1906), p. 124.

61. Rymer, *loc. cit.*

62. Raimondo Morozzo della Rocca and Antonino Lombardo, *Documenti del commercio veneziano nei secoli XI–XIII* (Regesta chartarum Italiae, 28–29; 2 vols., Rome and Turin, 1940), I, 31; William of Tyre, XI, 31 (*RHC, Occ.*, I, 508–509).

63. P. Sinopoli di Giunta, *La Badia regia di S. Maria Latina* (Acireale, 1911); J. L. A. Huillard-Bréholles, ed., *Historia diplomatia Friderici secundi* (6 vols., Paris, 1852–1861), V, 848 (cf. V, 587; VI, 747); Evelyn M. Jamison, "Documents from the Angevin Registers of Naples: Charles I," in *Papers of the British School at Rome*, XVII (1949), 138. The *somma* of Sicily measures about 265 liters; the *somma grossa*, 344.

the king of Sicily, Charles of Anjou, would not allow grain to be exported because of his war with the Byzantines. Some weeks later the treasurer of the Hospitallers expressed the same fears.⁶⁴ Thus an administrative act of the king of Sicily would determine whether there would be an abundance or a shortage in Syria, for the Sicilian export system presupposed that the merchants had obtained an import license from the vicar-general of the kingdom of Jerusalem or, for Acre, from the grand master of the Temple.⁶⁵ Any Syrian baron who refused to recognize the Angevin king of Sicily as king of Jerusalem had no hope of getting one of these precious import permits.

Before Charles of Anjou, Frederick II was thought capable of influencing the internal politics of the kingdom of Jerusalem by threatening to forbid the shipping of grain. Until 1244 he agreed to allow the imperial ships to carry grain to Acre; after the taking of Tyre by the Guelfs, he established a veritable blockade against Acre and the persons placed under the ban of the empire.⁶⁶ Earlier still, the threat of holding up the import of grain coming from the Byzantine empire was a weapon used to keep the counts of Tripoli in subjection to the emperor, as well as a measure against the Normans of Antioch.⁶⁷

Thus, unable to supply its own needs other than in the period 1120–1187, Frankish Syria necessarily fell into political and economic dependence on those countries that could provide supplies.

64. Rymer, *loc. cit.*; "Lettre de Joseph de Cancy . . . à Edouard Ier," in *Bulletin de la Société d'histoire de France*, I-2 (1834), 10. This is translated by William B. Saunders in *PPTS*, V-5 (London, 1896).

65. Georges Yver, *Le Commerce et les marchands dans l'Italie méridionale au XIIIe et au XIVe siècles* (Bibliothèque de l'École française de Rome, LXXXVIII: Paris, 1903), pp. 110 ff.

66. Huillard-Bréholles, *op. cit.*, VI, 466–467.

67. Anna Comnena, *Alexiad* (*RHC, Grecs*, I, 196) (to force the count to restore the money deposited by the imperial envoys).

B. Agriculture in the Kingdom of Cyprus⁶⁸

In contrast to the Frankish colonies on the Syrian coast, the island of Cyprus remained completely under the domination of Latins from 1191 to 1571. Its agriculture therefore was not affected by political events; at most, the Genoese occupation of Famagusta from 1373 to 1464 led to the peasants' abandoning the part of the neighboring plain which was ruined by the wars. In the same period, devastation by pirates, who carried off many villagers into slavery, certainly disrupted agricultural life.

The soil of Cyprus is quite varied and it is best to distinguish among the several regions according to their agricultural capacity. The west is a mountainous region (Akamas, Tylleria, and Troödos) which, because of the extension of the Makheras mountains, stretches north of Larnaca. This highland is cut by deep valleys rich in vegetation

68. The principal sources are Mas Latrie, *Histoire de l'île de Chypre sous le règne des princes de la maison de Lusignan*, II, III, *Documents et mémoires* (Paris, 1852-1855) (among the published documents is included the *Livre des remembrances de la Secrète* of 1468, as well as some Venetian statistics); and *idem*, *Documents nouveaux servant de preuves à l'histoire de l'île de Chypre . . .* (Collection de documents inédits sur l'histoire de France: Mélanges historiques, IV; Paris, 1882), pp. 337-619, and "Nouvelles preuves de l'histoire de Chypre," *Bibliothèque de l'École de chartes*, XXXII (1871), 341-378; XXXIV (1873), 47-87; XXXV (1874), 99-158. For seigneurial accounts, there are those of Knodhara and Morfittes, published by Édouard Poncelet, "Compte du domaine de Gautier de Brienne au royaume de Chypre," *Bulletin de la commission royale d'histoire*, XCVIII (1934), 1-28, and of Psimolófo, on which see Richard, "Le Casal de Psimolofa et la vie rurale en Chypre au XIVe siècle," *Mélanges d'archéologie et d'histoire*, LIX (1947), 121-153. See also *idem*, "Un Évêque d'Orient latin au XIVe siècle: Guy d'Íbelin, O.P., évêque de Limassol, et l'inventaire de ses biens," *Bulletin de correspondance hellénique*, LXXIV (1950), 98-133; and *idem*, "Documents chypriotes des archives du Vatican (XIVe et XVe siècles)," in *Chypre sous les Lusignan*, I (Bibliothèque archéologique et historique, LXXIII; Paris, 1962). There still remain some unpublished documents in the protocols of Genoese notaries. Some of the accounts of travelers are useful, especially that of Denis Poussot, *Le Voyage de Terre Sainte* (ed. Schefer, Recueil de voyages et documents, XI; Paris, 1890) and of Nicholas of Martoni (ed. Léon Le Grand, "Relation du pèlerinage à Jérusalem de Nicolas de Martoni notaire italien [1394-1395]," *ROL*, III [1895], 566-669).

For modern works one need only note Mas Latrie, *L'Île de Chypre: Sa situation présente: Ses souvenirs du moyen-âge* (Paris, 1879), and George Hill, *A History of Cyprus* (Cambridge, 1948), II, 6-11, and *passim*. On measurements, the conclusions of my "Documents chypriotes," pp. 16-21, do not agree with those of Cornelio Desimoni, "Observations sur les monnaies, les poids et les mesures cités dans les actes du notaire génois Lamberto di Sambuceto," *ROL*, III (1895), 21-25. Elements of this chapter are used in Richard, "Une Économie coloniale? Chypre et ses ressources agricoles au moyen-âge," *Byzantinische Forschungen*, IX (1976), 331-354.

(one of them is called Myrianthoussa, "the land of 10,000 flowers"); to the west the region of Khrysokhou is especially fertile. In general the mountains are well watered; the sides of the valleys can be terraced for cultivation. To the south of this highland is a shore plain cut in two by a mountainous promontory, the Paphos plain and the Limassol plain. In places this plain is very rich, where the streams converge from the mountains; but it terminates in the east, near Larnaca, in a veritable steppe. To the north of the mountains stretches the Mesaoria, a dry plain cut by stream beds which fill only in the winter. It is best suited to the cultivation of cereals, but in places one can get water from wells to irrigate gardens and orchards. Where the rivers end near the sea there are even marshes. To the north of the Mesaoria there is a new chain of mountains which extends eastward to the Karpass peninsula. The northern edge of this chain, falling to the sea, is one of the most fertile and best watered areas on the island.

Natural conditions seem to have been much the same in the Middle Ages as now. Possibly, as Louis de Mas Latrie says, there were more woods. In the fourteenth century the forest still furnished lumber for shipbuilding, and it was possibly under Turkish domination that excessive exploitation and the multiplication of goat herds aggravated deforestation, the plague of the island.⁶⁹ There are no traces now of the large forests which have disappeared since that time, and Şâlih ibn-Yaḥyâ found the region of Cape Kiti, near Larnaca, as desolate in 1425 as it is now.⁷⁰ Concern over water has dominated agriculture ever since, drought being an even more terrible calamity than the plagues of the locusts, which could reduce the yield to ten percent of normal.⁷¹ For cereals one depended on the winter rains, but other crops required additional irrigation. Sugarcane, cotton, and the gardens required lands which were *abevreyces*, lands over which water could be directed from the canals or creeks (*condutz* or *flumaires*). The canal water was drawn either from some river or from a spring — what the texts call *aigues courrans et sourdans*. Where there was neither river nor spring, it was necessary to tap sources of ground water. Denis Poussot in 1532 saw the cotton fields near Larnaca watered by means of water wheels (*norias*) turned, as today, by a blindfolded horse or ass.⁷²

69. Richard, "Une Économie coloniale," pp. 332-333. There is an account of 1325-1326 on shipbuilding in *idem*, "Documents chypriotes," pp. 33-49.

70. Louis Cheikho, "Un Dernier écho des croisades," *Mélanges de la Faculté orientale*, I (1906), 351.

71. Mas Latrie, *Histoire*, III, 496.

72. Poussot, *Le Voyage de Terre Sainte*, p. 148.

For those who were located along the upper reaches of a stream, it was a great temptation to hold up as much of the water as possible to irrigate their own lands, and the king's court had to adjudicate many conflicts occasioned by a *noveté d'aigue*. The "turcopolier" James de Nores had redirected the Pedias, in so doing ruining the land of the titular patriarch William of Jerusalem at Psimolófo. The patriarch, unable to get justice from king Peter I, obtained a request from pope Innocent VI to the king to reestablish the stream in its old course (1360). Between the Corners (Cornaros), Venetian lords of Episcopi, and the Hospitallers of Kolossi, there were several royal decisions regarding the use of the waters of the Kouris, which ran between these villages. We also have the account of a visit made by commissioners appointed by king Janus in 1413 for the purpose of giving satisfaction to the inhabitants of Palekythro, who complained that they no longer received the waters of the spring of Kythrea, which had formerly been used to water their lands and turn their mill. The commissioners followed the course of the stream and forbade the blocking up of the irrigation canals so as not to deprive Palekythro of water. Each village had a *neroforo* (a Greek title which the account of Psimolófo translates *custos aque molendini*); he had to see to it that "chascun ay sa razion par mesure et par ordenement."⁷³

If conditions of cultivation do not appear to have changed in Cyprus since the Middle Ages, the number of villages seems to have diminished. The documents of the fourteenth and fifteenth centuries mention villages which no longer exist. The statistics of the fifteenth century give the island a population of something like 150,000 to 180,000 persons living in from 834 to 839 casals and *prastii*.⁷⁴ The importance of these villages varied. Psimolófo, with 60 households, was certainly bigger than average. There was a difference between the casals and the *presteries*, which were mere hamlets dependent upon a casal.⁷⁵ Some of these *presteries* were undoubtedly inhabited only by the representative of the lord, with some slaves or wage laborers;

73. *RHC, Lois*, II, 378; Mas Latrie, *Histoire*, II, 504; *idem*, in *Bibliothèque de l'École des chartes*, XXXV, 111; Richard, "Le Casal de Psimolofos," p. 125; Bustron, *Chronique*, p. 29 (fountain of Kythrea). See also Jean Darrouzès, "Notes pour servir à l'histoire de Chypre (quatrième article)," *Κυπριακαὶ Σπουδαί, ΚΓ'* (1959), 47-51.

74. Richard, "Une Économie coloniale," pp. 333-334.

75. Bustron, *Chronique*, p. 462. In the Byzantine empire the nucleated village (*χωρίον*) and the separate farmstead (*κτῆσις*) were the two main types of peasant settlement. The *προάστεια* were large estates run with slaves or small leaseholders (George Ostrogorsky, "Agrarian Conditions in the Byzantine Empire in the Middle Ages," in *Cambridge Economic History of Europe*, 1st ed., I [Cambridge, Eng., 1942], 198, 201). The Cypriote *πράστειον* would correspond to both the *κτῆσις* and the *προάστεια*, the casal to the *χωρίον*.

others were practically small villages whose inhabitants cultivated their holdings and where the lord might also have lands of his own.

In most of the villages the lord seems to have had his own holdings (*demaine*) next to the lands cultivated by the peasants who owed him dues. Seigneurial exploitation had its center in the "court," which comprised a whole collection of buildings, although a seigneurial manor-house seems to have existed only in the most important places, and even then it was only rarely fortified. There is mention, however, of towers at Kiti and Pyla. In the smaller holdings the lord was often content to live in a tent when he spent any time there.⁷⁶

In each court there were houses for general accommodation, built according to the technique used in 1317 at Psimolófo—stone foundations, walls of unbaked brick, and terraced roofs with lathes and joists held up by "French columns" of wood. There were stables, granaries, and wine cellars. Also in the lord's court were the oven, the bakehouse (*paneteria*), the winepress, and sometimes a sugar mill, or else an olive grinder and press. As for the flour mills, some were run by water (as at Palekythro and Psimolófo), others by animal power. There is mention of a *molin de bestes* at Nicosia in 1367.⁷⁷ Finally, many casals had a *canute*, which seems to have been a tavern; presumably it was here that the lord had his wine sold.⁷⁸

To exploit his demesne, the lord—if he did not farm it out to someone to hold *en apaut*—established an intendent, the *bailli*, assisted by an *ecrivain*, a *grenetier*, a *canutier*, some artisans (blacksmith, carpenter, bakers), some wage laborers (*soudoyers*), and often also slaves who were clothed, fed, and lodged at his expense. The number of these people varied according to the importance of the seigneurial reserve. At Psimolófo the lord's portion was one seventh of the arable land. Some of the buildings belonging to the reserve, however, were not used by the lord, but were *apautée*. The mills, for example, were rented out.

The rest of the land of the casal was cultivated by the peasants, who were either serfs (*pariques*) or free men (*elevteres* or *francomates*), each of these categories having clearly defined obligations to the lord. The *pariques* were attached to the soil, and a periodic census called a *practico* recorded their names and the ages of members of their families.⁷⁹ A *parique* who left his land was considered a fugitive, and

76. Richard, "Guy d'Ibelin," p. 124. Cf. Nicholas of Martoni, "Relation," p. 637.

77. The account of the church of Limassol: Richard, "Documents chypriotes," pp. 61–110.

78. *Canute* (mistakenly read *camete* by Poncelet and *camire* by Mas Latrie, *Histoire*, III, 256, 263, 273) is the Cypriote *χανούτι*.

79. In the documents of the fifteenth century: "en serfz personnez cent dis sept, ce est hom-

royal ordinances—especially that of 1355—established measures to return him to his master and to punish those who kept him on some other land.⁸⁰ The marriage of pariques was also regulated. When a female serf of one seignury married a serf of another seignury, her new master had to give one of his female serfs to her old lord. To be ordained a priest or to leave a casal, the parique was required to pay a sum of money.⁸¹ Finally, it seems that the transference of his goods to his children was limited. On his death a portion of his cattle (which he had possibly needed for field work) may have reverted to his master.⁸²

In the acts of enfranchisement, where the obligations of the pariques were designated by the words *servage*, *chevage*, *anguaires*, *dimois*, *apaut*,⁸³ it is probable that the term *servage* applied to these restrictions of personal liberty. *Chevage* was received from all serfs aged fifteen to sixty. Leontius Machaeras identified it with the old head tax, which became the *kapnikon*.⁸⁴ Likewise another Byzantine impost had become a seigneurial levy on the serfs alone, the *dimois*.⁸⁵ *Anguaires*, also of Byzantine origin, required that serfs work on the lord's land two days a week—possibly three up to the middle of the fourteenth century, if we can believe Philip of Mézières, who says that the villagers were required to present themselves in the market on Sunday in order to be able to work for three days on their own lands, and that religious scruples led the king to reduce the length of these corvées. The lord was required, it seems, to provide meals for the *rustici de angaria*.⁸⁶ From the land which they cultivated for

mes, femez et enfans mermiaux, ce est des serfs du prahtico dudit lieu" (Richard, "Documents chypriotes," p. 143). Cf. Mas Latrie, *Histoire*, III, 465. Some of the documents specify the age of the children.

80. *RHC*, *Lois*, II, 373; Mas Latrie, *Histoire*, III, 192.

81. Mas Latrie, *Histoire*, III, 226–227, 234–235.

82. Richard, "Le Casal de Psimolofu," p. 146; Delaville Le Roulx, *Cartulaire*, III, no. 4515 (prohibiting the custom on the serf's death of taking *aratrum et asinos* when his heirs continue to fulfill his obligations "a coustume del vilenage"). Compare this with the custom in the Morea of exempting from seizure the land of the parique, his team of oxen, or his ass, all considered to be the property of the lord.

83. Mas Latrie, *Histoire*, III, 254, 270.

84. Cf. Andreas M. Andreades, "Deux Livres récents sur les finances byzantines," *Byzantinische Zeitschrift*, XXVIII (1928), 312. The *chevage* possibly corresponded to the Byzantine κεφαλητιών.

85. In 1222 queen Alice of Cyprus gave up the *chevagia et dimos que solvebantur regine . . . a rusticis ecclesiarum* (Mas Latrie, *Histoire*, III, 620). The *dimois* (δημόσιον) was possibly the old Byzantine land tax. *Dimois* and *chevage* appear to have been confounded under the name *catepanage*.

86. Richard, "Le Casal de Psimolofu," pp. 134–135; Mas Latrie, *Histoire*, II, 382; III, 125, 520. For a market at Episcopi see *ibid.*, III, 179. A recently discovered text indicates that the villagers of Marethasa owed the king 26 days' corvée in May for gathering sugarcane and 26

themselves, called *stagia*, the pariques owed the lord a third of the produce (*partizon o tiers*). From the fifteenth century at least they owed another tenth besides.⁸⁷ Finally, the Byzantine impost on herds was still raised from the pariques, who paid a tenth of their animals in money or kind.⁸⁸

The number of pariques continually declined. Because of the harshness of their condition they sought to escape by becoming franco-mates. In 1355 the majority of peasants were serfs, and the franco-mate had to prove his freedom by producing documentary evidence. King Peter I sold enfranchisements, which town dwellers especially took advantage of, but undoubtedly many countrymen did as well; and we possess the texts of individual acts of enfranchisement by the king and by lords. In addition, the pariques benefitted from the fact that every foundling was considered free. They pretended to abandon their children on the public way and took them back the next day. In the time of the Venetians the number of franco-mates was always greater than that of the pariques, and a Venetian governor had to require the franco-mates themselves to give 36 days corvée a year, with a team of oxen, in return for a salary, all of which provoked revolts.⁸⁹ But in the fourteenth century it had become difficult to have seigneurial reserves cultivated by serfs and slaves alone. The Cistercian nuns of St. Theodore of Nicosia were obliged in 1338 to convert their lands of Sterviga to "censives" because of the impossibility of finding serfs to cultivate them.⁹⁰

The payment of a "cens" was in fact the principal obligation of the franco-mates. We have the text of a grant made by William of Acre in 1468 to three Syrians of Episcopi who agreed to settle in his casal of Potamía.⁹¹ A house and garden were given them rent-free, and they received land to cultivate in return for a fifth of its produce (at Psimolófo in 1421 the cens paid by the franco-mates was estimated

days in August for harvesting crops: Richard, "Une Famille de 'véniens blancs' à Chypre au milieu du XVe siècle: Les Audeth et la seigneurie du Marethasse," *Miscellanea in onore di Agostino Pertusi (Rivista internazionale di studi bizantini e slavi)*, I [1981], 89-129).

87. The custom of paying a tenth over and above a third (Mas Latrie, *Histoire*, III, 540) possibly resulted from the imposition of a royal tenth on the revenues of fiefs at the end of the fourteenth century. For *stagia* see Rozière, *Cartulaire*, p. 315 (1210).

88. Richard, "Le Casal de Psimolofo," p. 145. Germaine Rouillard is mistaken in thinking that this tenth fell only on the nomadic shepherds ("La Dîme des bergers valaques sous Alexis Comnène," *Mélanges offerts à M. Nicolas Iorga* [Paris, 1933], p. 784).

89. Mas Latrie, *Histoire*, III, 457, 551-553. On the proportions of franco-mates and pariques see *ibid.*, pp. 496, 534, 541.

90. *Benoît XII (1334-1342): Lettres communes et curiales analysées d'après les registres dits d'Avignon et du Vatican*, ed. Jean M. Vidal (3 vols., Paris, 1903-1911), II, 90 (no. 6196).

91. Mas Latrie, *Histoire*, III, 297.

at a fourth or a fifth of their produce), a site to plant vines on which they would pay a cens and the tenth and where they could plant olives in return for a fifth of the fruit. The lord agreed furthermore to advance them two pairs of oxen and the barley and wheat seed necessary for the first year (the practice of lending seed grain and money to peasants to buy work animals is attested at Psimolófo and Knodhara). The francomate, free to leave the casal,⁹² was therefore required, until the introduction of the *fattion francomatica* by the Venetians, only to pay a cens on the vineyards and gardens and a rent corresponding to a fifth of the produce of the other lands. In addition, the lord appears to have enjoyed a right of *marechaussie* on their beasts.⁹³

An important part of the rural population was made up of slaves, Moslem or Christian, and freedmen. The latter, called "baties" or "batiees" when they were baptized Moslems, were tied to their master by bonds very like those which governed slaves. We know that 1,500 slaves had been seized between the years 1400 and 1415 from the lands of the Egyptian sultan by the naval forces of king Janus of Cyprus, and that the king refused to return them because they were needed for the sugarcane cultivation. These slaves were clothed and fed by their masters, who used them on their own domains; after being freed, however, they were assimilated to the population of the pariques.⁹⁴

The pariques and the francomates were probably associated in a true village community. No matter what their personal condition, services fell heavily on all the village inhabitants, for example the arrangement for the distribution of water. We know little about the responsibilities of the officials who appear to have lived in the villages. We find a *juré*, who might have been a kind of village mayor; a *catepan*, undoubtedly an old imperial official, now become an officer of the seigneurie (the personal taxes which the pariques paid, a survival of the fiscal system of the Byzantine empire, were called *catepanagium*); and various sergeants performed various tasks, overseeing harvests, maintaining canals, collecting dues, rewarded by the lord out of revenues called *sergentagium*, which the villagers paid.

92. *Ibid.*, p. 238.

93. *Ibid.*, pp. 217, 539 (5 bezants a year for 100 sheep or goats, but not known for the other animals).

94. *RHC, Lois*, II, 374-375 (assize of 1355 on fugitive slaves); Richard, "Documents chypriotes," p. 137; Pierre H. Dopp, *Traité d'Emmanuel Piloti sur le passage en Terre-Sainte, 1420* (Paris and Louvain, 1958), pp. 174-175; Richard, "Le Casal de Psimolofos," p. 131. The purchase of slaves to work the land is attested in *Jean XXII (1316-1334): Lettres communes analysées . . .*, ed. Guillaume Mollat and G. de Lesquen (16 vols., Paris, 1904-1947), VII, 44 (no. 43118).

As for the *aguelarchus* or *quisitor* at Psimolófo, he may have had to watch the common flock which the villagers pastured in the woods and on the lord's pasture lands.⁹⁵

Cereals were the principal crop of the island. The soil lent itself to grain nearly everywhere, but especially in the Mesaoria, and a Catalan would write in 1421 from Psimolófo "ço ques fa aldit casal es tant solament blat." The soil was worked before the winter rains by a plow usually drawn by a pair of oxen (undoubtedly one of those wooden plows which can still be seen on the island), and the peasants then sowed the grain advanced to them by the lord. The harvests (*seailles*) began early in April, and were completed by the end of June. They required the gathering together of a considerable number of *seors*, who cut the wheat with a sickle and gathered it in large sheaves tied with rope which they carried to the nearby threshing floors of the village. Denis Poussot saw grain being threshed on these floors as it is still done: boards, weighted with stones and dragged by animals, crushed the ears; the grain was collected into bags, while the chaff was carried to *ostels* unless it was sold "a menu es aires."⁹⁶

The most abundant cereal was barley.⁹⁷ Around 1540, in the whole island about 1,600,000 bushels were harvested, while the "white and red" wheat (hard and soft wheat) came to only 1,400,000 bushels. The fertility was such that they could expect a return of 7.5 to 1 when it was not too dry and when the locusts did not descend on the island. In some regions where the harvest was early it was possible to plant cotton right after the harvest and crop it just before seeding time again.⁹⁸

Oats were not so abundant—about 37,000 bushels—because the animals were usually fed with cotton seed, leguminous plants, and barley. Besides the main cereals, therefore, we must look at the leguminous plants. Unfortunately Venetian statistics differ a great deal. Beans (*feves*) were the most important (37,000 to 115,000 bushels). They were grown everywhere and were used, together with wheat and barley, for payments in kind made to cathedral canons as well as to

95. An *aguelarchus* is cited at Psimolófo. There is a discussion on the meaning of this word in Constantine N. Sathas, *Documents inédits relatifs à l'histoire de la Grèce au moyen-âge* (9 vols., Paris, 1880-1890), IV, lii.

96. Poussot, *Le Voyage de Terre Sainte*, p. 150; *RHC, Lois*, II, 373. For the sale of chaff at Knodhara and Morfittes, see Poncelet, *op. cit.*

97. The figures to be given here come from a Venetian report at the end of the fifteenth century (Mas Latrie, *Histoire*, III, 493-498) and from that of Francesco Attar (*ibid.*, pp. 534-536).

98. Richard, "Une Économie coloniale," p. 338.

the workers and sergeants of the casals.⁹⁹ The *fasiaus* (*faseoli*, kidney beans) were of equal importance. Lentils and chick peas (*pesiaus*) were hardly less important in the statistics of the sixteenth century. Finally, among the leguminous plants which the climate of the island favored, we must note crops which do not find a place in these summary tables but whose importance is clear from other texts: the *gelbans* or *julbans* (*julbān* in Arabic: vetches) and *cressiniaus* (Arabic *qirṣā'nah*: ers or black vetches).¹⁰⁰ At Knodhara, there was purchased for the slaves "four hogsheads of lobster seed," a plant which grew wild in the region of the Dead Sea and which the monks of that country ate, leading James of Vitry to think that it was this plant, not locusts (*locustae*, fr. *langoustes*) which nourished John the Baptist in the desert of Jordan.¹⁰¹

Cyprus also grew a large quantity of onions, both at Psimolófo in the Mesaoria and at Phínika in the mountains of the diocese of Paphos.¹⁰² Onions remained one of the principal articles of produce and export.

There were other crops for the making of oil. It was certainly for this purpose that they grew sesame, the annual harvest of which amounted to 3,500 to 7,000 bushels in the sixteenth century. Olives could be found all over the island. The eating of olives was undoubtedly less important than the making of olive oil, which was estimated by Francesco Attar at 850 cantars (about 200 tons). A significant proportion of this oil was not for consumption but for the making of soap. The planting of olive trees was the subject of agreements similar to those to be found in the contract between William of Acre and the Syrians of Potamia, who promised to the landlord a fifth of the fruit of the trees they planted.

Among the other fruit-bearing trees the most important were the carob, which, then as now, proliferated in the coastal plains of north and south. The carobs, measured by the bag, had a place in the export trade. But other than the carob tree, most fruit trees were to be found in gardens where they could be properly irrigated. Nicholas of Martoni was amazed by the gardens of Nicosia, and Gabriel Capodilista praised the magnificent gardens of Episcopi where he found

99. Cf. Richard, "Le Casal de Psimolofó," pp. 141-143, and the account of the church of Limassol in Richard, "Documents chypriotes," p. 105.

100. George E. Post, *Flora of Syria, Palestine and Sinai*, I (Beirut, 1932), 425, 430. The identification of *gelbani* with galbanum was an error in my "Le Casal de Psimolofó," p. 143.

101. Poncelet, *op. cit.*; James of Vitry, *Historia Hierosolymitana*, LIII (ed. Bongars, I, 1075).

102. Richard, "Le Casal de Psimolofó," p. 128; Mas Latrie, *Histoire*, II, 500.

oranges, citron, carob, and bananas; although not so renowned as these, gardens certainly existed in all the casals and the best of the irrigated lands were used for them. A text of 1458 gives us a complete description of a garden at Nicosia, with its wells, its cistern (*berquill*), its grape arbors, its fruit trees (pomegranates, mulberry, fig, apple, peach, walnut, orange, jujube), and its rose bushes, but without many details of the vegetables grown there.¹⁰³

The vineyards of Cyprus were famous. Besides the arbors for the production of raisins, there were immense vineyards, especially in the south of the island (in the dioceses of Paphos and Limassol) such as the *vinea Engadi*, two miles square—an old vineyard of the Templars, undoubtedly to the northwest of Paphos—where Ludolf of Suchem saw a hundred Moslem slaves working.¹⁰⁴ In the diocese of Limassol, the wines of Pelendria and Kilani appear to have been the most highly prized.

We know a good deal about work in the vineyards. It required a large amount of hard labor, since the ordinance of 1355 forbade that serfs suspected of having abandoned their holdings be seized either during harvest time or at the time of the grape harvest (September–October) and the time of the “labour des vignes,” which fell in March and April. The account of the casal of Porchades (Parsata near Lefkara) listed the various steps in this work: “premier fer” and “segond fer” (plowing), “sermenter” (pruning), “saper” and “environner” (cultivating), “nétээр” and “traire les traillies hors” (cutting off the shoots), “paratrohio” (layering the runners), and finally picking the grapes and trampling them.¹⁰⁵ Then they were taken to the presses, and the juice was stored in great vessels of baked earth, the *pitaires*. Some of these held more than 55 gallons; they were kept in the cellars of the casals.¹⁰⁶ To transport the wine they used goat skins, *boutizelles* (the *boutes* themselves were casks holding over 65 gallons).

The reports of pilgrims often mention the wines of Cyprus. Though Nicholas of Martoni said only that they were sweet (*dulce*), Ludolf of Suchem, who tells us that this red wine became white after six

103. Nicholas of Martoni, “Relation,” p. 635; Mas Latrie, *Histoire*, III, 76, 292. For the export of carobs see Genoa, Archivio notarile, Antonio Fellone, filza I, fol. 32^v (1302).

104. Mas Latrie, *Histoire*, II, 212. There were vines called *herminezes* (*idem*, “Nouvelles preuves,” XXXV, 123).

105. Mas Latrie, *Histoire*, III, 303. Professor Roland Martin tells me that on Thera *παπατρέχειν* was used in the sense of “layering” (*marcotter*).

106. Richard, “Guy d’Ibelin,” pp. 117–119; Nicholas of Martoni, “Relation,” p. 635. Documents of the fifteenth century list *pitaires* with presses and wine-cellars as indispensable parts of the casal.

to nine years in the *pitaires*, says that it was necessary to cut it with nine parts of water to one of wine, and that if taken straight a large quantity would not intoxicate but would burn one's bowels. No wonder he thought that the Cypriotes were the biggest and best drinkers in the world!¹⁰⁷

Besides foodstuffs they grew textile plants. Cotton was the most important, grown especially on the irrigated lands of the coastal plain in the south (Denis Poussot described vast fields of cotton near Limassol, and other fields near Larnaca, where he saw a waterwheel for the first time), and on the plain of Famagusta. The statistics of the sixteenth century gave inconsistent figures of 1,810 and 4,600 tons. Most of this production was exported to the west; of the remainder, what was not used for seed was used to fatten the cattle. Flax too was grown for its fiber and seed; Venetian estimates refer to it as an important product, more so than the hemp which was also grown on the island.

We must also note the spices and dyes listed in these statistics. Colocynth, safran, sumac, kermes seed, and others, which undoubtedly played only a small part in the produce of the island, caught the attention of the merchants who came there. The Middle Ages also viewed as a spice the most famous of Cyprus crops: sugar. The cultivation of sugarcane required irrigated land, and the problem of water was so vital for the plantations that a royal decision, rendered in favor of the Hospitallers of Kolossi over a question of irrigation, resulted in the loss of all the sugarcane at Episcopi—the Corners, following this disaster, could not find any new plants in Cyprus to rebuild their plantations, and they had to import them from Syria.¹⁰⁸ Sugar was harvested only in the wettest places: Sígouri, in the marsh where the present Kouklia reservoir is (where the kings of Cyprus had a castle built to watch out for the Genoese of Famagusta);¹⁰⁹ Palekythro, where the spring of Kythrea issues forth; Akanthou and Kanakaria, in the eastern part of the northern coastal plain; Lapithos, in the west of the same plain near one of the best springs on the island; and Morphou and Lefka, in the region of Pendayia. The area of Paphos and Limassol had the best plantations; besides some casals in the mountain valleys where sugar took up only narrow sites, as at Mamonía and Phínika, there were extensive plantations near Paphos, at Emba

107. Mas Latrie, *Histoire*, II, 214.

108. *Idem*, *Documents nouveaux*, pp. 396–397 (1368).

109. Poncelet, *op. cit.*; Nicholas of Martoni, "Relation," p. 637 (who calls the castle of Sígouri "Baffa").

and Lemba, Akhelia and Kouklia, and near Limassol, at Episcopi and Kolossi. In this last place there are still ruins of a sugarworks, later repaired in the Turkish period.¹¹⁰

All these places were familiar to merchants, for they took care to note from which casal came the cane used to make sugar for sale. Francesco Balducci Pegolotti recommended that one find out the place of production. This custom allowed Venice to force the king to meet his agreements with Venetian merchants by forbidding others from buying sugar in the casals from which their own deliveries had been promised, if these deliveries had not been completed.¹¹¹

The manufacture of sugar took place at two different times. The cane was crushed in mills which were probably situated in the casals themselves, and the juice was collected in the *boutres*. This "cane honey"—molasses—might be exported (to Venice for example) in order to be refined; but it might be refined in Cyprus itself, under conditions described in a contract drawn up between king James II and master Francesco Coupiou, *refineouir de sucre*, who replaced the Syrian refiners. The sugar thus obtained could be sold either as sugar-loaf or as loose sugar—and Pegolotti tells us that the best powdered sugar came from Cyprus. It was called *dezamburada*, rid of impurities which accumulate on the top of the sugar loaf, the *zambour*.¹¹² At the beginning of the sixteenth century it was estimated that Cyprus produced from 345 to 400 tons "*de premiere cuitte*," 57 to 103 tons of *zambours*, and 57 to 181 tons of molasses.

Denis Poussot, in his *Voyage de Terre Sainte* of 1532, shows Cyprus producing "force sucre et cannelle," and also "force soye que les vers font, force moriers, arbres desquelz lesdictz vers sont nourris." The cultivation of mulberries and the raising of silk worms were probably of long standing in Cyprus, but they got a new impulse in the sixteenth century. A Venetian report says of silk: "si traze per ducati mille e va multiplicando" at the beginning of the century; about 1540, Francesco Attar valued the silk production at 3,000 ducats, and although his estimates were always much greater than those of the Venetian report, it is still evident that production had increased.¹¹³

110. Mas Latrie, *Histoire*, II, 500; III, 88, 218-219; *idem*, "Nouvelles preuves," XXXV, 111; Bustron, *Chronique*, p. 29. On the sugar-works of Kolossi see Camille Enlart, *L'Art gothique et de la Renaissance en Chypre*, II (Paris, 1899), 685.

111. Francesco Balducci Pegolotti, *La Pratica della mercatura*, ed. Allan Evans (Mediaeval Academy of America, Publications, XXIV; Cambridge, Mass., 1936), p. 364; Mas Latrie, "Nouvelles preuves," XXXV, 113.

112. Mas Latrie, *Histoire*, III, 88 and note, 219.

113. Poussot, *Le Voyage de Terre Sainte*, p. 139; Mas Latrie, *Histoire*, III, 497-499, 535-536; cf. Richard, "Une Économie coloniale," pp. 341-343.

Turning to animal husbandry, a Venetian report at the beginning of the sixteenth century estimated 22,150 pairs of oxen throughout the island; these are the only animals included in the report. They were the work animals *par excellence*; they drew the cart which Nicholas of Martoni had the misfortune to hire to get from Famagusta to Nicosia; they were used for plowing, and the casual accounts never overlook the number of *bues dou domaine*; the word *charuga* was synonymous with ox-team.¹¹⁴ A large number of cows were raised; their milk, along with that of the goats and sheep, went into the making of cheese, which was among the principal products of the island (estimated by Attar as 850 cantars, around 200 tons). Horses, asses, and mules appear to have been numerous — at Psimolófo the lord advanced funds to the villagers to buy asses as well as oxen, which indicates the importance of these animals for carting and plowing. There was an indigenous strain of pack horse or draft horse which seems not to have been highly thought of, to judge from the little *ronsin cipriain* which Guy of Ibelin had. Turcoman horses were used, probably imported from Anatolia.¹¹⁵ Finally, camels were also used to carry loads, at least in the great interior plain, as they still are.¹¹⁶

The smaller animals comprised both the flocks of the seigneurial reserve, often watched by slaves, and those of the peasants. Sheep and goats appear to have been very numerous and pigs were raised in great number. Nicholas of Martoni, who suffered so many bitter trials in Cyprus, complained that people used to let animals into their houses, where they introduced a parasite that would not let the unfortunate traveler close his eyes.¹¹⁷ As in the west, the meat was salted, and a pig was killed at Christmas for the workers on the domain.

During the summer the animals usually grazed abroad — at Psimolófo there was an “animal keeper in the forest.” In winter the cattle had to be fed cottonseed or beans. As for fowl, the accounts mention pigeons, geese, hens, and capons, and we know that the villagers were required to give hens to their lords as a form of revenue. Chicken wings were a delicacy mentioned in the *Assises*.¹¹⁸

114. Nicholas of Martoni, “Relation,” pp. 633–634; Richard, “Le Casal de Psimolof,” p. 131, note; *idem*, “Une Économie coloniale,” p. 343, note 47.

115. Richard, “Guy d’Ibelin,” p. 121; *idem*, “Le Casal de Psimolof,” pp. 146, 149. The “fauvel de Chypre” which Richard the Lionhearted rode while on the crusade, and whose qualities Ambrose praised, was not necessarily a war horse raised in Cyprus. The king of England had taken it from Isaac Comnenus.

116. *Jean XXII: Lettres communes*, ed. Mollat, VII, 44 (no. 43118).

117. Nicholas of Martoni, “Relation,” p. 634; Richard, “Le Casal de Psimolof,” p. 145; *idem*, “Guy d’Ibelin,” p. 125.

118. *Assises de la Cour des Bourgeois*, in *RHC, Lois*, II, 193; Richard, “Une Économie coloniale,” p. 345.

The *Assises* also refers to bees, in dealing with the case of those who attracted someone else's bees to their own hives (*vaisseaus*) and of bees found in an *arbre sauvage qui n'a point de seignor*. Unlike the custom in the west, in this latter case bees and honey belonged to him who found them, not to the lord of the village. Denis Poussot was astonished that bees were raised in hollows made in the walls of houses rather than in hives. A tax of 16 deniers was paid for each *abeillier*.¹¹⁹ In the Venetian reports wax and honey are mentioned among the principal products of the island. The honey was estimated at 300 or 400 cantars (70 to 90 tons) a year, and wax at about 18 tons.

Among the natural resources we should also note game and fish. Although nothing is known of fishing in the seas around Cyprus, we do know something about the lagoons on the southern coast. Not only did these pools produce salt, as at Limassol and the "salines" of Larnaca, but there were so many fish caught in the former (mostly gilthead) that Florio Bustron found it worth mentioning.¹²⁰ and their sale brought in 5,370 bezants a year to the king, according to the account of the tithes of Limassol (1367). Hunting was the favorite pastime of the Frankish nobility. The animals they hunted have since been so thinned out that they have almost disappeared, at least as regards rabbits and hares; but at the time of the Lusignans they could still hunt wild sheep and roebucks called *agrini*. Travelers have left us accounts of the hunt, the lords often spending a month under canvas in pursuit of the game through the forests and mountains, using trained leopards and hunting dogs. The Venetian statistics mention wild fowl also. They were hunted with falcons. The travelers were scandalized by the luxurious trappings of the chase. Ludolf saw the 500 hunting dogs of Hugh of Ibelin, the titular count of Jaffa, with a huntsman for every two dogs, and he figured that each nobleman had enough falcons to keep a dozen falconers busy (an exaggerated number to judge from the bishop of Limassol, Guy of Ibelin, who had only three). Nicholas of Martoni says that king James I had 24 hunting leopards and 300 falcons.¹²¹ The cost of these animals is suggested by an *assise* of king Hugh IV on May 16, 1355, setting a reward of two bezants for whoever found and returned to the owner an adult goshawk or falcon, one bezant for the *tressiaus* (tercels?), sparrow-hawks, and merlins, and two bezants for hunting dogs. A heavy fine

119. *RHC, Lois*, II, 192-193; Poussot, *Le Voyage de Terre Sainte*, p. 147; Richard, "Le Casal de Psimolofo," p. 144.

120. P. 28.

121. Nicholas of Martoni, "Relation," p. 635; Ludolf of Suchem, in Mas Latrie, *Histoire*, II, 215.

was imposed on those who received stolen animals.¹²² No wonder that Cyprus was a country in which hunting literature flourished: it was probably in the fourteenth century that the two authors of tracts on falconry lived; one of them, Michelin, had been a falconer to a king of Cyprus, while the other, Molopin, dedicated his *Livre dou Prince* to prince John of Antioch, Peter I's brother.¹²³

The census of the produce of Cyprus confirms the impressions of travelers, who were amazed that a country covered with rocky hills could be so fertile. The resources of Cyprus were extremely varied, and a large enough number of people worked on the land so that in the middle of the sixteenth century Francesco Attar figured that nine tenths of the cultivable soil was in production. But was such cultivation designed to feed the populace or to enrich the Frankish lords? In defining the general characteristics of Cypriote agriculture a recent book has insisted on the "colonial" character of the production of the Mediterranean islands in general and of Cyprus in particular. According to the author, Fernand Braudel, everything was sacrificed to the needs of the western cities Genoa and Venice, of which Cyprus had been a protectorate. These cities had forced Cyprus to develop certain crops—cotton, wine, and sugarcane—at the expense of the needs of the inhabitants of the island and for the sole profit of the dominant aristocracy, to such an extent that the Turkish conquest seemed to the islanders an economic liberation raising their standard of living.¹²⁴

That Cyprus was an exporting country of colonial produce was certainly true. Sugar in particular played a large role in the commerce of the island. Although it is possible that sugarcane cultivation was of recent introduction (tenth century?), and although it developed especially when the possibility of the west's getting sugar from Syria declined, it was sufficiently important at the beginning of the fourteenth century for contracts drawn up in Famagusta to preserve evidence of purchases made by Genoese merchants at Episcopi from

122. *RHC, Lois*, II, 373–374; Richard, "Une Économie coloniale," p. 345, note 57.

123. These two tracts were used by Jean de Francières to write his well-known *Fauconnerie* at the end of the fifteenth century: Rolf Wistedt, "Le Livre de fauconnerie de Jean de Francières: L'auteur et ses sources," *Filologist Arkiv*, XI (1967).

124. Fernand Braudel, *La Méditerranée et le monde méditerranéen à l'époque de Philippe II* (Paris, 1949), pp. 122–125.

125. Genoa, Archivio notarile, Lamberto di Sambuceto, filza III, fol. 32^v (1307); Pegolotti, ed. Evans, p. 364. Cf. Mas Latrie, "Nouvelles preuves," XXXV, 137, and Sanudo, *op. cit.*, p. 24. The exploitation of Episcopi by the Corner family has been studied by Gino Luzzatto, "Capitalismo coloniale nel Trecento," *Studi di storia economica veneziana* (Padua, 1954), pp. 117–123.

the countess of Jaffa, and for Pegolotti to emphasize the importance of Cyprus sugar.¹²⁵ Cotton also appeared in these contracts.¹²⁶ Products such as resin and indigo were certainly destined for the western market.¹²⁷ Cyprus wine was also known overseas. Bishop Arnulf of Lisieux about 1147 compared the eloquence of another prelate to Cypriote wine, "sweet to the taste, but fatal if unmixed with water"; and the *Bataille des vins* of Henri d'Andeli around the end of the twelfth century ranked Cyprus wine first.¹²⁸ In 1307 a boat left Cyprus to take wine to the Hospitallers besieging Rhodes.¹²⁹ Its popularity would last throughout the Middle Ages. It was precisely to compete with Cyprus that the Portuguese planted sugarcane and vines imported from Cyprus in the island of Madeira.

The example of Madeira, however, where the exclusive cultivation of sugar and grapes had disastrous effects on forest and soil alike, cannot be applied to Cyprus. There sugar and cotton could be grown in only a small part of the country, which was much drier than the Atlantic island, and vineyards prospered only in a limited area beneath the slopes of the Troödos. The greater part of the island was given over to cereals and other foodstuffs, and the harvests were sufficiently abundant to provide large exports. In the twelfth century Cyprus appears to have victualled the crusaders; in the thirteenth it was the abundance of food there which dictated the use of the island as the base of operations for the crusades. Louis IX's provisioners had been prepared to buy veritable "mountains" of wheat and barley, which Joinville found amazing. Contracts of 1300, 1301, and 1302 reveal cargoes of wheat and barley, beans and vetches destined for Cilician Armenia (possibly for Egypt also, although illegally).¹³⁰ In 1347 a cargo of wheat left for Venice, a city which continually had to count on Cyprus for the grain for which it had such pressing need. The *provedditore* Bernard Sagredo complained in 1562 that the Signoria overestimated the capacities of the island in demanding that he send 40,000 *stara* of grain.¹³¹

126. Genoa, Archivio notarile, Antonio Fellone, filza I, fol. 32^v (1302), and Lamberto di Sambuceto, filza II, fols. 257 and 283^v.

127. *Ibid.*, Antonio Fellone, filza I, fol. 17^v: the purchase by a Genoese of 58 "rotes" of resin.

128. ". . . dicens eum habere naturam Ciprici vini, quod in ore quidem dulce est sed occidit, si non aqua fuerit temperatum" (*Historia pontificalis*, in *MGH, SS, XX*, 535); "Vin de Cypre fit apostoile" (*Oeuvres de Henri d'Andeli*, ed. Alexandre Héron [Paris, 1881], p. 30).

129. Lamberto di Sambuceto, filza III, fols. 37^v, 38^v.

130. Desimoni, "Actes passés à Famagouste de 1299 à 1301 par devant le notaire génois Lamberto di Sambuceto," *ROL*, I (1893), 138, 310, 322, 325, 327 (1300); Antonio Fellone, filza I, fol. 8 (1302); Giovanni Bardi, filza IV, fol. 133^v. For the shipping of wheat, barley, and biscuit to Rhodes in 1449 see Mas Latrie, *Histoire*, III, 59-60.

131. Mas Latrie, "Nouvelles preuves," XXXV, 102; *idem*, *Histoire*, III, 554.

Cyprus, a greater producer of cereals than even of sugar or wine, provided its inhabitants the means of a good life.¹³² In a normal year a hogshead of wheat was worth one bezant; a *rote* (5 lbs.) of the whitest bread was never more than 6 deniers, and the same weight of barley bread (*gruau*) which the poorest ate was rarely more than 2 deniers.¹³³ The daily pay of a carpenter in the shipyards of Famagusta rarely fell below half a bezant (24 deniers, the price of a hen); and two centuries later the francomates required to do forced labor by Venice received one bezant a day. Cyprus therefore had a low cost of living.

Since Cyprus was above all an agricultural country, it can be regarded as a vast exploitative enterprise yielding fat profits to the king and the Frankish aristocracy. The lords' granaries and cellars were the source of their wealth, and the merchants beat a path to their door. It was to the storehouses of John of Ibelin, the titular lord of Arsuf, that a Genoese went to buy 130 jars of "Paralime" wine on October 14, 1300. In 1406 the Bragadin family intended to withhold 7,878 hogsheads of wheat bought from queen Heloise *in magazenum ad casalia*. Despite their precautions in sealing the storehouse door, the queen had it reopened to sell the wheat at a better price a little later.¹³⁴ Moreover, the king's financial year was determined by the date he leased out his casals, as well as when he sold his wheat, cotton, and wine; very frequently he made his payments in sugar to be drawn from the harvest of one of the "bailliages" of the royal domain where sugarcane was grown.¹³⁵ Not only the king but the entire Frankish nobility of Cyprus lived off the sale to the merchants of Outremer of the products of their lands, like Antilles planters in the eighteenth century.

However, the Cypriote population did not suffer much under their regime. The most striking fact of the history of the peasantry during the Frankish period is the steady improvement in its condition. All

132. The importation of wheat is mentioned for the years of famine caused either by the influx of refugees from the Holy Land or by drought — or even by excessive rainfall; e.g., 1296, when it was necessary to fix bread prices and when the drought caused a famine in Egypt, or 1309, when the winter storms and the snow were late: R. de Mas Latrie, ed., *Chroniques de Chypre d'Amadi et de Strambaldi* (2 vols., Paris, 1891-1893), I, 233, 243 note, 292-293. Cf. also Yver, *Le Commerce et les marchands*, pp. 118, note 4, 141.

133. Richard, "L'Ordonnance de décembre 1296 sur le prix du pain à Chypre," *Ἐπετηρίς τοῦ Κέντρου Ἐπιστημονικῶν Ἐρευνῶν*, I (Nicosia, 1967-1968), 45-51.

134. Desimoni, "Actes passés à Famagouste," *ROL*, I, 137; Mas Latrie, "Nouvelles preuves," XXXV, 113-114. Wine-cellars and granaries were pillaged by the peasants in 1421 during an uprising the causes of which made it similar to the Jacquerie of 1356. The peasants rebelled less against the harshness of the seignorial regime than against the inability of their lords to defend them against Moslem invasion.

135. Mas Latrie, "Nouvelles preuves," XXXV, 111 ff.

the charges which continued to burden the pariques had been imposed during the Byzantine regime; the Franks seem not to have introduced any new ones (before instituting the tax to pay tribute, first to Genoa, then to Egypt, and in particular the "mete dou sel").¹³⁶ Under the Lusignans emancipations increased, and seigneurial domains were subdivided for the benefit of the francomates who had to pay only the "cens." Attempts to exploit these lands with slaves would fail, especially when the Genoese prompted the slaves to revolt in 1373. With the decline of labor provided by the corvées (as well as a reduction in the number of days of the corvées, if Philip of Mézières is correct), the exploitation of the seigneurial reserves became increasingly difficult; we find great planters like the Corners forced to rely on some 50 francomates, in addition to their slaves and serfs, to harvest the sugarcane at Episcopi in 1396.¹³⁷

The passing of most of the peasants into the free classes and the reduction of their obligations would have unforeseen results. The Venetians, seeking to get as much out of their new colony as possible, tried to keep the pariques in their service by every means at their command, and to get labor for the seigneurial estates by forcing the francomates to perform the corvée. At the same time they tried to develop production of those things particularly necessary to Venetian industry, such as silk. The passing of the island into Venetian hands therefore modified the conditions of agricultural life. Under the Lusignans agriculture guaranteed a livelihood, supported local industry (textiles, soap, and so forth), and provided a surplus for export which enriched the nobility and, by giving the peasants the means to buy their freedom, led to an amelioration of their lives. The misfortunes of the late fourteenth and fifteenth centuries, and the Venetian conquest, converted an economy essentially Cypriote into an economy increasingly colonial.

136. Richard, "La Révolution de 1369 dans le royaume de Chypre," *Bibliothèque de l'École des chartes*, CX (1952), 113.

137. *Idem*, "Guy d'Ibelin," p. 121; Mas Latrie, "Documents nouveaux concernant divers pays de l'Orient latin," *Bibliothèque de l'École des chartes*, LVIII (1897), 108-110.

C. Agriculture in the Latin Empire of Constantinople¹³⁸

It is impossible to describe the conditions of rural life in the whole of the Latin empire of Constantinople, because it lasted such a short time and left us so few records. We can, however, get some impression of those conditions from the texts provided by those parts of the empire which remained in Frankish hands a somewhat longer time. Except for the Morea, however, specific studies are lacking, allowing us only a brief sketch.

The parts of the Latin empire which we shall deal with are the principality of the Morea, which was Frankish throughout the thirteenth century but began to slip away during the fourteenth; the Venetian towns of the Morea (Coron, Modon, and their dependencies); and

138. I was able to use an important article by Jean Longnon on "Les Classes rurales dans la Grèce franque," the manuscript of which he has kindly allowed me to examine, and a résumé of which has appeared in his *L'Empire latin de Constantinople et la principauté de Morée* (Paris, 1949), pp. 209-212. Other studies include Peter Topping, "Le Régime agraire dans le Péloponnèse latin au XIVe siècle," *L'Hellénisme contemporain*, ser. 2, X (1956), 255-295; David Jacoby, "Les Archontes grecs et la féodalité en Morée franque," *Centre de recherche d'histoire et civilisation byzantines: Travaux et mémoires*, II (1967), 421-481; and (for the Venetian possessions) Freddy Thiriet, *La Romanie vénitienne au moyen-âge* (Paris, 1959). The sources include legislative texts, accounts of chroniclers, and, above all, the fief descriptions and demesne accounts. These documents, some edited by J. A. C. Buchon, *Nouvelles recherches historiques sur la principauté française de Morée et ses hautes baronnies*, II-1 (Paris, 1843), and by Spyros P. Lampros, "Ἐγγραφα ἀναφερόμενα εἰς τὴν μεσαιωνικὴν ἱστορίαν τῶν Ἀθηνῶν" (Athens, 1906), following his translation of the work of Gregorovius, are now accessible in Longnon and Topping, *Documents sur le régime des terres dans la principauté de Morée au XIVe siècle* (Paris and The Hague, 1969), with very important comments. Some property titles are edited by Ernst Gerland, *Neue Quellen zur Geschichte des lateinischen Erzbistums Patras* (Bibliotheca graecorum et romanorum Teubneriana, Scriptores sacri et profani, V; Leipzig, 1903). As for the documents in Venetian archives, they have given rise to two important publications: Sathas, *Documents inédits relatifs à l'histoire de la Grèce au moyen-âge* (9 vols., Paris, 1880-1890); and Hippolyte Noiret, *Documents inédits pour servir à l'histoire de la domination vénitienne en Crète de 1380 à 1485* (Bibliothèque des Écoles françaises d'Athènes et de Rome, LXI; Paris, 1892). A systematic search through the archives of Venice, Genoa (especially for Chios), and Malta (for Rhodes) would certainly turn up a number of new documents; I have given here only a sketch of our present knowledge, which documentary discoveries may in large part modify. On Chios the sixteenth-century work by Hieronimo Giustiniani, *History of Chios* (ed. Philip Argenti, Cambridge, Eng., 1943), is useful. See also Thiriet, "Villes et campagnes en Crète vénitienne aux XIVe-XVe siècles," *Actes du IIe congrès international des études du sud-est européen*, II (Athens, 1972), 447-459.

the Venetian islands (Corfu, Euboea, Tenos, Myconos, and especially Crete). The islands in the hands of independent lords (duchy of Naxos, Zante, Cephalonia) have left hardly any documents.

This spread hardly lends itself to a precise description of the infinitely varied natural conditions of the different countries. There are some well-developed mountain areas as well as fertile alluvial plains such as the valley of the Eurotas, the plains of Messenia and of Elis in the Morea, and the Lelantian plain, which one text calls "the eye and the garden of Negroponte."¹³⁹

The seigneurial regime appears to have been much the same everywhere. It seems to have been a survival of the Byzantine regime, save that in the Morea the lords had replaced the emperor and taken the imperial revenues for themselves. In the Venetian colonies the commune of Venice was able to reserve quite extensive powers for itself and to exact from the nobles, to whom fiefs had been granted, payments in kind. This made the nobles tenants of a special kind, but did not leave them the independence which they would have enjoyed in the principality of the Morea. Most of the peasants were serfs, and we find here the name "pariques" which we have met in Cyprus. These pariques, or *vilani*, subjected to the *vinculum vilanutici* or *servitutis*, were tied to their *stasis*, bound by restrictions concerning marriage and the right to dispose of their goods. The *stasis*, or holding, together with the team of oxen or the ass with which it was worked, was in any case inalienable and was considered the property of the lord.¹⁴⁰

The peasants paid the *angaria personnalis*, a personal tax like the Cypriote *chevage*—but one which was undoubtedly imposed on the peasant in place of forced labor—which Venice offered to cancel in 1434 in return for the payment of a large lump sum, hoping thus to avoid the high costs of collection.¹⁴¹ Further, they had to pay a land tax to the lord, the old Byzantine *acrostiche*, and a proportion of their harvest, the *datio, facion* or *terraticum*.¹⁴² As for the Cypriote

139. Sathas, *op. cit.*, III, 455.

140. Longnon and Topping, *Documents*, pp. 265–267; Sathas, *op. cit.*, I, 285; III, 83; IV, 20, 31, 71, 182–183 (granting the inhabitants of Coron and Modon greater freedom to make wills, 1305); Noiret, *op. cit.*, p. 256.

141. Sathas, *op. cit.*, I, 269–270 (in 1473 the lords of Zante wanted to have the refugees from the Morea *contribuire real e personalment* like *i suoi parchi e villani*); II, 24; III, 421; Noiret, *op. cit.*, p. 363. This *angaria personnalis* probably corresponds to the *servitium personale* cited in Buchon, *op. cit.*, p. 55. Cf. Topping, "Régime agraire," pp. 268–272; Longnon and Topping, *Documents*, pp. 271–272.

142. Sathas, *op. cit.*, II, 24; Noiret, *op. cit.*, p. 409. The *facion* possibly corresponds to the *modiaticum* (Longnon and Topping, *Documents*, pp. 268–269), which was paid besides

kapnikon, for which there was no equivalent in Frankish Morea, it existed in Euboea, Tenos, and Myconos under the name *capinicho e vigliatico*, and appears to have been a payment in lieu of military service.¹⁴³ The *pariques* were also required to do forced labor, either on the lord's demesne, or in Venetian territories on public works, or even to take part in the great hunts (such as the annual partridge hunt, the *paganea*, of Chios). Despite their complaints, those who depended on Venice saw the number of their days of *corvée* increased from one a month to two; then, in spite of the rules, to four.¹⁴⁴ They often demanded the suppression of other customs (delivery of straw and hay to the Venetian governors, gifts to the castellans) without success.¹⁴⁵ Moreover, the custom of making gifts (*exenia*) to the lord existed in Frankish Morea also.¹⁴⁶

The *pariques*, however, enjoyed the right to have recourse to the books in which were inscribed their names and the details of their obligations, books which were called *practico* or *catásticos*.¹⁴⁷ These also included the names of those who settled in the *casals* to work the wastelands. Possibly these were the people (called *vaginiti* in Corfu in 1413) who formed the class of *nicarii* which Longnon noted in the Morea.¹⁴⁸ Then there were the Albanian tribesmen who invaded Greece in the fourteenth and fifteenth centuries. They asked to be allowed to settle in the Venetian territories (Euboea for example), agreeing to pay one ducat per household *pro recognitione servitutis* and to give military service. These seminomadic herdsmen were thus assimilated to the serfs.¹⁴⁹

We do not know if the Albanians were required, as the *pariques* were, to pay taxes on their cattle. The tithe on small animals, like that of Cyprus, is cited in the Moreote texts,¹⁵⁰ and there was a tax

the *acrosticho*. In Crete these revenues were a third of the harvest, the *terziarie* (Noiret, *op. cit.*, p. 497).

143. Sathas, *op. cit.*, II, 63; III, 127, 221, 311, 363; Topping, "Régime agraire," p. 264; Thiriet, *La Roumanie*, p. 225.

144. Sathas, *op. cit.*, III, 2, 70, 197; Noiret, *op. cit.*, pp. 252-253; Giustiniani, ed. Argenti, p. 385.

145. Sathas, *op. cit.*, I, 291-292, 300; III, 68, 163.

146. Buchon, *op. cit.*, pp. 74-75; Longnon and Topping, *Documents*, p. 269.

147. Buchon, *op. cit.*, p. 97; Sathas, *op. cit.*, II, 190, 221; Thiriet, *La Roumanie*, p. 223.

148. Sathas, *op. cit.*, III, 38-39 (in Crete the *villani ascripti* and the *villani liberi* were distinct: Noiret, *op. cit.*, p. 474); Longnon, *L'Empire latin*, p. 211; Topping, "Régime agraire," p. 282; Longnon and Topping, *Documents*, p. 263.

149. Sathas, *op. cit.*, I, 176, 178-179, 215.

150. Buchon, *op. cit.*, p. 60; Lampros, *Eggrapha*, pp. 99-100, 102; Topping, "Régime agraire," pp. 277-278.

called *zovaticum* collected on the other animals at the rate of nine hogsheads of cheese per ox, four and a half per cow.¹⁵¹ On Tenos and Myconos, horse-raising country, a *thimainicho* was levied under the pretext that the lord ought to have a stud banality.¹⁵² Finally, the herds which grazed in the forests overnight gave occasion for the raising of new taxes.¹⁵³

We know even less about the demands made on the freedmen, the *franchis* whose liberty Venice recognized in 1299.¹⁵⁴ Probably they were subjected only to the payment of the cens on their land.¹⁵⁵ It seems that the old free rural Byzantine communities continued to flourish by hanging on to their old privilege of paying their taxes jointly. The pariques sought enfranchisement, and even tried to invoke the thirty-year prescription to escape the servile bond. An enfranchisement granted in 1364 to a Cretan reveals that by not paying either the personal tax or the proportionate levy on the harvest, and by avoiding the *corvée*, one could prove one's "franchise."¹⁵⁶

There were not enough pariques to cultivate the land. In Crete the lords employed day laborers or even bought slaves for the job.¹⁵⁷ Besides the lands cultivated *ad acrosticho*, there were others given out on lease (*ad affitto*).¹⁵⁸

The villages in the Morea and the islands were also called casals, and they had the same officials to be found in Cyprus, although with different titles. In place of *catepans*, *aguelarchi*, *jurés*, or *neroforos*, there were *curatori* and *vetrani*, and the apportionment of water in the fields was in the hands of a *potamarcho*.¹⁵⁹

The seigneuries of the Morea, better known to us than those of

151. Sathas, *op. cit.*, II, 24, 25; III, 68, 71, 161; Jacoby, "Un Aspect de la fiscalité vénitienne dans le Péloponnèse aux XIVe et XVe siècles: Le *zovaticum*," *Centre de recherche d'histoire et civilisation byzantines: Travaux et mémoires*, I (1965), 405-420.

152. Sathas, *op. cit.*, III, 363.

153. *Ibid.*, III, 84.

154. Gerland, *Neue Quellen*, p. 85; *idem*, *Das Archiv des Herzogs von Kandia im Kgl. Staatsarchiv zu Venedig* (Strasbourg, 1899), pp. 124-125.

155. Sathas, *op. cit.*, I, 269-270; II, 79; Longnon and Topping, *Documents*, pp. 263-264.

156. Noiret, *op. cit.*, pp. 256 and 365 ("liberum et franchum . . . ab omni datio, angaria et tello et quolibet alio vinculo servitutis"—without doubt *angaria* here refers to the *corvée*, ἄγγαρεία, and *tello* to the personal tax τέλος). On this word see Longnon and Topping, *Documents*, p. 269.

157. Noiret, *op. cit.*, pp. 54, 409-410; Thiriet, *La Romanie*, pp. 314-315.

158. Sathas, *op. cit.*, I, 285; IV, 12; Longnon and Topping, *Documents*, pp. 272-273.

159. Sathas, *op. cit.*, I, 293; III, 361, 455; IV, 3, 7; Noiret, *op. cit.*, p. 53. At Chios the "elders" responsible for collecting the taxes, who were elected by the other inhabitants, had the title of *protogero* (Giustiniani, ed. Argenti, p. 385). *Terrae appactatae*: Topping, "Régime agraire," pp. 272-276.

the islands, included a seigneurial reserve of some importance, called the *despotico*. It comprised cultivated fields, lands planted with vines or fruit trees (*ambellonia*), and gardens, and included banalities of mill, olive press (*carpetum*), the *linobrosium* where linen was treated, the tavern for the sale of wine, the silk workshop, and probably also the wine press.¹⁶⁰

The different areas which made up the Byzantine empire before 1204 did not have the same agricultural capacities, and their produce varied widely. The Morea, the largest of the Frankish colonies, had insufficient wheat fields to feed its population, but it had other resources. Its wines were known in the west; the wines of "Clarence" (Glarentsa) on the northwest coast and the "Malmsey" (Monemvasia) wines of the east coast attained a wide renown. The texts reveal that vines prospered throughout the peninsula. They were grown both on the seigneurial reserves and on the peasant holdings, and the peasants got special privileges for bringing land under cultivation by planting vines. The wines, however, were not all of the same quality; some spoiled quickly and it was necessary to sell them in the taverns of the casals since it was impossible to export them.¹⁶¹

Olives were also important in the Morea. The peninsula exported both raisins and olives preserved in salt; primarily, however, olives were used to produce oil.¹⁶² Textile plants were also grown, especially flax. Venice had to forbid its being steeped in the rivers which provided water for its colonies of Coron and Modon.¹⁶³ The production of sugar was large enough to warrant the notice of Sanudo;¹⁶⁴ and bees supplied honey and wax in abundance. The raising of silkworms was also important, and Laconia was one of the regions which produced the most raw silk, to be sent off either to Italy or to the weavers of Thebes. Some dyes were produced, above all the scarlet seed of the kermes oak.¹⁶⁵

The Morea also possessed two resources which most of the Latin east lacked: forests and prairies. Sanudo thought that this region

160. Buchon, *op. cit.*, pp. 61-63, 77; Lampros, *Eggrapha*, pp. 97, 99-100. For a herd of cows on the domain of Lise du Quartier in 1337 see Buchon, *op. cit.*, p. 90. See also Longnon and Topping, *Documents*, p. 275.

161. Lampros, *Eggrapha*, pp. 96, 102-103. For leases of vineyards see Gerland, *Neue Quellen*, pp. 233, 235.

162. Lampros, *Eggrapha*, pp. 99-100 (for legislation against the destruction of olive trees, in 1467, see Sathas, *op. cit.*, IV, 35).

163. Sathas, *op. cit.*, IV, 15.

164. Sanudo, *Liber secretorum* (ed. Bongars, II), p. 24.

165. For all this cf. Longnon, *L'Empire latin*, p. 212; Sathas, *op. cit.*, III, 241.

could provide a crusade with the wood needed for the construction of ships and war machines.¹⁶⁶ The acorns of the Morea provided food for pigs as well as *vallonées* used by the dyers of the west.¹⁶⁷ Pasture lands not only allowed the raising of cattle, but several regions were turned over to horse-raising, especially Elis, Messenia, the plain of Tegea, and the duchy of Athens (the duke of Athens asked the Venetians of Negroponte to look after his stud horses during the threat of a Turkish invasion; no doubt they were usually kept in the plain of Boeotia).¹⁶⁸

The produce of the Venetian islands showed less variety. Corfu produced cotton, silk, and scarlet seed; Euboea, wood and cotton.¹⁶⁹ But the archipelago lent itself to little more than animal pasturage. Other than the cotton of Thera (Santorin) and the mill wheels of Melos, it was usually for their horses and mules that the islands were known.¹⁷⁰ They tried to develop other resources: in 1432 Venice farmed out Tenos and Myconos to a contractor to bring the uncultivated land into production, to plant vines and fruit trees, and to develop the production of honey, with what success we do not know.¹⁷¹ Chios was famous for its mastic, produced by a tree of the *lentiscus* family; Rhodes produced sugar.¹⁷² But the small size of these islands did not allow production comparable to that of the Morea or Crete.

Crete was the best example of a colony exploited at the orders and for the needs of the metropolis. It had an unsettled history. The thirteenth century and most of the fourteenth were marked by frequent revolts, and Venice had to keep a close watch over the government of the great island and take measures to prevent any new uprisings. As a result, agriculture was forbidden in some of the most fertile locations, since they happened to be too close to the habitual centers of revolt, to deprive potential rebels of the possibility of obtaining provisions which could sustain their uprising. The plain of Lasithi and the region of Anopolis were therefore empty from 1364 to 1463 because of government orders.¹⁷³

166. Sanudo, ed. Bongars, p. 68.

167. Buchon, *op. cit.*, p. 63; Sathas, *op. cit.*, III, 90.

168. Sathas, *op. cit.*, I, 178–179; this question has been studied especially by Longnon in *Classes rurales*.

169. Sanudo, ed. Bongars, pp. 67–68; Sathas, *op. cit.*, II, 107, 108; III, 90.

170. Sathas, *op. cit.*, II, 119; Noiret, *op. cit.*, pp. 215, 297; Sanudo, ed. Bongars, pp. 67–68.

171. Sathas, *op. cit.*, III, 412.

172. Sanudo, ed. Bongars, p. 24. On the mastic of Chios and the regulation of its export, see Giustiniani, ed. Argenti, pp. 207–209. The island also produced cotton, silk, some reputable wines, and fruits (pp. 205, 82–84, 75–79, 85–86); Giustiniani gives details on the use of rivers and waterwheels for irrigation (pp. 17–19, 75, 80).

173. Noiret, *op. cit.*, pp. 36, 488.

But in the early fourteenth century Venice made Crete its principal supplier of wheat. Marino Sanudo complained about this, suggesting that the Venetian government might better get its wheat from the nearer Apulia (where the wheat was a better grade anyway) and leave the island as a possible supplier for the crusades.¹⁷⁴ By the end of the century, however, everything was subordinated to the production of the wheat needed by Venice. There was a *descriptio bladorum*, an accounting of the harvest, on the basis of which the government decided on the amount of wheat the seigneurs had to deliver to the state granaries and the amount they could dispose of for sale abroad. Even then they could sell only to countries subject to Venice. They got export licenses (*bulletae*), which had to be endorsed by the Venetian authorities at the places of sale. Thus the third of their harvest which the peasants owed their lords came under the disposition of the government.¹⁷⁵

These irksome measures eventually provoked shortages. The famine of 1455 appears to have been brought on (if we can believe the complaints of the island feudatories) when the government stipulated the quantities of wheat to be exported on the basis of an assessment of land under cultivation rather than of the actual harvest. The harvest was bad, exports drained the island of wheat, and famine was the result. Following the crisis, Venice was asked to send millet seed to introduce this new crop into the island and thus provide a new food source. Venice refused (1462) because of the expense, and the only measure taken to avoid the recurrence of famine, by planting the plain of Lasithi and the other areas where cultivation had been forbidden since 1364, reinforced still more the single wheat crop.¹⁷⁶

The concentration on wheat was not complete, but the worry about the food supply of Venetian colonies overrode all other concerns. The feudatories always had the greatest difficulty in maintaining the horses which they owed the commune for their military service. The horses of the Archipelago, and with still more reason the mules of the same area, could be used only as draft animals (and it was still necessary to have Venetian authorization to import them). Furthermore, the knights ruined themselves buying riding horses in the west or in Turkey.

174. Sanudo, ed. Bongars, p. 67.

175. Noiret, *op. cit.*, pp. 89, 228, 260, 490; Thiriet, *La Romanie*, pp. 232-233, 317-319. The *feudatarii* objected to surrendering the *terziarie* on the grounds that they still had to advance money to their peasants to buy cattle (pp. 472 ff.), and sought to escape the obligation by renting out their land (p. 498). For proceedings against one who had sent grain and *faxoli* to Chios see p. 542; and for unusual licenses for exporting grain to Patmos and Rhodes during years of abundance see pp. 2, 225.

176. Noiret, *op. cit.*, pp. 451, 472, 475, 488, 494, 497; Thiriet, *La Romanie*, p. 413.

In 1462 they asked for permission to turn some of the lands near Candia into pasturage, but Venice granted permission only in 1471, and it was only after that that horses could be raised on Crete.¹⁷⁷ Venice did try to introduce products of particular interest to merchants, such as sugarcane and mastic trees. But the privileges granted to those who were given the task of introducing them appear to have been insufficient to guarantee success, and Crete continued to produce the same old crops.¹⁷⁸

Crete had some very important cotton plantations, and there was also flax. Scarlet seed was an article of export.¹⁷⁹ Crete also exported cypress wood, which was widely popular, but Venice limited its exploitation in 1412. Since it was used extensively for the construction of boats and houses, the eventual result was that it could be found only on the steep slopes which the mules could not reach without great difficulty. Thenceforth its export was prohibited and its use on the island regulated.¹⁸⁰

Grapevines prospered throughout the island—too much so, indeed, for the various villages tried to forbid the introduction into their own territory of wine coming from other parts of Crete. They had to import casks, especially from “Romania.” These were so cheap as to threaten the ruin of Venetian cask makers, and so their import was taxed. Cretan wine—of the Malmsey type—provided an important item of export. We know that it went not only to Alexandria, but also to London and Flanders; it was necessary to stop smugglers from hiding spices in the wine casks leaving for these countries.¹⁸¹

Animal husbandry was based on oxen, which provided a source of labor power. Venice had to take steps to forbid speculators from selling them to peasants at excessive prices.¹⁸² Likewise, there were attempts to stop speculation in sheep (merchants advanced to the peasants the price of their cheeses to allow them to buy animals), but it was necessary to bow to the necessities of cheese-making, one of the foods Crete exported; Egypt in particular bought Cretan cheese.¹⁸³ It was also necessary to modify the regulations to allow commerce

177. Noiret, *op. cit.*, pp. 54, 89, 177, 215, 252, 272, 481, 515.

178. *Ibid.*, pp. 324, 347, 352, 402; Thiriet, *La Romanie*, pp. 417–418.

179. Noiret, pp. 143, 148, 163, 293, 343, 355, 526.

180. *Ibid.*, pp. 226, 233; Thiriet, *La Romanie*, pp. 322, 416.

181. Noiret, *op. cit.*, pp. 62, 225, 250, 256, 390, 391. Crete produced primarily Malmsey wines; in 1421 a merchant loads *monovasia* for Flanders (Noiret, *op. cit.*, p. 287; cf. Wilhelm Heyd, *Histoire du commerce du Levant*, tr. Furcy Reynaud [2 vols., Leipzig, 1885–1886; repr. Leipzig, 1936, Amsterdam, 1967], I, 279–280).

182. Noiret, *op. cit.*, pp. 251, 343 (Crete exported hides [*pelomina*] to Egypt); Thiriet, *La Romanie*, pp. 320–321, 415.

183. Noiret, *op. cit.*, pp. 55, 59, 225, 230; Thiriet, *La Romanie*, p. 324.

in oxen and sheep destined for the abattoir, so as to supply meat to the Venetian squadrons at Canea,¹⁸⁴ although it was primarily the wheat biscuit which the squadrons bought in Crete.¹⁸⁵

Despite the existence of these other products, however, Crete was devoted above all to the production of wheat. Probably natural conditions had a hand in this, but the policy of Venice gave to wheat production a preponderant place, to the detriment of a balanced economy in the island. Crete thus offers a particularly noteworthy example of a medieval colony exploited in the exclusive interest of a metropolis. It submitted because the aristocracy living on the island, Venetian or Greek, had been harshly repressed after its revolts,¹⁸⁶ and because it had passed without change from Byzantine domination to Venetian.

Of the other countries of the Latin east, none presents the same characteristics so clearly. Cyprus, a fertile island and not too exposed to danger, had been cultivated for the great benefit of its kings and the Frankish nobles who sold their wine and sugar, but even under the domination of Venice it was not subjected to any agricultural specialization similar to that of Crete. The islands of the archipelago did not provide sufficient resources, although the Morea, incapable of self-sufficiency because of a shortage of wheat, did provide a quantity of foodstuffs which found a good market abroad, bringing in considerable revenues to the nobility living either in the peninsula or in Italy. Unfortunately we know little about the duchy of Athens, but the wealth of its dukes from the thirteenth to the fifteenth century suggests a sufficient agricultural productivity.¹⁸⁷

The case of Frankish Syria is quite different. It was a crusading territory, exposed to frequent devastation, menaced unceasingly, and obliged to nourish pilgrims and crusaders in addition to the indigenous population. The Frankish nobles could not exploit their domains as the lords of Cyprus and the Morea did theirs. The sale of sugar, cotton, and other products demanded by overseas commerce was offset by the need to import foodstuffs. Outside of a short period (the second half of the twelfth century) agriculture was not an important source of revenue.

In all these areas, agricultural exploitation was carried on within

184. Noiret, *op. cit.*, p. 520.

185. *Ibid.*, p. 459.

186. Gerland has noted that the Venetian system of exploitation of the island reached perfection after the repression of the last revolt in 1364: "Kreta als venetianische Kolonie (1204-1669)," *Historisches Jahrbuch des Görresgesellschaft*, XX (1899), 19.

187. Heyd mentions only figs and raisins from Attica (*op. cit.*, I, 273); the plains of Boeotia were certainly covered with cereals, and fed herds of horses, but documents are very scarce for the duchy of Athens.

the framework of the seignorial regime. This does not appear to have become more severe during the period of the domination by crusaders — the Venetian rule was probably no harsher than the Byzantine which it replaced. The condition of the peasantry in the Holy Land was much as it was in the time of the Moslems, who themselves had retained many traces of old Byzantine institutions. Cyprus preserved the regime which had existed under the Comneni; the Morea and the islands, the Byzantine regime at the time of the Fourth Crusade. Almost everywhere the Frankish aristocracy took the place of the previous public authorities, but the levies which the peasants paid corresponded to the taxes which they had previously paid. And gradually, as the centuries went by, a slow evolution tended to enlarge personal liberty.