PROBLEMS

The Economic Development of the Region of Lazio in the Middle Ages

M. R. Caroselli
University of Rome

1. The sources

The principal historical sources[1] on the economic life of medieval Lazio fall into three distinct groups. The narrative sources provide fairly ample information on the

[1] Among the principal archival sources used for this study (manuscript sources which require considerable palaeographical skill to interpret) are: the Vatican Archives, including the *Archivio Segreto*, *Archivio della Segreteria di Stato*, *Archivio della Camera Apostolica*. Equally valuable are the sources in Castel S. Angelo (*Archivio della Rocca*), and the miscellaneous collections there which include the records of the monasteries of Carampi and Pio. The materials available in the less secretive and more accessible *Biblioteca Vaticana* and its associate libraries (Ottoboni, Borgiana, Barberini, Rossi), those in the archives deposited with the Vatican (*Capitolo di S. Pietro*, *Fondi di S. Maria in Campo Marzio*, *S. Maria in Via Lata*, *S. Angelo in Pescheria*, *S. Erasmo in Veroli*) and those of the Barberini, Ruspoli, Chigi families and others are of course well known. Other than the Vatican collections we have also used the archives of the following churches in Rome: *S. Giovanni in Laterano*, *S. Pietro in Vincoli*, *S. Agnese*, *S. Andrea*, *S. Maria in Trastevere*, *S. Maria della Pace*, *S. Maria Nuova* etc. Also important are the collections in the *Archivio di Stato di Roma*, particulary those of the suppressed religious houses, the city hospitals and the abbeys of the Lazio region. The *Archivio Capitolino* contains the papers of many of the Communes and great families of the province, while the government libraries contain the official archival collections for the region. In addition, there are certain private family archives, although it must be said that these are generally difficult to consult and gain access to. Outside Rome itself there are excellent archival sources which have been inexplicably neglected by certain recent writers, and those of Rieti, Casperia, Alatri, Fossanova, Anagni, Casamari, Farfa, Subiaco, Terracina, Trisulti, Veroli, Palestrina, Segni etc. are particularly good.

The printed sources consist mainly of hagiographies, pontifical biographies, papal annals, registers and records, as well as the innumerable philological, historical, archaeological, artistic and cultural studies of the Lazio region by Italian and foreign authors whose findings and methods provide an indispensable starting point for anyone who is setting out for the first time to work on this period.

central, southern and eastern areas of the region[2]. The diplomatic archives and those of the governments of the principal cities and towns provide wider information covering the entire region. But it is perhaps from the legal documents of the period that not only the laws and customs of the age, but also the style and social features of medieval Lazio emerge most clearly - and amongst these sources, notarial deeds provide one of the most important collections.

Until the Xth century the historian of the region's economic life can only turn to relatively informal types of legal documents which resulted from agreements between friends, known as '*brevi*' or *pro rei memoria*, and were drawn up by the scribes of the Roman Curia. Unfortunately, although these deeds give some idea of the basic legal guarantees on goods and effects, they provide little in the way of wider information about the relationships between individuals within the predominantly rural communities of medieval Lazio. Due in no small part to the delay in achieving more adequate types of legal procedures, social development remained contradictory and uneven, and it was only at the close of the XIIth century that what has become known as the 'Renaissance of the law' began to make itself felt and to influence day to day life. It was at this time that the notary public made his first appearance.

As in the past, the notary public was engaged in drawing up private bequests, bills of sale and contracts, but he was now responsible for expanding and clarifying a whole range of new types of legal deeds and documents that played a part in virtually every aspect of the social and economic life of the region. The deeds ranged from new and much more detailed types of wills and testaments, which now began to include extensive codicils, to deeds of trusteeship, documents relating to betrothals and the ways in which joint estates were to be managed after marriage, or the emancipation of heirs and the settlement of inheritances. In addition, settlements of income, the placement of cash savings and the formation of commercial partnerships were all activities which as a result of the development of the monetary economy and credit operation required specific forms of legal documentation. So to did the leasing of lands which began to take increasingly differentiated and distinct forms (from outright sales to leases *pro tempore* or *ad meliorandum*) and the renting of urban property, not to mention the legal problems arising from the forms of apprenticeship used in both the towns and the countryside.

The increased activities and responsibilities of the notaries in this period provide an excellent demonstration of the breadth of the social transformation that was experienced in Lazio, as in all other areas where 'written law' became established in these early decades of the XIIIth century. It was to the notary public that individuals from every social group turned for advice and guidance on the most detailed

[2] For example, the profound difference between life in Viterbo and Orvieto, on one hand, which had preserved a degree of economic independence, and that of Rieti, Veroli or Velletri, which were more directly subject to papal government.

and intimate aspects of day to day life in medieval Lazio. And at the heart of this process of social transformation lay the phenomenon of demographic expansion, which in turn eroded traditional family structures, encouraged building, drew increasing numbers from the countryside into the cities, while at the same time increasing the quarrels and conflicts between towns and villages, between villages and between landowners. It was up to the notary public to preserve the rights and duties of the citizen. Whereas previously the notary's function had simply been that of giving legal protection to generalized transactions involving the trasfer of wealth, with the new century there began to emerge a new language which in a punctilious style that was somewhere between a vulgarization of conventional formulae and the linguistic delicacy of the pre-Renaissance era began to describe and encapsulate every aspect of the economic and social relations binding lords and their dependents, masters and servants fathers and sons, the Almighty and his clergy[3]. Within notarial culture a new awareness had taken place, and as a result the instruments provided by Roman law were adapted in order to meet the specific needs generated by a society that was expanding. The way had been opened first by the glossators who had been responsible for initiating the symbiosis of *jus commune* and *jus proprium*, of law and custom; but whereas these were ideas that influenced the development and progress of abstract legal doctrine and theory, the notaries lived and practised in the day to day world and by the mid-XIVth century they were equipped with Rolandino Passageri's *Summa* which contained definitive models for every form of legal document and transaction[4]. The notarial deed quickly became the model on which all other legal and commercial documents in Lazio were based. From monastic charters and from the correspondence of the abbots of Subiaco[5], who had for centuries used scribes from the episcopal curias[6], we know that by the end of the XIIIth century it was becoming increasingly common to turn to notaries public even for the management of the internal affairs of the monastery.

The notary had, therefore, became established as a public figure, and had the competence to draft legal deeds which established legal rights against other

[3] Although the temptation is strong, there is no space to describe either notarial methods or the career structure of medieval notaries in Italy. The medieval statutes, and in Lazio those of Aspra Sabina, Tivoli, Trisulti, are the best direct sources for this. For comparative studies of notaries in medieval Italy see: G. Cencelli and G. Masi on Bologna, J. Schmale's essay in the *Deutsche Archiv* 1957, and the valuable essay by Francesco Calasso ('Fonti del diritto medievale italiano' 1970).

[4] Cf. G. Orlandelli "Genesi dell'*ars notariae*" nel sec. XIII, in: *Studi Medievali* ser. 3, 1965, f. 2.

[5] The best known compilator of monastic cartularies was Gergorio da Catino, who was also a collector of privileges and notarial documents whose authenticity he carefully verified.

[6] Cf. Federici V. *I monasteri di Subiaco* Rome, 1912, 2 vols.

claimants and guaranteed rights against third parties[7]. In Lazio, more than elsewhere, this was part of a process of transformation from the old Roman and Ravenna based culture towards a new Italian culture which, unlike what had happened in the Po valley in the period between the VIIIth and the XIIIth centuries, took place without foreign intervention[8]. As a result the notaries, whose office was conferred on them through the universal power of the Papacy, enjoyed great status and prestige and were able to carry on their profession in Rome and in the leading cities of the region in response to the changing needs of the society in which they lived. They continued to do so whether the economy was expanding, stagnating or decaying.

2. The historical geography of the region

What was the nature of the geographical area within which the notaries of Lazio carried on their business? As a region Lazio enjoyed little geographical unity and was characterised rather by a mosaic of contrasts of climate, of types of housing, and methods and forms of farming. To the north lay the old Roman province of Tuscia with its gentle undulating countryside, its silent and isolated villages; to the east, Sabina with its tree-clad hills where cereal growing was combined with vines and olive groves which mirrored the landscapes of neighbouring Umbria and the Abruzzi; to the south, the flat Pontine plain and the Ciociaria hills were also dotted with vineyards and olive groves, but the agricultural systems here were already predominantly those of the deeper south; finally, to the west the coast-line was largely dominated by swampland and infested with malaria[9], an area made chaotic by the undisciplined course of the Tiber estuaries and by the instability of the subsoil[10]. Other than the waters provided by the spring and autumn storms, the region's hydrography was determined by the presence of two river basins which provided water for much of the province. The first of these derived from the river Tiber and its tributaries, the Nera, Velino, Salto, Turano, Aniene; the second from the river Liri in the extreme south of the region, together with its tributaries, the

[7] During the pontificate of Nicholas 11 (1277-1280) there were already public notaries in Rome, Bauco, Ninfa, Ferentino, Velletri, Terracina, Rieti, Nepi, Anagni, Subiaco, Tivoli, Ceprano, Vico, Veroli, Palombara, Alatri, Sora, Bracciano, Viterbo, Tuscania, Cerveteri, Frosinone, Poggio Mirteto, Anticoli, Sermoneta, Priverno, Arpino, Supino, Monte S. Giovanni, Carpineto, Farfa, Collepardo, Fumone, Guarcino, Roccantica, Collalto Sabino, Trevignano etc.

[8] Cf. P. S. Leicht *Il diritto privato preirneriano*, Bologna, 1933 and A. Petrucci *Documenti per la storia del notariato italiano*, Milano 1955.

[9] See: M. R. Caroselli *La Campagna romana e la sua agricoltura in età moderna e contemporanea*, Siena, 1977; C. Celli, A. Fraentzel 'Quellen zur Geschichte der malaria in Italien und ihre Bedeutung für die deutschen Kaiserzuge des Mittelalters', in: *Quellen und Studien zur Geschichte des Naturwissenschafts*, 1935.

[10] V. Sabatini *I vulcani dell'Italia centrale*, Rome, 1900-1912

Sacco, Cosa and Amaseno. A secondary hydrographic system was provided by the region's many lakes, all of which were of volcanic origin, and by the proximity of other pre-Appennine foothills which provide the explanation for the proliferation of sources of drinking water both on the surface and underground, with and without special chemical features, that were to be found in plenty throughout the region[11].

The hydrographic features largely determined the structure of habitation in Lazio, which was organized primarily around pastoral activities. In the medieval period there was greater freedom to chose between grazing and a modest expansion of arable farming as new land was put under the plough in combination with more livestock, thanks to the ample supplies of water available. After irrigation, the types of soil and vegetation influenced the forms of farming adopted. As far as soils are concerned, medieval Lazio enjoyed little variety, unless the latin terms used in the notarial deeds were unable to encompass the distinctions made in the vernacular, or the pressure of increased population had eroded the earlier distinctions that suited certain land to certain types of production. There are references, however, to red soils, tufaceous, sandy, and chalky soils. In terms of vegetation, ancient Lazio must have been thickly covered with high trees, if place names like Fagetum, Ilicetum, Cerretum, Farnetum cited by the notaries and scribes implied an abundance of beeches, ilex, and oaks. By the Middle Ages, of course, these place-names did not necessarily mean that the trees from which they were derived still existed, but there were many others that point to the wide variety of vegetation in the region: Canneto (reed-bed in the Agro Romano; Ginestra (broom) near Anagni; Laureto (bay tree) near Rieti, Subiaco and Trisulti; Mirteto (myrtle, near Veroli and Poggio; Sambuceto (elder tree) near Subiaco, Tivoli, and Veroli; Sanguineto (dogwood) near Fumone, Veroli and Bauco; Scopeto (health-land) at Alatri; Spineto and Spinalba (hawthorn) in the Castelli Romani. The references in the notarial deeds indicated that in addition to the chestnuts and olive trees of the pre-Appennine foothills and the Pontine plains, the slopes of Reatino, Carseoli, Simbruini, Emici and Sabatini were covered in lentisk, asphodel, honeysuckle, rosemary, lavander, and thyme. These references are important because they suggest that the earlier wild plantations of larches, pines and oaks that had existed in ancient time had now contracted or even disappeared in some places since they were no longer referred to. The notarial records again give fairly detailed indications about the reasons for this and squarely lay the blame on human intervention for the disappearance of the region's woodlands. At the same time Roccamassima, Cori, Sezze, Raccagorga, and Priverno had in antiquity been surrounded by massive expanses of Mediterranean scrub land, and these survived in the medieval period. The same was also true for Guarcino, Vico, Collepardo, Agosta, Affile, Aspra, Caprignano, Gavignano, Rieti, and Fossanova, places that were rich in vegetation despite an unending history of political turmoil, wars, in-

[11] *Memorie illustrative della Carta idrografica d'Italia*, Rome, 1891-5.

vasions, surrenders, fires and devastations between the Xth and the XIIIth centuries. The disappearance of the plantations of tall trees from other parts of Lazio in the same period can probably therefore only be explained by the desire of many landowners to clear and farm their lands. This was certainly the case on the vast feudal estates of the Frangipane family, who systematically cleared the wild plantations of tall trees on their lands, from the upland slopes that reached 1000 metres above sea level down to the coastal swamplands between Terracina and Torre Astura. Historical geographers have already demonstrated that even in the medieval period there were swamps and steppes, depending on the altitude, covering much of this region of Lazio, and this is borne out by the references in the notarial records, even though these at times give rise to certain problems of interpretation. But they show that cleared woodland, or woodland that had fallen victim to forest fires, either caused the area of swampland to expand, or else, where this was possible, enabled former woodland to become gradually transformed into pasture, to provide grazing land in place of the former wealth of timber and woodland fruits.

But in contrast to this picture of ecological decline and human destruction there in also evidence that many towns and villages like Pozzaglia, Orvino, Pietrademone, Percile, Cerdomare and many others had by the medieval period established plantations of olive, chestnut, and fruit trees as well as vineyards. There was almost certainly an economic explanation for these developments between the Xth and XIIIth centuries, since these were precisely the areas in which either local feudal lords were establishing indivisible consortia of rural properties or where villages whose lands were held in common were to be found. This was the case, as we can tell from the village statutes of the XIVth and XVth centuries, for villages like Norma, Segni, Morolo, Arcinazzo, Alatri, Subiaco, Montelanico, Carpineto, Rivodutri, Poggio Bustone, Pereto, Camerata, Poggio Cinolfo, Oricola, Nespola, Scurcola, all of which were sited at between 200 and 600 metres above sea level in ecologically ideal conditions and had rich supplies of natural vegetation.

At this point it is necessary to ask whether the geophysical features of the region constituted an advantage or a disadvantage for social and economic development in the period from the XIth to the XIVth century. To answer the question we must consider the region in relation to altitude, since the different factors of climate, hydrography, soil conditions and vegetation all converged to concentrate both human habitation and agriculture on those lands that lay at intermediate levels of altitude. The higher plateaus served for transhumant grazing alternating with agriculture, and for farming alternating with brigandage. The hill country provided further grazing, but land around the villages and towns was put under extensive cultivation and was held either in private ownership, or else by lay or ecclesiastical corporations. On the plain, mixed farming prevailed with market gardens, orchards, olive groves and vines; but this was also the area where the swamps were to be found, where the hydrographic structure was at its most chaotic, and where human habitations were dispersed and isolated.

In order to understand the economic vulnerability of Lazio in these centuries

it is essential to bear the geographical and physical characteristics in mind. They made it more difficult to find adequate solutions both to the economic and legal problems posed by landownership, and to the technical and social problems posed by the production, circulation and consumption of wealth.

Property as an economic and social reality

The notarial documents and the statutes of the communities of the region enable us to identify the main urban rural centres, the administrative regions around each town and settlement, as well as the roadways which permitted circulation in the society of medieval Lazio. These documents include citations of *viae publicae* designed to ensure freedom of transit, references to the employees responsible for seeing that no-one tried illegally to gain control over public highways and for checking that landowners with property adjacent to a public highway fulfilled their obligations to contribute to its maintenance and repair. The *Statuta de officio balivorum viarum*[12] shows that agents called *baglivi* were responsible for arbitrating in cases of contested rights of passage or problems of requisitioning labour. This meant that landowners in the interior of the province who were at some distance from the public roads were still guaranteed direct right of access to the fields. At the same time, many proprietors sought to protect these rights by means of legal fictions or devices derived from former rights of succession, sales or bequests in order to ensure that their holdings formed a herring-bone structure that at some point touched on a public highway.

In addition, every landowner in Lazio showed a highly developed sense of individualism in the lengths to which they went to establish and publicise rights of ownership over their land. The boundaries were carefully marked out by plantations of trees, piles of stones, streams, ditches, dry walls and footpaths, as well as by boulders, and crosses made either from wood or stone[13]. From the XIIIth century onwards the methods used for marking boundaries became more standardized, creating what was to become a typical characteristic of the countryside of Lazio. Stone boundaries were used to mark out land used for dry cereal farming, for irrigated farming, for grazing, vines and orchards. On the cereal fields there was little risk of illegal use of the land by others, given the modest and monotonous levels of yields, but boundary walls were very common for vineyards and orchards sited closed to the main rural settlements since these gave good yields. The village statutes are full of references to such *horti conclusi*, while the notarial deeds which recorded compensations made for damage caused to 'enclosed lands' practically provide us with a general scale of values[14].

[12] Statutes of Tivoli, Viterbo, Roccantica (for 1305,1251 and 1327 respectively).

[13] Papers of the monastery of SS Cosma e Damiano, 1028 and 1041, *ed.* P. Fedele.

[14] E. Sereni (*Storia del paesaggio agrario italiano*, Bari, 1964) refers to lands enclosed by walls, hedges, gates etc.

But what was the size of a privately owned field in the period between the XIth and the XIVth centuries? The notarial deeds are not wholly convincing on this since they contain very general references to the '*mensuratio agrorum*' (agrarian measurements) carried out by 'honest men' (that is the land surveyors) on their behalf. The descriptions of different estates were made with little attention to the accuracy of the figures and were always prefaced with the cautionary formula '*vel si alii sint confines*', and it was on the basis of such rough and ready approximations that the different transactions involved in sales, bequests, inheritances, dowry settlements and so forth went ahead.

The best way to calculate the formation of fields in medieval Lazio is to work from those groups of lands which still today retain the features ascribed to them in the medieval notarial registers. There might, for example, be reference to the fact that the lands were square or rectangular in shape[15], of which a good third would be devoted to seed, another third formed a vineyard, while the smallest third was an orchard. This was the case of the lands described in the notarial documents relating to the neighbourhood of Veroli[16]. Triangular fields were very rare: known as '*embutus*'[17], a rectangular section would be ploughed, while the remaining pyramid was devoted to mixed production of vines, olives, and fruit. There are also references to polygonal fields at Vico, although there is no indication of how the space was used[18].

Nor do the notarial documents give any very precise answer to whether the fields were open or enclosed. They do tell us that there were terraced fields where each strip was carefully walled, as at Farfa and Subiaco. But they were not normally fields used for growing cereals. There were also pieces of land which were completely surrounded by other properties, whose owner was at some distance so that the fields were looked on as an 'appendage' of the main property to which they had been aggregated through marriage or bequest. There were also rectangular vineyards organised adjacently, each belonging to a different owner as occurred at Vico, Trisulti or on the estates of S. Maria in Campo Marzio[19].

Bearing in mind that vineyards and orchards were generally sited close to fortified settlements, whereas the ploughland stretched almost to the naked heights of the mountains, did the organization of the land in medieval Lazio constitute an advantage or an obstacle for economic growth? Obviously human labour was concentrated around the villages where the peasant could draw greater profits from the olive groves, the vineyards, the fruit orchards and the market gardens. This explains the fragmentation of the land in the neighbourhood of the villages and

[15] M. Bloch (*Les caractères originaux de l'histoire rurale française*, Paris, 1956 2nd edn) also describes the same geometry for the fields of medieval France.

[16] *Archivio capitolare e fondi di S. Erasmo in Veroli* (XI-XIIth centuries).

[17] As at Alatri and Subiaco, see their respective *Archivi capitolari* (Xth-XIIth centuries).

[18] *S. C. V, Biblioteca Fondi di S. Erasmo in Veroli* (Xth century).

[19] P. S. Leicht 'Un contratto agrario dei paesi latini mediterranei', in:*Studi in onore di G. Luzzatto*, Milan, 1950, vol. 1.

the levels of production in the hill farms where farming techniquies and more reliable water supplies enabled vines and tree crops to be combined to provide a steady increase in output. The extensive cereal estates, on the other hand, were characterised by declining yields and stagnation which became more marked after the XVth century. This was one of the causes of the gradual migration away from the less hospitable and fortunate areas towards the plains and the hills where labour was more in demand, even though the vicinity of swampland and marshes were not sufficient dangers to win for seasonal or casual labourers either decent food, lodgings or wages - the latter being generally reduced by the cut taken by the foremen of the day.

When landowners of the great wheat-growing estates began to become aware of falling yields and profits, they began to switch back to sheep ranching and thereby brought into being the nomadic shepherds and the sheep-grazing contract known as the '*fida*' - a contract far removed from the typical medieval share-cropping system of medieval Tuscany, and one which ensured that from the beginning of the Renaissance period Lazio would fall back into an irreversible position of economic dependence that would last for centuries.

But to relate the land to the problem of economic growth, we must consider the ways in which property was distributed around urban and rural settlements. The place-names of medieval Lazio amply reflect the prevalence of hills, mountains and rocky outcrops in the landscape. Although in semantic terms these all form part of the same family, we should consider them in relation to the problem of the altitude above sea level which we have already mentioned. We find that amongst the place-names the association with castles, rocks and towers is very frequent, showing that the concept of a settlement was closely related to three factors: a hilltop or summit; fortifications; and the natural geographical feature of the region. Looking more closely at these names we also find references to particular types of crop or plant, to a particular animal or type of vegetation, or else to some deity or ancient Roman proprietor, or again to a saint or some practice of the new Christian religion. The landed properties which are described in the historical archives of Lazio were located around such places: Collalto, Collaltea, Colle Baracco, Collegiove, Collevecchio, Colle di Fora, Belmonte Montagliano, Monte Libretti, Monteleone, Montorio, Montopoli, Poggio Bustone, Poggio Catino, Poggio Fidoni, Poggio Mirteto, Poggio di Otricoli, Poggiolo, Rocca di Papa, Rocca di Cave, Rocca Sinibalda, Rocca Canterano, Castel S. Angelo, Torri, Paglia, Morro Reatino, Oliveto, Frasso Sabino, Cerreto, Contigliano, Ciciliano, Bocchignano, Staffoli, Fara Sabina, Acquaviva, Agosta, Anticoli, Caminata, Cantalice, Cantalupo, Casaprota, Corese, Orano, Gallicano, Jenne, Licenza, Magliano, Marano, Montecelio, Olevano, Ponticelli, S. Polo, S. Vito Romano, Scandriglia, Selci, Torrita, Vivaro, Trevigniano, Anguillara and so forth.

The notarial documents also reveal that many smaller centres were absorbed into larger and more prestigious lay and ecclesiastical properties while retaining their original name as a point of geographical reference. This was what happened at

Acupenco, where in the XIIIth century the village tower was surrounded by the property of a certain Giuseppe who owned houses, vineyards and fields: from the Farfa archives; however, we know that the Pope Pascal II gave Acupenco to the Abbey of Farfa. The same sources also tell us that a hamlet called Arbitreto which contained an ancient fortification including a castle and lands became part of the possessions of the monastery of Subiaco in the mid-XIIth century and remained listed thereafter in the registers with the reference the hill of Arbiretum with its castle'. On the other hand, the Farfa archives also reveal that Acquamezza was ceded by the abbey to the counts of Rieti who were owners of extensive arable lands, although Acquamezza was a fortified hamlet close to present day Pozzaglia Sabina with vineyards and olive groves. The same happened in the case of the hamlet of Bezano which was ceded to a guild of charcoal burners during the XIIIth century to carry on their craft, while similar transfers were made of so-called 'castles' in Colli di Nera, Cozzano, Cufi, Fondi, Luco, S. Massimo, Portica and elsewhere either to private landowners or to other abbeys.

More important were the older rural settlements whose owners changed gradually over the centuries, yet whose names, size and farming systems survived intact into the Middle Ages without being absorbed into larger estates. Examples of such survivals are to be found in the districts around Alatri, Casperia, Campana, Grufo di Tivoli, Marciliana, Montelanico, Rocca Baldesca, Forcella, S. Erasmo, Merulano, Oriolo, Bassano, Bracciano and Tancia, and in all of these cases the names of the different owners and details of the size of their patrimonies had been preserved. Even today the names of ancient properties of this type that survived through the medieval centuries as hamlets can still be found, as in the cases of Arci, Corno, La Croce, Melice, Petesca, Torre, Volpiano and others.

This sample of the property structure of the Lazio region is sufficient to indicate the position held by the great estates owned by the aristocracy, tied closely to the papal court in Rome, and of those held by the religious corporations and congregations. The size of these estates varied but as always considerable, covering both the plain and the hills, the water-bearing slopes, woodland and forest, and often the resources of the subsoil and roadways as well. Alongside these large estates there were smaller properties owned by the peasants. Until the XIIth century these small peasant properties occurred mainly in the province of Tuscia, but they were not rare elsewhere in Lazio especially in the so-called *'gualdi publici'* where the formation of small peasant farms was encouraged by a form of contract known as *'pastinatio in partem'* which gave the peasant families a share in the harvest and kept them on the land so that it did not go to swell the size of the large estates.

The lay and ecclesiastical estates all originally derived from very similar beginnings, and were the product of bequests, gifts, purchases and transfers made between laymen and clergy in both directions. In the sources they are described as *'curtes'*, *'villae'*, *'casalia'*, but from the XIth century onwards a real revolution began to take place in the structure of the region's agrarian property. The

landowning nobility become more concentrated and less numerous, while small and medium-sized properties also began to expand. Similar developments were to occur in other parts of the peninsula, although with a different chronologies, causes and effects as in the cases of Brescia, Lucca and Bobbio[20]. In the case of Lazio, the most important source is provided by Gregorio da Catino's lists of serfs who had negotiated and achieved the status of landowners. Luzzatto, the only historian to have recognised the importance of Gregorio da Catino's compilations, was admittedly puzzled by these lists, and it must be said that the information they contain has only the merit of demonstrating the fragmentary and unstable character of landownership in the region, and is inadequate to reveal the workings of the legal status of property rights, the economic structure and composition of landed properties, or even their social and historical characteristics, since the management of the different estates seems to have been based in such widely differing criteria of rent that there is no possibility of constructing a more general economic model. In our view, therefore, the apparent evidence of the range and comprehensiveness of the forms of estate management in medieval Lazio that is suggested by the use of terms like '*vicus*', '*castrum*', '*roccha*', '*civitella*', '*villa*', '*massa*', '*domus*', '*curtis*', '*cella*', '*casale*' etc, is very much open to question. These terms expressed a much less clearly differentiated hierarchy of prestige and power than the notarial deeds seemed to assign to them. Also, seigneurial and peasant properties were never fixed in an unalterable relationship of dependence after the XIIth century, as is evident from the fact that '*casae massariciae*' often proved to be quite independent of the overall structure of an estate, giving further illustration of the degree to which property was fragmented in Lazio.

Further evidence of this decisive change in the concept of property rights is provided by another fundamental feature of the agrarian structure, the dependent labourers living on their small tenancies. This also throws light on the question of social mobility and the quality of life enjoyed by the peasants of Lazio in this period. Until the XIth century the notarial documents register 'resident serfs', 'manual serfs', 'ministerial serfs', 'family serfs', all of which were descended from the categories of a previous age and were drawn from social classes clearly differentiated from freemen. All the categories of serfs listed here gradually gained their freedom, either through the legal process of '*manumissio pro anima*' which was generously conceded by the landowners, or else by the transfer of lands with servile labour from lay to ecclesiastical lordship, since the clerical seigneurs were generally prepared to show greater respect towards their feudal tenants. Others achieved liberty through legal procedures which enabled serfs to purchase their freedom with payments either in the form of labour services or of cash saved by the serfs themselves.

Historical research has also shown that another cause of these changes lay in the tendency for agrarian property to become centred around the sites of the

[20] Cf, references in the writings of Luzzatto, Hartmann, Barbieri, Fumagalli, etc.

'*castelli*', which encouraged the development of future townships and less constricted relations between these settlements and the surrounding rural world. Evidence of this is provided by the widespread use of the term 'tenant houses' (*case coloniche*) and the notarial references to 'tenants' (*coloni*), the greater freedom enjoyed by those who worked the land and also a series of legal battles between landowners and the freed serfs of various estates in the province[21].

Recent research has also succeeded in explaining the causes and effects of the process by relating the emancipation of the serfs in medieval Lazio to the demographic revival, to the emergence of stronger family farms, to the technical development of agricultural techniques, the mobility of landownership and the changing importance of the labour force. All these conclusions are amply supported by the notarial documents which refer repeatedly, and indeed almost monotonously, to lands on which the tenant farmer was the key social and economic figure who 'lived' in the leased cottage with his wife, his sons and daughters, forming the central focus of the farming enterprise, whether they were dependent on the local lay or ecclesiastical landowner or farmed the land on their own account[22].

In order to understand how the farms worked, what sort of responsibilities they carried, what profits and returns they made further research is needed on the types of agrarian contracts in use in the Lazio region between the XIth and the XVth centuries. As we mentioned earlier, the lay and ecclesiastical landowners in Lazio had need of labourers who were drawn to the great estates by labour services imposed on freemen. These services could be either temporary or permanent and were organized by means both of written contracts and custom. In fact the *servitium rusticum* might be for as little as eight days' work on the seigneurial estate, but even in other less extreme cases it would have been counter-productive for the farms to rely on such transient and brief services which were impossible to control effectively and imposed no obligation to complete the work competently. More generally the sources relating to these labour contracts refer to the major 'works', that is to the labour required at the traditional times of reaping, the wine harvest and sowing. In the region around Anagni these services amounted to several weeks' labour with the employment of either the labourer's or the lord's animals[23], on both arable land and the vineyards . Among the notarial records from the XIth to the XIVth century we have not found any references to the '*angariae*' and '*corvées*' that had been common in Lazio in an earlier period. On many of the lands of the abbeys there were, it is true, a class of volounteers who provided services out of devotion and were known as the '*fideles abbatiae*'[24], but it was much more common for the farm work of the year to be carried out by means of a genuine lease, whereby land was rented to someone from the locality with experience of

[21] G. Luzzatto *I servi nelle grandi proprietà del Medioevo*, Milan, 1949.

[22] B. Paradisi *Massaricium Jus*, Bologna, 1937.

[23] *Archivio Capitolare di Anagni, Carte Notarili* (VIII-XIIth centuries).

[24] *Archivi Capitolari di Trisulti, Farfa, Fossanova, Carte Notarili* (VIII-XIIth centuries.)

farming who would move into the village with his family and assume full responsability for the management of the farm[25].

The labourers who were to be found on the estates in the districts around Rieti, Anagni, and in the Roman Campagna were legally freemen since, as the documents stated, 'they were not vassals of anyone'. The ownership of the farm was fully retained by the landowner, yet the tenant was bound by the terms of the contract which indicated how the land was to be farmed. Although both landowner and tenant maintained quite different interests, for both the contract was constructive[26].

What was the nature of these contracts[27]? The most prevalent contract in medieval Lazio was the emphyteut (*'livello'*), a type of lease found widely throughout the Mediterranean region. The *'livello'* contract embodied the legal, political and social experience that was the fruit of many centuries of Italian culture, and also reflected a range of local customary procedures that the new demands and transformation, of the agricultural structure of Lazio in the late Middle Ages had not done away with. The lease clearly defined the relationship between the landowner and the lease-holds, and was composed of 'two charters drawn up together': one defined the obligations of the two parties, the other concerned the guarantees of the rights of each of the two parties. A careful study of the notarial documents relating to these leases indicates that during the XIIIth and XIVth centuries they underwent a number of legal and social changes, but this does not alter the decisive importance of the original terms of the contract at the moment it was drawn up, even when additional clauses and modifications were added to it.

In general, the *'livelli'* leases of the period between the XIth and the XIVth centuries were twenty-nine year contracts. There was also a second type of contract known as 'three generation leases', and in the XIIth and XIIIth centuries these were the most common, although they were in many respects very similar to the *'livelli'*. There were various reasons for this, but primarily the preference arose from the rapid demographic expansion, the accelerating rhythm of economic growth and the increased demand for money rents. These factors increased the attraction of the 'three generation leases' since renewals were more frequent. In legal terms there was little difference between the *'livello'*, and 'three generation' leases, although in economic terms the latter was more suited to the needs of both parties. The emphyteut leases in the district around Farfa, for example, never constituted 'sales disguised by the "three generation" formula', but were rather means for transferring capital from lay to ecclesiastical hands for short periods, since the 'three

[25] *Liber Largitorius farfensis*, *Archivio della Abbazia di Farfa*.

[26] S. Mochi Onory *Studi sulle origini storiche dei diritti essenziali della persona*, Bologna, 1936; F. Calasso *Gli ordinamenti giuridici del Rinascimento Medievale*, Milan, 1953.

[27] There is an enormously rich bibliography on legal history for this period; see, for example, the essays by Grossi, Pivano, Leicht, Zucchetti, Luzzatto, Imberciadori and Barbieri and their excellent bibliographies, and the proceedings of the *Settimane di Studio* held by the *Centro Italiano Spoletino*.

generations' clause implicitly guaranteed the possibility of mobility backwards and forwards. Neither of these contracts affected in any way the values of rural properties, but were concerned exclusively with the transfer of titular ownership for given periods and on given terms, while allowing the possibility of renewal.

On one hand, the contract set the immediate payment required for possession of land belonging to a third party, which was known as the 'entry payment', and also the annual rent, or '*censo*', payable to the original owner, to which was often added various labour services to be performed by the lease-holder and looking more closely at the terms of these contrasts we can also see how the economic relationship between the landowner and the tenant functioned. The documents also provide further information which could be used to estimate levels of agricultural production in Lazio in this period - a question to which I shall return in the following section.

However, it must also be said that the notarial documents of this period do not contain a very large number of contracts for either emphyteut or 'three generation' leases. Had these contracts been more numourous, it would have been possible to reconstruct a general model of the types of agrarian contract used in medieval Lazio which might reveal more clearly the measures adopted to expand agricultural production and their suitability. But written contracts were relatively rare since small and medium-sized estates were probably almost always either leased through verbal agreements, or else were not considered worthy of being recorded in writing for reasons that remain unclear and are not mentioned, for example, in the *Liber Largitorius* or the *Liber Floriger* of Farfa abbey.

In this context it is important not to forget the weight of 'custom', which meant not only that respect for verbal contracts was high, but also applied to such contracts the sacrosanct principle that '*consuetudo secundum legem pro veritate habetur*'. For this reason the medieval notaries in Lazio always took care to record in their contracts clauses derived from accepted local custom.

Two quite distinct features formed the basic distinguishing mark of medieval agrarian contracts in Lazio. The first was the price, the 'entry payment' referred to above, which the lease-holder had to pay immediately to the land-owner. The price was based on the size of the lands leased. The second lay in the economic fruits that sprang from the lease itself, which were known as the annual 'censo' and constituted the permanent rent on the property. More widely the contracts reflected two quite separate social experiences, and on one hand established the relations between one landowner and another, while on the other hand also defining the relations and obligations binding a single landowner and tenant.

At first these contracts were denounced by the medieval chroniclers and canonists as improper forms of alienation, since they suspected that the contractual form was merely a disguise for an effective and illegal sale. But for the economic historian they have a different significance, since in an age when circulating currency was in very short supply, leases of this type made it possible for the great ecclesiastical proprietors in particular to raise capital in this way, which could then be used

for investment in other activities. As a result, the leases made an important contribution to the circulation of capital between the lay and the ecclesiastical agrarian worlds - and this is again something to which we shall return in the final section. For the time being, it is sufficient to say that the existence of lease-hold contracts in general provides an indication of the importance, the volume, and the ultimate destination of agricultural production in medieval Lazio. In order to clarify these features we must now turn to look at the various written and verbal contracts from the point of view of the leaseholder.

The contracts did not specifically mention the duration of the lease, but depending on local custom they referred to the date of termination as the third generation descending from the original lease-holder, unless the contract had previously been renewed. The norms for renewal, therefore, guaranteed the landowner with an annual rental income, while placing the lease-holder in the legal position of a quasi-hereditary tenant, subject to certain obligations. One of these obligations was the duty of 'improving' the productivity of the land held in lease. Excepting only damage caused by natural calamities, any short-fall in the product of the land caused by the negligence of the lease-holder which thereby reduced the value of the land was sufficient cause for the annulment of the lease, and in the case of those contracts which carried the obligation of 'improvement' this automatically precluded the right of renewal. But it would appear that such a formula did not reflect any suspected dishonesty on the part of the lease-holder, but was essentially a variant on the general formulae stipulating the need for careful management found in other contracts - '*ad bene laborandum*', '*bene regendum*', '*bene colendum*' etc. In effect, and taking into account the expertise and probity of medieval notaries, it was a reflection of the diligence and experience which distinguished a good farmer.

As well as the obligation to 'improve' the land, the lease-holder was also bound to pay an annual rent, which in medieval Lazio right through to the XXth century was generally known as the '*risposta*', particularly in the area around the Castelli Romani. The annual rent was paid in cash or in kind, or in a combination of the two. The contracts were never silent on this aspect of the lease and always stipulated the particular form in which the rent was to be paid. The lease-holder was also obliged to render certain labour services, and these were often performed by his wife in the form of domestic work for the landowner's family. Alternatively, he was obliged to make certain small gifts, such as spring vegetables from his garden or fruits from the orchard. This was particularly common when the lands held in lease were grouped around a central estate of recent origin and relatively small economic proportions, as in the case of the small fortified hamlets that were established throughout Lazio between the Xth and the XIIth centuries. Thereafter, whether or not supplementary labour services were also required, annual rents were normally stipulated in cash which had to be current tender and whose value was therefore related to the silver coin that circulated throughout western Europe.

Were such contracts advantageous to the landowners? In my view the answer must be yes. They provided the landowner with a fixed annual income in currency

whose value was guaranteed and unchangeable at least until the end of the XIIIth century, giving access to other forms of economic employment and activity throughout the Mediterranean basin. In addition, the landowner could also count on regular payments in kind made at the customary times of Christmas, Lent, Easter, Ascension, on the days of local saints and other religious festivals. Although these payments came in the form of foodstuffs, fruit and wine could be stored and cheeses, sausage, hams, fish and meats could all be salted and smoked. The religious corporations and the lay seigneurial families were by means of these tributes provided with subsistence during the winter months, while the value of these goods constituted another return on their capital.

If the situation was highly advantageous for the landowners, it was less so for the tenants. Once again due account must be taken of the exceptions to this rule which occurred when the lease-holder's obligations to the landowner became translated into economic rents which were incorporated in specific forms of contracts found in certain parts of Lazio. But the nature of these contracts illustrate the ways in which they still differed from the legal and economic features of the classical sharecropping contract which had been in existence in Tuscany since the IXth century[28]. Contracts of this type were to be found, for example, in the district around Sabina and gave the landowner the right to share in the seed stock. But these were exceptional and occurred only in areas where the contracts between administrative centres and dispersed farms made tighter forms of organization difficult. For the same reason many agrarian leases in regions of Tiburtino and the districts of Viterbo that lay in Lazio between the Xth and the XIVth centuries stipulated a division '*in partibus*' of the produce of the land between the landowner and the tenant, reserving $\frac{1}{8}$ of the harvest for the landowner. The products to be shared fell under the heading of 'the four crops' - wheat, barley, spelt and vegetables. The remainder went to the leaseholder in consideration of the fact that he was responsible for providing the labour, running costs and management of the farm. Some contracts, it is true, stipulated that the landowner should have a share of $\frac{1}{5}$ of the cereal crop, but in the majority this was $\frac{1}{4}$ or $\frac{1}{3}$ - the so-called '*terzeria,*' which was generally known as the *ferraginalia.*

These crops and the vine harvests were divided on the basis of different criteria. Wine, fruit and olive oil was divided half and half, on the basis of customary measures such as the vat or cask, or the fruits gathered into the orchard barns. In Sabina, however, as early as the XIth century the fruit harvest was divided on the basis of one third to the landowner and two-thirds to the lease-holder as far as we can tell from the notarial sources.

[28] I. Imberciador 'Le scaturigini della mezzadria poderale nel sec. IX, in: *Economia e Storia,* 1958, n. 1; Ibid *Mezzadria classica toscana con documentazione inedita dal IX al XIV secolo,* Florence, 1951.

In fact, what these documents reveal above all is that custom ruled supreme over written contracts, and that whereas the cereal crops were divided on the basis of fairly standard proportions, in the case of the more valuable products the criteria of division were more influenced by factors of quality, while other fruits and products were subject to more arbitrary division. However, no matter in what ways the rights of the property owner were limited or modified, they still constituted a permanent and important range of obligations imposed on the lease-holder whether they were met through payments in cash or through tributes in kind, in crops, fish, honey, salted meats, fruit, oil or wines, all of which could subsequently be turned into consumer or commercial commodities. Finally: did the regular terminations of the leases free the lease-holders from their eternal condition of indebtedness? On this the sources remain silent, although it is a problem that takes us to the heart of the social conditions and psychology of the time, and opens up the problems of the suffocating weight of the structure of the family, of subordination to the Church, to the law and to custom. But even in Lazio history was on the move, albeit with a crushingly slow gait for the generations that lived through the medieval period, and offered the opportunity of flight from the countryside to the urban centres which offered economic and social prospects which in the eyes of those who worked the land must have been very different from those enclosed in the narrow horizons of the countryside.

Agriculture and farming techniques.

In order to understand the tendencies at work in the agrarian economy of Lazio in this period it is essential in my view to start from the geographical distribution of rural settlements, because it was this that often determined the types and methods of agriculture that were practised. The settlements were sited in accordance with one of two sets of criteria: either on the summit of mountains or hills, or else on high ground at the confluence of two ranges of hills or of two rivers. The former were built on the rocks around a fortified high place, with the houses forming concentric circles radiating downwards and linked by narrow vertical streets or steps. This was the case, for example, at Rocca di Castro, Rocca Priora, Rocca d'Arce, Rocca di Papa, Rocca Canterano and in many other places. Those settlements situated on spurs of higher ground took a more varied format. Generally they included both hill and flat land, demarcated by streams and rivers with the fortified seigneurial stronghold at the centre of the village. Examples of this structure can be seen at Cantalupo, Gallicano, Poggio Catino, and elsewhere. There were other cases in which the settlement had two main centres, the lord's stronghold and the church, with habitations radiating out from both - as in the cases of Sabina, Fara Sabina, Cicolano, Bassano, Barbarano, Oriolo and many other settlements.

The agricultural land of the lay and ecclesiastical landowners of medieval Lazio lay around these settlements. In the terms used in the notarial records, the land was divided into two broad categories; the cultivated and the uncultivated, or in

terminology of the late Roman period, *ager* and *saltus*[29]: the former included all land under the plough, the '*sementariciae sactionales*', the second the lands devoted to pasture and woods. The notarial documents made further distinctions within each of these two broad categories in terms that were strongly influenced by local usages and dialect: 'dry lands', 'marshy land', 'land for clearing', 'land by the shore', 'friable land', 'land near the village (*de intus*)', 'land away from the village (*de foris*)', 'contiguous lands', 'adjacent lands', 'property (*fondi*)', 'designated places (*vocaboli*)', 'curved lands', 'circular lands', 'arable lands', 'the cowherd's vineyard', 'lands with vines', 'enclosed vineyards', 'vines in open fields', 'flat vineyards', 'vineyards with trees', 'wooded land', 'thickets', 'spinneys'. In the case of small parcels of land that formed part of a larger estate, the notarial documents used terms such as 'little fields, 'terraces' (*terre balzole*), 'bits of land', 'little orchards', 'little farms', etc.

Between the XIIIth and XIVth centuries the statutes and regulations of the local communities became more detailed and this served to bring some standardization to the rather homespun terms used previously in official notarial records, and gradually establishing a clearer hierarchy of terms describing the quality and the position of land. But even in the local statutes, the older terms continued to reappear when attempts were made to establish fixed scales of value in order to settle disputes over contested usage or damages resulting from abusive use of communal properties. These estimates make it possible to reconstruct the productive values of different types of land in medieval Lazio. The new terms to describe land were particularly common in regions where extensive dry cereal farming predominated, where the damage caused by abusive cultivation was potentially the highest, and where the fines imposed for such abuses were most severe, and also in regions where enclosures had been established or where natural grazing was also protected.

The notarial records and the communal statutes also demonstrate the appearance of new terms to specify the situation and siting of land. Around the settlements lay the orchards and gardens which were devoted to intensive cultivation of vegetables, olives, fruit trees and so forth. These were described as properties 'nearby the gates', 'beneath the towers', 'beneath the walls', 'close by the charcoal kiln'. Generally such property was set out in terraces which needed regular and careful maintenance to repair damage from land slips due to rain water or movement of the soil. '*Horti*' and '*viridari*' of this sort were recorded in the communal statutes of Trevignano, Vico, Collepardo, Anagni, Veroli, Torrita, Alatri, Subiaco, Cervara, and elsewhere. Domestic animals were often given access to these orchards and gardens since they provided manure. They were well irrigated either by nearby streams or underground springs, and provided the possibility of a varied and rich polyculture producing cherries, apples, pears, garlic, onions, beans, peas, lentils, cauliflower, broccoli, cucumbers, marrows, melons, and so forth[30].

[29] SCV, Biblioteca, Fondi di S. Erasmo di Veroli 1X,5.

[30] Medieval Statutes of Tivoli, preserved in the *Archivio Vescovile* and the *Cartulari di S. Maria in Campo Marzio & S. Maria in Via Lata* (XIII-XIVth centuries).

The classical agronomists like Varrone, Columella and Palladio decried the stagnation of the orchards and market gardens of Lazio, but it appears that the medieval period gave new life to these properties and the monks of Subiaco (who greatly revered the advice of the Latin agronomists, whose works they carefully transcribed in their silent *aulae scriptoriae,* enjoyed a diet rich in vegetables and onions which came, as their chronicles and account books tell us, from the varied produce of the irrigated orchards which lay along the 'beautiful countryside' of the slopes below their monastery. It was here in the distant VIth century that St Benedict had prayed and worked the good soil of Lazio, and in the years between the Xth and the XIIIth centuries the Benedictines followed example set by their founder: they irrigated the terraces, carefully pruned and manured the olive trees, the almond trees, the cherry trees, and raised for themselves all the fruits and vegetables needed for the kitchens of the monastery and the festivals of their religion, while at the same time becoming the first to deal on the markets of the region. The result of this increase in productivity was that the supply of fruits and vegetables became more abundant, with important consequences for the history of diet as well as for the economic history of the region in general.

In medieval Lazio the production of fruits and vegetables was closely linked with that of secondary cereals. These were used either for enriching the land, for animal feed, or for making bread in times when the wheat harvest was poor. Barley, millet, rye, vetch, and lupins met the demand for forage crops and also for subsistence in times of famine, which as a result either of drought, flooding, earthquake, or war frequently afflicted rural society in Lazio in the medieval period. Often listed amongst these lesser cereals were fibrous crops like hemp and linen[31] which could be used for textile production, but the sources make scant reference to them and almost certainly the terrain was less well suited to their production than in the Po valley[32]. But hemp and linen were produced in the XIIth and especially in the XIIIth century, particularly on seigneurial marshland or on the castrensian reserves, because here the awareness of the profits to be derived from vegetable fibres was strongest[33]. But in certain areas these fibres were also grown by the peasants, as is indicated by local statutes[34].

Other than these more specialized crops, the greater part of the agriculture of medieval Lazio dependend on extensive dry cereal farming and vines. Marc Bloch has provided us with an outstanding description of the wheat farming regions of southern France in the Middle Ages[35], and there are many similarities with the situation in Lazio in the same period. The soils were generally red or brown on the plain, had been cultivated relatively recently, were predominantly chalky and

[31] Statutes of Roviano, Viterbo & Tivoli (XIIIth century).

[32] Pier De Crescenzi *Trattato della agricoltura,* Milan, 1805.

[33] Statutes of Vicovaro, 1273 - these and thre Roviano statutes indicate the nature of the agrarian policies of the Orsini family who were leanding landowners in the region.

[34] Statutes of Saccomuro e Canepina, rural settlements belonging to the Orsini in 1311.

[35] M. Bloch *Les caractères originaux... op. cit.*

gave yields that were amongst the lowest on the whole of the Italian peninsula - a situation that remained unchanged until the XXth century when Lazio, it should be remembered, was at the centre of the Fascist 'battle for wheat'. The region had never functioned as a granary, but rather as a area of consumption, since it lay at the centre of a political structure that could draw on supplies and resources from elsewhere.

The situation with regard to wine production was quite different. The land that was poorly suited to cereal production was favourable for vines, which were grown abundantly on poor soils, on low and marshy soils, and on the slopes of the alluvial valleys. Similar geographical conditions existed also in France, in Burgundy and Bordeaux, on the Rhine and in Valois, but it was only as a result of a prolonged and bitter struggle with climatic obstacles that the peasants of these regions were able to establish production which was both plentiful and of high quality in the medieval period. In Lazio, on the other hand, although there were a number of important exceptions, such as the wines of Montefiascone, Marino, Frascati and Velletri, wine production was plentiful but the quality was indifferent and the wines rarely travelled well. We shall have more to say about the question of transport in the following section, Although vines were planted both on the plain and in the hills, they were not alternated with cereals in such a way as to diversify production[8]. From the Xth to the XIIIth centuries the land most preferred for planting vines was that reclaimed from the lower valleys or along the coastal marshes, because here transportation to the main centres of habitation on the plain was easier. This explains the prevalence of vineyards on the lower Rieti plain, in the Amaseno valley, on the Tiber estuary, and along the strips of densely planted land between Circeo and Terracina. Although Lazio was densely covered in vineyards, the wines they produced were for immediate consumption and needed to travel only short distances by road or river. The Roman Via Salaria and Via Latina were admirably suited to the needs of wine production and marketing, providing access both to the northern states of the peninsula and to the markets of the Mediterranean basin from Terracina. The rivers Tiber, Velino and Aniene which were navigable as far as Corese meant that the wines grown on the vineyards and terraces of the entire province had access to wider markers[37]. However, the lighters on which the wine casks were carried were poorly constructed and often caused the wine to became mixed with water or suffer from evaporation both by day and night. As a result even a journey of only a few days was often enough to ruin a wine and destroy both its value and its reputation.

Few disasters of that sort were needed to persuade farmers to turn their vineyards into orchards or market gardens close to the village or town boundaries. This often happened in the Rieti district. In many marshy areas orchards were also established

[36] After the XIVth century these areas were returned to farmland.

[37] *Regesto of the monastery of S. Silvestro in Capite*, ed. V. Federici.

as an alternative to leaving the land waste. But only region in medieval Lazio in which wine production and consumption remained both plentiful and of good quality was in the hill country of the Castelli Romani, where the vines were planted alongside fruit trees allowing much greater specialization in all branches of production, and where methods of transportation were better.

Between the cultivated and waste lands of medieval Lazio there were the pastures. In the language of the notaries, pasture and meadowland fell under the category of *Incultum*, along with woodland, heath and waste land[38]. But by the XIVth century many communal statutes were drawing a distinction between[39] the '*pascua*' (what the English at this time called 'out-fields') and natural grazing land. The former were irrigated, could be divided into allotments demarcated by hedges or by poplars in the wetter slopes of the valleys. They were described as '*pratalia opaca*' and in the notarial documents from Trisulti, Subiaco, Rieti and Alatri we find them also called 'long meadows'. They provided excellent permanent pasture for heavy animals like cattle and horses, and could also be used to grow specialized crops. They were generally in the sited positions and were normally owned either by the clergy or by the local lay notability. The owners were careful to mark out their property with stone boundaries, and the sources do not mention any of such reserves held by common labourers[40].

It is now time to turn to the agricultural techniques used in medieval Lazio. There are excellent bibliographies available on this subject[41], and we can begin by emphasizing the three principal features of agricultural methods in use in Lazio in this period: the tremendously slow pace of progress in more efficient land utilization; the almost exclusive dependence on manual and animal energy; the assessment of production in terms of quantity alone. Before the XIIth century these rather severe conclusions cannot be supported by firmer archaeological, iconographical or written evidence, but from about 1200 onwards technical information begins to appear in wills, post mortem inventories, deeds of bequest, and in the communal statutes. Such sources enable us to reconstruct the nature of many of the implements used in the various stages of farm work in the XIIth and XIIIth centuries. There is no information, however, telling us what implements were provided by the landowner to the labourers who worked his lands, or whether the repair of farm implements, the mending of a broken hoe, shoeing a horse, making of bags to carry grain to the mill on the back of a donkey, repairing the bridles

[38] Notarial archive, Anagni (X-XIIIth cent) cap. 1, n. 552 'prata, pascua, silvae et selecta... "de inculto modio IV, duo de silva et duo de prato...".

[39] Cf. *Statuta militum di Genazzano; Statuta Tiburis; Statuta Viterbensia* (XIII-XIVth centuries).

[40] In Lazio, medieval statutory legislation was inspired mainly by the *boni homines castri* and reveals sharp social distinctions.

[41] Cf P. J. Young (ed.), *Cambridge Economic History of Europe*, Vol. 1, 1966, pp. 799 ff.; C. Parain *La Médititerranée, les hommes et les travaux*, Paris, 1936.

of the draught animals or damage done to their stalls formed part of the obligatory labour services.

These labourers were the men who were directly concerned with working the land, be they tenants, hired hands, or skilled workers. But of their crafts and skills, of the ways in which they used their implements, of the techniques employed for growing wheat, vines and fruit trees know hardly anything and the sources give no lead. But they do say something about the making of farm implements. The communal statutes indicate that the makers of iron implements were considered to have the status of artisans. In Sabina, the Roman Campagna, the area around Maritima and thoughout the Papal estates, as well as in the townships of the Ciociaria and the Castelli Romani, blacksmiths were part of the *boni viri loci*, 'masters' of their craft and respected for their skill, seniority and power[42]. They were often the pioneers of the labour force, and when new *castra* were founded at Toragnano, Pomonte, Cavallaria, Grottole, and Tribuco 'master blacksmiths' were needed to help construct and run the flour mills, one of the first requisites of any new settlement. Since the grain came from the abbey of Farfa, it is reasonable to assume that the *boni viri loci* were responsible for making the implements used to work the land, harvest the grain and carry it to the mill. And this points to the economic dynamism of the monasteries of Lazio in this period and the ways in which they contributed both to the agrarian economy and the growth of urban settlements. The statutes of Trisulti also speak of the *boni viri loci* with great respect, and historians have often erred by under-rating the importance of the contributions of these groups[43]. Both the communal statutes and the notarial records of the XIIIth century, as well as the inventories of the possessions of certain *castra*, refer either specifically to blacksmiths' workshops or to instruments such as the *aratrum*, *falcastrum*, *ferrum*, *fossorium*, *furca*, *ligones*, *martella*, *mazza*, *runcilio*, *seca*, *manualis*, *securis*, *tenalle*, *vanga*, *vomeris ferratura*, *zappa tallens*, *zappitellus* etc.[44]

But despite the skill of the blacksmiths, they were not able to provide the landowners and labourers with the implements they needed either quickly or easily for two reasons. Metal ores were difficult to come by since there were few iron ore mines in Lazio and those that did exist catered mainly for the retainers of the various siegneurs, supplying them with swords, bows and cross-bows. This was the case of the mines sited near Vico, Bracciano and Alatri, and the demand for military supplies became even greater in the XVth, XVIth and XVIIth centuries[45]. As a result the supply of metal farm implements was limited, while the demand must have

[42] Cf. the *Cartolare farfense, op. cit.*.

[43] J. Le Goff, *La civilisation del'Occident médiéval*, Paris, 1964.

[44] G. Duby, *L'economie rurale et la vie des campagnes dans l'Occident médiéval*, Paris, 1962 vol. 1.

[45] G. Barbieri, *Industria e politica mineraria nello stato pontificio dal '400 al '600*, Rome, 1940.

been very considerable especially since demographic expansion caused the area under cultivation to increase.

The communal statutes reveal that the main farm equipment belonged to the landowner and was leased to the tenant farmers during the course of their lease. But whether the equipment belonged to the landowner or the labourer, the burden of repair and maintenance always fell on the latter and the documents show that it was always such people who were involved, presumably because they had hired the equipment and accepted the obligation to keep it in repair. There are examples of this from Roccantica in the early IXth century[46], and a similar case at Tivoli in the same period involved a plough and oxen[47] reveals that ploughing was normally done with the aid of two oxen, guided by a labourer. The landowners, leaseholders and implement makers were bound together by a variety of shared interests than can be glimpsed from the sources that have survived. The Farfa documents show that the farm implements belonging to the abbey were leased to the farm hands, but their use was supervised by agents appointed by the owners. The same occurred on the wheat farms in the Rieti district, where locally made iron implements, and in particular ploughs drawn by at least a pair of oxen, were in use in the XIIth and XIIIth centuries. At times the statutes even refer to shod horses being used in place of oxen to draw the ploughs, but this was exceptional and occurred only on land sown with hay. On the other hand, it was mainly on the wheat growing estates (many of which were owned by monastic communities like the Cistercian abbeys, the cathedral chapters and the Benedictine estates) that the owners possessed and needed to possess equipment for ploughing. When these same lands where transformed from cereals to transhumant grazing, or in areas where the latter prevailed, such as on the perimeter of the Pontine plain and in the Latina valley, there are far fewer references to farm implements in the sources.

In the case of polycultures, manual labour provided the main element of agriculture, combined with the use of manure and crop rotations. Medieval statutes contain frequent references to the collection and transportation of human waste and the ashes from fires and bonifires, especially for Subiaco, Viterbo, Tivoli and Roccantica. In order to fix these valuable fertilisers in the land there was also need for water and irrigation systems, and spring waters that could be organized in channels and small canals to water the land and spread the precious long periods of drought to which the region was subject, water containers were built which were normally about 12 to 20 metres deep. These were formed from cyclindrical holes dug in the ground with an opening of a few meters in diameter; the interior walls were plastered, and the top of the cylinder rose only about a meter above ground levels. The storage tanks were then linked up with a system of canals and small

[46] Statutes of Roccantica (XIVth century).

[47] Statutes of Tivoli, XIVth century: 'nulla persona pastorizet in valle... excepto quando quis iverit ad arandum et tum sit licitum sine pena ducere et retinere boves cum quibus araret...'.

reservoirs, thereby enabling a large area to be irrigated at times when then natural rainfall was insufficient. The water kept in these tanks, which were known as *cisternae*, *putei* or *pilae*, was quite separate from the *aquaductus* brought into rural and urban settlements by closed conduits to provide drinking water. This flowed out through the fountains into the village water tanks, and came from pure spring sources, each of which took the name of some locality or village in Lazio: Fontanarosa, Fontanacandida, Fontemarcia, Acquacorna, Capodaqua, Rivo di Forma, Acquaviva. The communal statutes in the XIIIth and XIVth centuries laid down precise regulations on the ways in which these waters could be used and prohibited them from being mixed with the water from the rural cisterns. It was the responsibility of the village authorities to ensure that the drinking water was reserved for the public fountains, the public washing places, the troughs for beasts of burden in transit, for watering and quenching the thirst of the inhabitants, and to enforce the sort of regulations found, for example, in the statutes of Palestrina.

As well as the distinctions drawn between the water reserved for the needs of the land and that for human consumption, the use of animal manures was similarly differentiated and these were never applied to fields on which dry cereal farming was practised. Unlike other regions of Italy, green animal manure was never used for soil enriched for dry farming[48]. The statutes of Cave, which are the only XIVth century source that we have discovered to give direct information on this subject, prohibited the use of green manures but provided a detailed description of the techniques of soil enrichment using the ashes obtained from the autumn bonfires of scrub and woodland vegetation. In medieval farming practice, the addition of wood-ash to the soil facilitated oxygenation and increased the area that could be sown by adding the salts and potash needed for enrichment.

An analysis of the forms of fertilization employed enables us to obtain some impression of the varieties of cereal production in medieval Lazio. In addition the agrarian leases recorded at Farfa in the XIIIth and XIVth centuries, together with references drawn from other communal statutes provide lists of the types of grain grown, marking it possible to draw up a fuller list. These included different qualities of wheat, most of which had been grown in the Lazio region since Roman times; spelt or German wheat, barley, rye, millet, sorgum. There are no precise references to hay, although this may have been merely a case of omission on the part of the scribes, nor to spring wheat which was obviously not suited by the climate of the region. In general, the cereal crop was composed of hard winter grains and the lesser cereals, the former providing flour for bread, the latter the ingredients for soup.

During the centuries under consideration, the steady increase in the population created greater demand for the lesser cereals, with the result that the production and consumption of sorgum increased, while the hard grains were more often stored as a reserve against hard times. But wheat flour was only used for bread-making in the XIIIth and XIVth centuries on exceptional occasions such as major

[48] Piero De Crescenzi. *op. cit.*

religious festivals. Everyday bread was made from a variety of different cereals, as can be learned from the details of baking procedures included in the statutes of Tivoli, Cave, Ripi, Veroli, Rieti, Subiaco and Trisulti. The cereal lands of medieval Lazio followed set patterns of obligatory fallow, and the records of the lands of the clergy of S. Maria in Via Lata[21] indicate a biennial rotation alternating between stubble and fallow, although many of the richer lands of the Rieti region and southern Lazio followed a more intensive triennal cycle, where stubble was followed by lesser cereals and then by vegetable crops which were used to enrich the soil.

To explain such innovations one might point to the population expansion and the resulting increase in demand, or else to the introduction of new types of plough on the alluvional soils. But in fact the economic reality of medieval agriculture in Lazio was more modest, at least as far as the informations provided by our sources are concerned. Even on the richer and more fertile soils these rotations *ad tres* or *ad quattuor fruges* were in effect essentially biennial systems with the addition of peas or beans grown for enrichment of the soil. And such systems were always associated only with the best quality soils: '*bonae terrae sementariciae*'. The less good and the poor soils of Lazio provided a wheat crop only once every three years, and often only once in six or seven[22]. In such cases, rather than talk of rotation proper it would be more accurate to say that the land was sown on an intermittent basis in medieval Lazio. To explain how the population was able to live off this discontinuous form of cereal production it would be necessary to take account of the amount of land sown in a given year, as well as the variety of secondary cereals which were also grown and could be used for making bread.

This situation also helps to explain the relative values of the fertile and poor soils and their respective part in the development of the agrarian economy. Medieval notaries took great care to record the particular agrarian features of the lands referred to in their deeds. They were not content to list lands simply as '*cultum*' or '*incultum*'. Although these distinctions were recorded, they did not constitue a general set of categories, but rather reflected particular local circumstances. The case of the abbey of Trisulti provides an example of this, since the possession of a nearby forest was contested in the XIIIth century beween the abbey and the commune of Alatri[23]. Because the communes of Alatri and Vico believed that their rights had been infringed, they listed - to the great good fortune of later historians - a complete inventory of all the products that had been yielded over a fifteen year period by both the cultivated and the waste lands claimed in the forest. The included wheat, barley, millet, beans, vetch, vegetables and other cereals were described simply as '*blada communia*', as well as wood, charcoal and stone. While it is obviously true that since the two communities were attempting to refuse the claims of the

[21] *SCV, Biblioteca, Codice Vat. lat* n. 8049,1.
[22] Veroli, *Archivio della Cattedrale*, Atti (13th cent.).
[23] Cfr Alexander IV, Bull '*Ea quae judicio*', Jan. 1256.

monks, the figures may well have been manipulated to suit the purpose of the litigants, but the important thing to note is that wheat production did not conform to the notional distinction between arable and non-arable land, and held a predominant place in local production. Although the figures are contradictory and confused, the sources suggest that one third of the land was devoted to wheat, the remaining two-thirds to the other products and the lesser cereals[49]. The monks, therefore, produced wheat for their bread and for trade, while at the same time growing a range of minor cereals and other crops as a fall-back in case of a shortage in the main crop. All the cereal used were autumn or winter sowing varieties, which again indicated the nature of the agricultural methods and philosophy of the time: while the technical progress offered by spring-sown cereals was unknown, the farmers of medieval Lazio were still alert to the need to maximise their options and secure their main crop, and therefore sowed twice a year.

The question of the techniques used in vine production in this period is less complex. In technical terms, vineyards were organized in Lazio pretty much as in the rest of the Mediterranean region. Whether the vines were planted '*a braccio*' or '*lavorate*, the methods used for staking out the shoots, for binding, spacing and for the March prunings were the same. The communal statutes and the agrarian contracts always rehearsed the same technical calendar: light hoeing, removal of the excess shoots, supporting new vines with stakes, fumigation to destroy parasites and other minor operations which took place during the course of the year before the harvest, which began when the September rains began to fall. All this is described in an account made for the Vatican[50] and reflects the practices used elsewhere in Italy which were described in great detail by De Crescenzi[51]. As far as Lazio is concerned, the Subiaco records in the Xth century did give technical information regarding the best ways to 'set the vines in lines', on the optimum distance between each vine in order to ensure the roots and branches sufficient light and room to breathe, but the records of other areas give only very general information[52].

Vines were often combined with other forms of fruit trees, such as chestnuts, olives, nut-trees, pears, cherry trees, and so forth, all of which are recorded in the notarial sources of the XIIIth and XIVth centuries[53]. But in the system of polyculture practised in the medieval period in Lazio the vine was the primary product and the fruit trees survived as a residue of the earlier plantations that been cut down to make way for the vines. One exception to this rule was the combination of vines and olive trees, but this was generally found where older and larger olive groves had been converted to accomodate vines as well. Examples of this can be found

[49] *S.C.V., Biblioteca, Reg. Urbani IV*, 1264 n.1090

[50] *S.C.V. Archivio Vaticano, Conti della Camera Apostolica sotto Onorio IV (1285-1286)*, I, f. 54 et seq.

[51] Piero De Crescenzi, *op. cit.* Bk IV.

[52] Statutes of Tivoli, Gavignano, Barbarano, Celerano, Vaticano, Albano, Velletri, etc.

[53] Archivio di Stato and the abbatial archives of Veroli, Alatri, Anagni, Trisulti.

in the Veroli area where the charters refer to *terrae vinatae ubi stant multae arbores olivarum*[54].

But in general mixe farming as a form of organic agriculture was rare in medieval Lazio, and this distinguished the region's agrarian economy from the neighbouring provinces of Umbria and Tuscany where the close combination of trees and vines enabled livestock to be raised on the same land. For the same reason sharecropping farmsteads were able to develop in these regions, whereas the agrarian contracts of Lazio were quite different. However, animals and trees were not entirely lacking in the agrarian landscape of Lazio, and trees were always the subject of special care and attention. Shallow furrows were ploughed around the trees, they were carefully pruned, fallen leaves were used to make ashes for fertilizing the soil, their fruits were used for food, and timber provided the basic material for all forms of building and toolmaking. Similarly animals provided the constant companion to human labour and care was lavished on their breeding and utilization, whether this was in agriculture or for food consumption or for recreation. The medieval sources describe the types of hunting that were practised in the woods, where bears, wolves, boars, deer and foxes were to be found[55]. Pigeons, turtle-doves, pheasants, partridges, and quail were also widely hunted[56].

The archival sources devote much greater attention to fish breeding, especially on the ecclesiastical estates where fish constituted the obbligatory diet for long seasons of the year[57]. The larger animals that existed in the region were largely the same as those of antiquity. In the Pontine marshes were to be found the Asiatic buffalo which are mentioned in the Farfa Chronicle and were the subject of papal privileges conceded to the abbeys of S. Maria di Poggio Mirteto, S. Angelo of Ninfa and Subiaco[58]. The buffalo was highly prized on account of its strength and its ability to support the heat of the lower Lazio plain when used for ploughing. No less important was the superb milk yielded by the buffalo cows, from which the renowned *buote* cheeses were made. Little interest was shown in rearing pigs, while goats were virtually prohibited and the statutes of Tivoli banned the keeping of pigs or goats near cultivated land. More common, on the other hand, were donkeys, mules and asses which were essential for carrying out agricultural labours and which the labourers were often forced to hire.

Sheep, on the other hand, presented different problems since sheep rearing was predominantly transhumant and bore little resemblance to other forms of livestock rearing. Special areas were set aside for sheep and the transhumant economy created

[54] *S.C.V., Biblioteca*, Cartolari di Veroli, Subiaco, Marino, Rieti, (XIIIth cent).

[55] Cf. Statutes of Roccantica, Roviano, Aspra Sabina etc.

[56] C. De Cupis, *La caccia nella Campagna romana secondo la storia e i documenti* Roma 1922.

[57] G. Mira, *La pesca nel Medioevo nelle acque interne italiane*, Milan, 1937.

[58] Privilege granted by Gregory IX, 1235; privilege granted by Alexander IV, 1258: "pro bobulis per totam Maritimam in pastinis communibus".

its own particular relations though the adjustment contracts which provided important sources of revenue for both lay and ecclesiastical patrons. But the lands which the Cistercians of Casamari, Fossanova and Trisulti and the nobles of Rome and the Campagna used foar sheep-raising were very different from those that encircled the rural settlements or the cereal *latifundia*. Although sheep grazing was practised virtually throughout the Campagna region, it was not the cause of Lazio's economic decline in the late XIVth century, but it did survive as a clear indication of the region's under-development and throughout the modern period dominated the agrarian economy.

Trade and the means of trade

The most important factors in the development of trade and commerce in medieval Lazio were money, roads and merchants. By looking at each of these elements in turn we can obtain a good idea of the ways in which the region's commercial economy developed from the closed economy of the early medieval *curtis* to wider forms of exchange which drew on, or were influenced by, the appearance of new urban centres, the policies of papal governments, and more rational forms of economic production.

In the period between the XIth and the XIVth centuries, the principal means of exchange in Lazio was silver coinage[59], the dollars of the Middle Ages[60] that originated from Carolingian France and gradually replaced the pure gold Byzantine coins of Constantinople throughout Vestern Europe. Italy, too, adopted the silver coin, and for over five centuries it provided Lazio with what was effectively a mono-metallic currency, since gold coins played only a very marginal economic function.

We have said that the silver coins circulated, but it is necessary to be more precise on this point. From the XIIth to the XIVth century there was always a public currency in Italy, even though there were very few places in which coins were minted: Pavia, Milan, Verona, Treviso, Venice, and Lucca. The workers who struck the coins were few in number, highly skilled and genuine artists in their own right. They were known as *monetarii* and organized in craft guilds. As far as sovereign rights over minting were concerned, it was only during the XIIIth century that responsability for managing the gradually increasing number of mints began to be delegated to the authorities (*conventus civium*) of the communal cities. This was a new addition to their administrative responsabilities, and the Hohenstaufen considered this the best way to give the currency wider circulation.

This development effectively surplanted the chaotic feudal system of minting, whereby rights were delegated to private mints over which there was little effective control. There is no place here for a detailed discussion of the preparation

[59] C. M. Cipolla, *Le avventure della lira*, Milan 1958.

[60] R. S. Lopez. 'The dollar of the Middle Ages', in: *Journal of Economic History*, 1951, n. 9.

and weight of silver in these medieval coins, and this subject is dealt with in a number of excellent specialist studies[61]. However, the silver content tended to decline in relation to the accelerating rhythm of the economy in the period from the XIth to the XIVth centuries. Evidence of this acceleration can be seen in the rise in nominal prices over the period and the growing shortage of metallic coin. At the same, currencies from other regions of Italy began to find their way into Lazio as part of the same process, thereby giving rise to the phenomenon of bad money tending to drive out good, long before Gresham coined his law.

The situation in Lazio was, of course, deeply influenced by the presence of Rome, which had its own silver mint. As the capital of Christianity, Rome acted as host to throngs of churchmen, artists, merchants, and others, who came from not only every corner of the peninsula but from all parts of the world and brought with them currencies of differing types, values and denominations. The notarial sources show vividly how these different currencies began to circulate not only in and around Rome, but throughout Lazio as a whole. The details provided by the sources enable us to reconstruct with considerable precision the chronology of different forms and types of monetary circulation in medieval development from the XIth to the XIVth century, as well the function of associated facilities such as credit and commercial bills.

We should start by listing the types of currency that were to be found in medieval Lazio, even though numismatists have rightly alerted us to the prevalence of forgeries in the coins that have survived from this period[62]. However, numismatic collections remain of considerable importance for establishing the values, weights, shapes and uses of the coins used in medieval Lazio[63]. Secondly, it is important to take account of the coins that were in use in Rome itself, and particularly to distinguish between those that were minted there and those of other provenance, since the sources are extremely vague on the various types of currency that found their way on to the markets of Lazio. The notarial sources tend to refer to '*bona moneta*', adding general indications of quality and reputation, such as '*denari boni*'; '*denarii novi*'; '*denarii expendibiles*' (i.e. readily usable); *denarii quales per tempora currunt*'; '*qualiter per caput ibunt*' and so on: fine phrases which give absolutely no indication regarding weights or values, never mind the type of use of the particular currency to which the sources were referring. There is, however, one expression that recurrs with great frequency throughout the sources: *denarii monetae romanae*, meaning, I believe, both money minted in Rome and currencies officially recognized as such by the authorities.

Numismatists have shown that at the end of the VIIIth century after the reign of Adrian 1, the papacy struck a silver coin to mark its advance into the economic

[61] An entire '*Settimana di Studio*' organised by the *Centre of Spoleto* was devoted to monetary history: see also in particular the contributions by R. S. Lopez (Moneta e monetieri...''Continuità e adattamento...'') published in *Studi in onore di G. Luzzatto op. cit.*

[62] P. Grierson. *Some modern forgeries of Carolingian coins*, New York, 1958.

[63] C. Serafini. *Le monete e le Bolle plumbee pontificie nel Medagliere Vaticano* vol. 4, Bologna, 1964

sphere of the Carolingian rulers and to symbolize the break with the Byzantine tradition. Further coins were struck by different Popes in the IXth and Xth centuries, and economic historians have shown how these symbolized the economic integration of the papacy into the French empire. However, the coins that have survived from that era are few in number and are not sufficient to establish any general conclusions with regard to their weight or quality, although it appears that those coined at Rome in the XIIth century were more standardized in weight and consistency than the lighter coins of the XIth century. On the other hand, the Roman coins became considerably heavier after the alliance between Leo VIII and the German emperor Otto 1, but it is hard to say whether this was as a result of some improvement in the regional economy (since the currency had reflected such fluctuations for over a century), or whether it was simply an expression of the political and ideological importance of the alliance between the papacy and the new Germanic empire. Yet had the latter been the case, the notarial sources would undoubtedly have referred to the fact that this was a political currency whose value was only provisional. Since they do not do this, but continue with their insistence on the use of *denaro romano* in public and private contracts, we must accept the conclusion that their reason for so doing was that these coins were 'sound, commercial and easily exchanged'.

Amongst the currencies also circulating in the Lazio region there were also other, such as those of Pavia and Lucca, which were also considered to be 'sound, commercial and easily exchanged'. These currencies were brought to Rome by the pilgrims who came to express their devotion, and who also carried with them currencies from beyond the Alps, from England, Provence, Hungary, Germany, Switzerland, France and Saxony. Historians have explained what happened to these non-Roman currencies in two ways. Either they finished up in the Rome mint where they were melted down and converted into Roman coins thereby providing the papal government with the profits from the mining without the charge of the raw materials, or else they were held in reserve in the papal treasury and used to maintain the Vatican's prestige in its international economic and monetary transactions. The sources do not provide any very clear answer to these disagreements, and we can only comment very briefly on the problem here although there is a temptation to consider it at much greater length since it is obviously a matter of major importance for an understanding of papal economic policies in this period. But there is one astonishing piece of evidence that suggests that papal economic policies were determined much more directly by principles of prestige than economic calculation. At the end of the Xth century the Roman mint was shut down, and commercial transactions became entirely dependent on the currency of Pavia which was backed by a much more dynamic commercial economy than that of the stagnating Holy City. The Roman economy was losing ground, while the merchants of other Italian states were gradually expanding their commercial networks on the peninsula and abroad, so that their currencies began to circulate widely thoughout Europe. By the advent of the year 1000 Rome had become subject to the domination

of other currencies, and Pavian coin was welcomed in the city until the end of the XIIth century. But with the close of the XIIth century the currencies of Pavia and Lucca went into decline and gave way to those of Provence, as is evident from the notarial sources which after referring for years to the '*boni denarii*' of Pavia and Lucca now begin to insist on Provencal coin for payments, loans and deposits. During the XIIth century the Provencal coins had an enormous success at Rome and the Senate, in agreement with pope Clement 111 who was to share the proceeds, decided to mint a new silver coin in Rome which was known as the '*new provencal*' "provesina nova" and was a direct imitation of the original Provençal coin, althongh rather lighter[64]. Yet this was the only locally minted coin for use on local markets and for local exchanges.

Given the prevalently agrarian structure of the economy of the Lazio region, how was it possible for currencies and monies of such widely differing values to circulate? The query arises from the information contained in the notarial sources, since these show that contracts for major or leases were often paid in combinations of many different currencies. Between the Xth and the XIIIth centuries the sources distinguish between two types of money; the first was used for larger payments, such as in the case of high annual rents and a high entry payment owed by a leaseholder; the second was used for lesser contracts, such as small quit-rents, where 'common coin' was stipulated to be acceptable. When monies were recorded in the notarial contracts, they were given their legal values. But we must ask in each of these cases whether we are dealing with the real or the account values of the monies in question - or was the value purely notional? How, too, can we take account of the multiple circuits followed not only by the coins struck at Rome, but also by those of Pavia, Lucca and Provence as they made their way around Lazio? Given the fluctuations and changes to which each were subject, how can any single historical criterion of evaluation be established? In my view, we can only say that the Roman coins had a purely regional value, and that the monies of Pavia and Provence were able to penetrate Lazio only because of the economic dynamism of the Po valley and the prestige of the Champagne fairs. The case of the money from Lucca was rather different, and in the XIIth century it, too, reflected the short-lived economic prosperity of the Luccan economy, but it circulated mainly in the districts of Tuscia and Sabina, without ever gaining much support in Rome and the surrounding districts. By contrast, the Roman provencal struck by the Senate and backed by the prestige of the authorities, circulated widely at Rome but did not reach neighbouring areas like Subiaco, Anagni and Terracina for over fifty years. These examples are sufficient, I feel, to indicate the enormous difficulty of assessing the values of the different coins that were in circulation, as well as illustrating the real division between the economic development of the northern and southern provinces of the Lazio region. In the former, the money that circulated was largely regional, while in the second curriencies of international standing were much

[64] ASR, *Fondi del Monastero dei SS. Cosma e Damiano*, carte 151 et seq.

more evident, even though they tended to become quickly eroded so that within the space of little more than sixty years the strong Pavian denaro had become the 'vile brunetto' mentioned in a contract of 1200.

The process of devaluation was also counter-balanced by the constant and indeed picturesque phenomenon of different types of currency that were constantly going in and out of fashion. The region's commercial economy was dominated by coins, which flowed outwards and inwards from and to Rome which stood at the centre. From Rome poor currency was disbused in small day-to-day business, while whatever was considered to be the strongest and soundest currency of the day was used for more major transactions, so that the baser currencies came to be looked on as merely a smaller version of the stronger. This criterion appears in the notarial contracts especially in cases where the notary and the parties to the contract felt there might be some difficulty in effecting the settlement, when they employed an accounting device that had been common since the Longobard era but which historians have never been able to fully understand. The problem lies in the calculations used to translate one currency into the values of another. The sources speak only of 'denari bianchi' and' denari brunetti'[65]. But what is important is that the coexistence of two different types of currency meant that a form of bimetallism had already come into being, which is particularly surprising since in the case of Lazio true bimetallism was not established until gold coins began once again to be struck in the XIIIth century[66].

From much earlier, however, Lazio had given an *ante litteram* demonstration of the validity of Gresham's law, anticipating its author by some centuries, as the silver provençal denari became increasingly rare. After the introduction of the Roman provençals the latter circulated with much greater velocity, since merchants and businessmen tended to get rid of them quickly while holding on to the silver provençals. This did not escape the attention of the papal government, and in 1208 Innocent 111 issued a Bull dealing with papal finances which expressed concern over the disturbances caused to the monetary system by what we would now call Gresham's law, but whose effects were even then clearly visible.

The Farfa and Subiaco records serve to throw some light on what type of contracts allowed 'sound coin' to be replaced in 1076 at Casamari, by goods or labour services[67], and the frequency of such practices. Another factor revealed by the sources is that when currency was short the contracts at times made allowance for settlement using some form of credit. Very little is known about the length, terms, or interest rates on such credits in medieval commerce, other than the fragmentary

[65] G. P. Bognetti «*Il problema monetario dell'economia lombarda e il* "panis" *e la* "scutella de cambio",» in: *Archivio Storico Lombardo* 1944, n. 9.

[66] R. S. Lopez, *Settecento anni fa: il ritorno all'oro nell'Occidente duecentesco*, Naples, ESI, 1955.

[67] D. Herlihy, «Treasure hoards in the Italian economy», in: *The Economic History Review* 1957, n. 10.

information provided by Gregorio da Catino to whom we have already referred, but these references are very general and their meaning far from clear. In the case of the abbey of Farfa, credit settlements were used when these enabled the abbey to obtain long-term leases for its estates and also short-term loans which could be used for other transactions. This may well have been one of the causes of the abbey's indebtedness, since these credit operations did not have the regular repayment terms of the annual quit-rents paid by the emphyteut lease-holders. By the mid-XIIth century the nature of credit operations was beginning to change and the sources tells us quite explicitly in a wealth of new terminologies that credit was now synonymous with trade in money. Described as *usura, lucro, reddito,* it became part of generally accepted custom even to the extent that the *usus pignorum* on guarantees provided in land was included amongst the written statutory rights of the XIIIth century.

There were various ways, then, in which the shortage of circulating currency made itself felt. In notarial transactions silver coin remained the single reference for value, and this was because there was no Muslim, Byzantine, Florentine or Genoese gold coin available at that time in Lazio, except for those quantities that found there way to the bullion chests of the Apostolic Chamber to enhance its prestige and credit.

If money constituted one of the principal means by which trade was effected in medieval Lazio, scarcely less important was the net work of roads. We need to consider this network in terms not only of the length[68] of the system of road and waterways[69], but also in terms of the profits generated by the traffic and goods that travelled along them and the ways in which these facilities affected the values and prices of commodities. However, the sources are unfortunately quite inadequate to answer most of these questions, and we can only summarize what we have been able to deduce from them. What can be said of the roads of Lazio other than those that were travelled by the pilgrims to Rome and carried rare and exotic luxuries from abroad? The sources have all too little to say about the transportation of primary necessities, foodstuffs, and materials, nothing to say on the volumes of traffic that used different local roads, on the types of transports used, or on the peasants who brought goods and produce down to the markets. They tell us nothing about the costs of transport, nothing about market prices. They do, however, give a good indication of the principal road and waterways that traversed Lazio, which had of course inherited the splendid communications system of the ancient Romans[70]. What had remained of this exceptionally rational net-

[68] C. M. Cipolla, «In tema di trasporti medioevali,» in: *Bollettino storico pavese,* 1944, n. 5; R. S. Lopez, «The evolution of land transports in the Middle Ages,» in: *Past & Present* , 1956 n. 9.

[69] Y. Renouard, «Routes, étapes et vitesse de marches de France à Rome au XVIII e au XIV siècles», in: Studi in onore di A. Fanfani, vol. 3, 1962.

[70] Cf. K. Miller, *Itineraria romana,* Stuttgart, 1916. Nearly all the best studies on the medieval road systems of Lazio are in German, but see also the reference in: M. R. Caroselli *La Campagna romana e la sua agricoltura...* 1977 *op. cit.*

work, what new roads had been added to the ancient consular highways which the barbarian invasions and human destructiveness had ruined? Did the new roads simply retrace the routes of the Roman highways, or did they serve to link the townships, castles, fortifications, hamlets and farm estates that had transformed the social geography of the region? Some of these questions are answered by our sources for the Xth, XIth and XIIth centuries. The via Appia, via Latina, via Labicana, via Tiburtina, via Nomentana, via Castrense, via Salaria, via Flaminia, via Cassia, via Aurelia, and via Sublacense were all frequently described in the sources as being fully serviceable. But reconstruction is difficult since estates in medieval Lazio no longer took their names and addresses from the mile-stones on the great imperial highways, but now had more general and picturesque descriptions. The archives of the monastery of SS.Cosma & Damiano, for example, mention a hamlet 'qui vocatur quarto, foris portam Maiorem'. The estates lying along the via Salaria were an unusual exception and continued to be described in relation to their position on the consular highway.

The attention and care given to the roads was also quite different in the medieval period from antiquity. The old consular highways had all been paved, whereas the more recent medieval roads quickly revealed poor construction techniques and often proved quite incapable of supporting the traffic that used them. Of the old roads, the via Appia had suffered particularly heavy damage during the period from the Vth to the Xth centuries, and huge masses of stone had been removed for building materials: as a result in the XIth and XIIth centuries travellers often instead used a newly excavated and winding road that went though Cori, Norma, Sezze, Sermoneta and then at Priverno met up with the 'paved' via Casilina which went on to Frosinone and Terracina. The via Labicana, via Latina, via Prenestina were all roads that had been newly built in the medieval period, but followed the same route as the earlier consular roads as they hugged the hollow of the Lazio plains from the Lepini mountains towards Valmontone, Frosinone, Ceprano, Anagni and Cassino.

How long would it have taken to reach Rome from one of the main provincial centres in Lazio? The sources are not exactly voluble on this but with the help of the studies by Renouard, Bautier and Ludwig the distance from Valmontone to Rome was 42 kilometres, Valmontone to Frosinone 41 kilometres, from Valmontone to Anagni 25 kilometres, and from Anagni to Ceprano some 42 kilometres. A man on horseback with or without luggage travelling from one place to another would cover a *dieta* (daily distance)[71] of between 30 and 50 kilometres. On that basis we can estimate the times needed to transport men and goods around the road and highways of medieval Lazio.

The medieval sources also clearly reveal that roads were no longer looked on primarily for their military use, but rather for their economic and commercial im-

[71] The *dieta* was the distance covered in a day by-shod horse on a made-up and unflooded road.

portance. This helps us understand why the Benedictines of Cassino were particularly concerned and preoccupied with roads in general, and deliberately sited their house in southern Lazio where they hoped to take advantage of the cultural and economic exchanges flowing both southwards towards the Neapolitan Campania and northwards towards Rome. This also demonstrates the importance of the roads to the south and east of the Tiber: the via Tiburtina which led to Tivoli; the via Valeria leading towards Vicovaro and Marsica; the via Sublacense which linked Rome not only with Subiaco, but also with the via Casilina, Arcinazzo and southern Italy.

But what roads traversed the rich ploughland und vineyards that lay between the Tiburtini and Prenestini hills? There are only the most fleeting references to the roads that had been were few practicable waterways in medieval Lazio. Only light boats could make the journey along the river Aniene from Rome to Tivoli and they were subject to a toll at Lucano[72], while the rivers in the south of the region, the Liri and the Sacco, carried no significant transport. The best tiberine communications were provided by the Tiber and its tributaries along the via Salaria and retained an economic importance comparable to that which they had had in antiquity. The sources provide much richer information on the commerce they carried, starting from the Liber Pontificalis which described the functions of the Tiber in the VIth century down to the Bulls of Leo IV which ordered the fortification of the *porta Portuense* to supervise the craft that travelled up the Tiber from Ostia, and the records of the monastery of S. Silvestro in Capite[73] which listed the privileges which the monastery exercised over the river from S. Valentino along the via Flaminia and particularly over the bridge at Milvio where the salt, fishing boats and transports of the monks were kept and which provided a connecting point either by road or river with Sabina, Tuscia, Gallese, Sutri, Orte, Vitorchiano and Palombara Sabina.

The Tiber provided an important axis of commerce through medieval Lazio, and its course was dotted with toll-points, bridges, and small local markets. The Tiber made Orte an important commercial centre, since it was here that the river joined its tributaries, the Nera and Velino. But there were many other ports on the river in other parts of Lazio, in addition to those situated within Rome itself and one in the Tiber estuary. Passo Corese between Fara Sabina and Rieti, Cerro between Torrita Tiberina and Poggio Mirteto, Sesiliano through which the commerce of the abbey of Farfa with Rome was channeled, Trevigniano in the Magliano Sabina valley, Magliano Sabina, itself, the largest tiberine port on the upper Tiber in Lazio, Orte where the rivers brought the trade of the great abbeys and the feudal landowners together, Colli to the north of lake Piediluco and Tabula which carried the trade between the abbey of Farfa and the counts of Rieti, were all amongst the most important and active of the commercial ports situated along the Tiber in

[72] L. Bruzza, *Osservazioni sul Regesto della Chiesa di Tivoli*, Milan, 1969.

[73] Historians disagree as to whether this digest is authentic or a XIIth century forged copy.

the medieval period. The sources give little consistent information on the navigability of the tributaries of the Tiber. However, they do indicate that the Nera was passable from Terni to the confluence with the Tiber but not beyond because of the rapids at Marmore. But this was made good by the via Salaria and the neighbouring via Quinzia Reatina, which provided the principal commercial thoroughfare linking Rome and the countryside in a north-easterly direction.

The river ports that we have mentioned provided meeting points in the Middle Ages that linked the different waterways, roads, and rural settlements, providing natural resting places for men and goods as they journeyed to and fro. Passage was conceded against payment of a toll, described in the sources as *lucro*, which was collected by the agents of the lay or ecclesiastical owners of the ports. Only at Orte and Corese were tolls exacted by the Rome-based guild of the Tiber boatmen, known as the *'schola sandalariorum'* [74] and described vividly in the Cartulary of S.Maria in Campo Marzio in the XIth century. The ferrymen were entrepreneurs who owned the boats that they themselves had built: they were flat bottomed, little more than rafts, and they carried goods up and down the Tiber in return for payment. The guild was headed by a 'Prior', and was divided into major and minor guilds depending on the type of activity carried out. But rather than a genuine boatmen's guild it was a form of confederation of transport businesses. The abbey of Farfa found that it had need of the ferrymens' services to market its products, for example, and after lengthy wranglings between the monks and the boatmen the latter were given control over the tolls raised at Orte and Passo Corese. As a result of their common economic interests and traditions, the boatmen of Ripetta and Ripa Romea in Rome were renowned for their energy and arrogance. The ports provided the urban terminus for the goods that reached the city from the rich estates of Tuscia and Sabina, and the boatmen formed an important and articulate group within the social classes of the capital[75].

How long did it take for a lighter to make the journey from Orte to Rome, for example, along the Tiber? The sources provide few clues and this aspect of the process of the circulation of wealth in medieval Lazio can only be resolved by drawing comparisons with the data available for the Po valley[76], Sicily[77], France and Germany[78]. But even in these cases we have little idea of the type of boats used or of the nature of their cargoes. We only know that in the XIIth and XIIIth centuries the journey up the Rhine covered 30 kilometres a day, the descent some 80 kilometres a day. From this extremely general and approximate basis we

[74] P. S. Leicht, *Ricerche sulle corporazioni professionali in Italia dal sec. V all'XI*, Rome, 1936.

[75] C. Cecchelli, *Topografia e urbanistica a Roma*, Rome, 1948, with an extensive bibliography.

[76] C. Cipolla, «In tema di trasporti medioevali» *op. cit.*

[19] M. Bonardi, «Problèmes de subsistence... au Royaume angévin de Sicile» in: *Annales d'histoire économique et sociale*, 1938, n. 10.

[77] F. Ludwig, *Untersuchungen uber die Reise und Marschgeschwindigkeit*, Frankfurt, 1969.

can calculate that it would have taken a Tiber *sandalo* about two days to make the journey from Orte to Rome given the very gradual decline, whereas Rome could be reached in a day's sailing from Magliano or Corese. As far as cargo is concerned, Cipolla's figures for medieval navigation on the Po and the Ticino would suggest that a large boat might have carried about 300 times the load of a mule, with the additional advantages of greater speed, capacity and lower costs in general: factors which have examined in a different period but within the same geographical area by G. Mira[79].

While this explains the importance of the activities of the Tiber ferrymen, overland transport continued to compete with tiberine trade especially for heavy loads that could only be carried by cart and mule. This provided the opportunity for other transport entrepreneurs, the muleteers, porters, and carters whose activities have been well described by historians. Medieval trade, in other words, relied on a complementary systems of communications, rather than alternative systems. This is demonstrated by the number of staging points situated along both the highways and the rivers; by the contacts between the landowners of the hinterland and the ferrymen of the Tiber: by the volume of the goods in transit by one or other route towards the capital, where they provided profits for the supplier and trade for the city and its inhabitants.

Yet the circumstances of the period, the existing methods of transportation and communications, the administrative structures of the estates from which the goods came and of the Papal State as a whole, meant that it was impossible to overcome the various obstacles facing trade in medieval Lazio[80]. Among these we can list the slowness and delays which held up goods as they were checked at each toll-point, and the endless wrangles to establish monopolies and rights over goods in transit. An example of this is provided by the alliance formed between the landowners of Repasto and Colli di Labro, who thereby acquired complete control over the obligatory transit on the waterways between the Nera and the Velino, a monopoly which even the abbey of Farfa was unable to avoid at the end of the XIth century[81].

One final aspect of commercial transport remains to be discussed: what sort of goods were being moved from one end of Lazio to the other? To answer the question it is necessary to identify the regional products which travelled along the different roads and waterways mentioned above. The most important of these were foodstuffs like cereals and wines which made their way to Rome. These were the two principal products of the region's agriculture and were also, as the sources indicate, the two commodities chiefly in demand[82]. But other goods presumably

[79] G. Mira, «Note sui trasporti fluviali nell'economia dello stato pontificio nel XVIII secolo» in: *Archivio della Società Romana di Storia Patria*, 1954, n. 8, ser. 111.

[80] For a study of the obstacoles to communications at a European level in the Middle Ages see: A. Fanfani. *Storia Economica*, Turin, 1965, vol. 1, pp. 374-394.

[81] *Abbazia di Farfa, Atti della amministrazione* (XIth cent.).

[82] *Cartario di S. Maria in Campo Marzio; Cartario del monastero dei SS. Cosma e Damiano op. cit.*

also travelled along the same routes. I say 'presumably' since archaeological and artistic sources provide the best explanations for the reasons why building materials formed an important part of these cargoes. Rome, because of the decay of the imperial city and the plentiful supply of carved stone and marble available to those searching for material with which to build the new medieval city, was of course one of the largest open quarries that existed at that time in Italy, while neighbouring towns like Tivoli could draw on a similar inheritance from the past, thanks to the splendid villas built there by the Caesars and the magnates of the imperial era[83]. But the ancient statues, marbles, stones, mosaics and columns had first to be selected, then raised and transported to the new sites chosen by the civil and ecclesiastical patrons for the building of the new *Urbe*. The city's Senate took alarm at the havoc that was being wreaked on the monuments of antiquity and in the XIIIth century set up a body of *magistri aedificorum Urbis* to control and prohibit the use of archaelogical remains[84]. The carters who plied the via Appia and the via Cassia, the muleteers, the Tiber boatmen, all needed to take account of these regulations when contracting to transport goods as cumbersome, heavy, and obvious as these, knowing as they did that they would be subject to frequent checks and controls on their journey. As a result, and although the sources have little to say on this, the freight charges must have been very high.

Another important commodity was wood. Small pieces of wood for domestic use were carried to the city by the mule trains that came down each to the city's market to sell bundles of fire-wood, but larger sections of timber needed for building the houses, churches and public offices of medieval Rome were a different matter. Since the neighbouring countryside was not well endowed with large trees, given the prevalence of orchards, vineyards and swampland, they had to be obtained from the pre-Appennine valleys around Sabina, Frosinone or the Amaseno. Here the hard-wood trunks, stripped of their branches, were transported mainly by the ferrymen and carried right to the port of Ripetta, as is shown the records of St. Peter's when large timber beams were needed to roof the great basilica which was the centre of the Christian world in the XIth century. Even though there is no information in the sources there can be little doubt that the ferrymen charged a price which reflected the risks and labours involved in such a service. The documents do reveal, however, that the ferrymen were on occasions permitted to receive a percentage of the offerings given by the faithful at the feet of the statue of St. Peter[85].

[83] *Statuti di Tivoli*, 1305.

[84] P. Fedele, *Sul commercio delle antichità a Roma nel sec. XII*. Rome 1909.

[85] Accounts of the Fabbrica di S. Pietro, 1272-1276, cited in: Fabre-Duchesne (ed), *Liber Censuum*, vol. 1, Paris, 1955.

One other commodity on which the sources do provide abundant information was salt[86]. There were extensive salt-pans on the coast not far from Ostia which were divided into separate zones called *in Bordunaria* and *in Campo maiore*. The latter was situated on the right bank of the Tiber, near the estuary at Porto[87]. This formed a genuine Tiber lagoon in many ways similar to that of Venice[88]. The salt flats were equipped with evaporation pools (*areae*) organised either in lines or grouped together in *quartieri*. Each area was linked by trenches and channels through which the sea water entered, and was then distributed by means of dams, while roadways provided communications across the whole complex along which carts could travel. The expertise of the workers on the salt-pans was ensured by highly specific contracts which were enforced with rigorous discipline, and any infringements of the regulations were punished by loss of wages[89]. The workers were organised in the customary guild of the *schola salinariorum* from at least the XIth century onwards[90]. The *schola* was directed by one or more 'rectors' who were responsible for the work-carried out in the different parts of the salt flats, and they were assisted by a *paterens artis* whose task was to provide expert opinion in the case of some malfunction. As far as can be told from the sources, the salt flats had originally formed part of a devotional bequest to certain religious houses, but since all these sources are ecclesiastical this does not mean that all the salt flats were clerical property. It seems likely that the nobility and wealthy classes of Rome had acquired shares in the property either through purchases, gifts or dowry settlements which are revealed in notarial deeds, and this provides further proof of the mobility of landownership in Lazio in this period[91] since many of the salt flats were described as the property of noblewomen, sons of senators, blacksmiths, shoemakers and other members of the city's commercial classes. Further proof comes from the Farfa cartulary, and since the abbey was extremely punctilious in all things concerning its property it is significant that possession of a 'strip of salt marsh' rather than a whole salt-pan was entered on the records in 1015. This would suggest that parts of the salt-pans were also leased on the customary renewable 19 or 29 year emphyteut contracts in return for an annual rental in salt, or else sold outright. The salt measure was the *moggio*, a cylindrical terracotta container with a large mouth that was 272 litres in volume. It could also be equivalent to four quarts, as Le Goff has indicated[92]. This valuable and precise

[86] There is a huge bibliography dealing with aspects of the medieval salt trade exploitation of salt-pans, and prices: see JEANNINE, LE GOFF, MOLLAT etc and more recently C. MANCA.

[87] R. MONTEL, *Un casale della Campagna romana dalla fine del sec. XIV agli inizi del XVII*, Turin 1971.

[88] M. MOLLAT, 'Aux origines de la précocité économique et sociale de Venise: l'exploitation du sel', in: *La Venezia del Mille*, Florence, 1963.

[89] P. FEDELE, *Commento al Tabularium S. Mariae Novae, sec. XII* Rome, 1937.

[90] Previously the Porto salt-pans were controlled by the Vatican.

[91] Regest of the monastery of S. Silvestro in Capite, VIth-XIth centuries.

[92] Y. LE GOFF. *Orientations et recherches* (Cartolare di Subiaco), Paris, 1958

information on one of the innumerable measures of the Middle Ages enables us to understand more accurately the incidence of the annual rent in salt recorded in the notarial contracts. The owner received 43 *moggia* of salt as annual rent to the lease of the salt-pan, which, when converted, amounts to 116 hectolitres, 115 of which were stipulated to be of grey salt, and one hectolitre of white salt. Should the yield for the salt-pans prove to be less than that anticipated, then the lease-holder was entitled to make up the value in cash. In other words, this was a type of contract that was quite new in the medieval context, and was also established on a long-term basis. The entry payment was relatively low, but the rental obligation was much heavier for the lease-holder and was of long duration. Those who worked on the salt-pans had little security other than that provided by the *schola* (which was in any case more in the nature of a partnership amongst the workers rather than a proper guild), and they were recruited not from the peasantry but rather from the more wretched casual seasonal labourers who worked in the marshes.

The sources provide little further information on the social conditions of the workers on the salt-pans, and even less on the methods of transportation and marketing used. Porto was the traditional centre in which the salt was collected and stored, and we know that it was kept in warehouses that were owned by Roman merchants or *negotiatores*. From Porto the salt was shipped up the Tiber to Rome and beyond into the hinterland of Lazio to meet the needs of the pastoral industries of the Appennines. Southern Lazio was also supplied from the salt-pans at Terracina which in the XIIth century had a fairly active local market, from the mineral salt deposits at Collepardo on the estates of the abbey of Trisulti and from other lay estates in the Ciociaria, whose owners all drew corresponding benefits. Fossanova and Casamari must presumably have been supplied from Ostia, and in return provided timber from their forests — but this is mere speculation, as the sources provide no more than fragmentary hints.

We can conclude on this point, however, by saying that the salt trade in medieval Lazio was essential regional and did not bring wealth to anyone. The abbeys of Subiaco and Farfa which held extensive salt-pans never sought to draw profits from them. This is the main reason why our sources contain such a fleeting references to the subject.

The factors involved in trade in medieval Lazio therefore involved money, roads and merchants. We have also considered in general terms the occupations that were associated with each of these: the mint workers, the overland and river transport workers, and the mass of peasants to whom was entrusted the working of the land throughout medieval Lazio. To complete the picture some mention must also be made of the merchants and others engaged in commercial activities in the towns.

Lazio's urban development in this period was much slower than in other regions of Italy like Tuscany and Lombardy which boasted an advanced level of urban life. It is not by chance that the sources make little reference to urban trade and production, and as a result there are only a few urban occupations that can be described

more fully and these were generally tied up in one way or another either with rural labour or agrarian property. There were insufficient industries carried on within the city and town walls to provide the basis for much variety, since the consumer classes were composed exclusively of churchmen and landowners whose tastes for luxury goods were generally met by high quality foreign products. Occasionally, as at Sutri in the Xth century, we find a reference to a local goldsmith who made a ring for the local bishop[93]. But wider information on artisan industries can be found in the monastic archives, since the monasteries were permanently employing master weavers, seamstressers, painters, cabinet makers, fish salters, marble-cutters, jugglers and so forth, all generically described as *communes familiares* [94]. Although blacksmiths, farriers, cask-makers, carpenters and masons were to be found in the towns of medieval Lazio they were normally also closely linked to, and dependent on, the needs and labours of the great landed estates nearby. There are frequent references to *magistri ferrarii* for example in the sources for Alatri, Veroli, Rieti, Viterbo, Velletri, and Capena, but there the work was derived mainly in this period from the need to transform the raw materials of the countryside, timber, iron, hides, and stone, into equipment and materials demanded by the great estates. As far was women's work is concerned, spinning, weaving, and laundering are all subjects that remain wrapped up in the closed and secretive harem-like world of the early Middle Ages. A more distinct group were the fishermen of the lakes and rivers, whose labours adorned the tables of the ecclesiastical and lay aristocracy; but although there was always heavy demand for fish in the towns, fishing remained a casual rather than a settled occupation. Amongst the group of workers who were settled in the towns, however, the metal workers and building workers formed an important group. Such was their importance at Anagni, Subiaco, Alatri, Frosinone and Rieti in the XIIIth century and such was the demand, that smiths and masons began to move up the social ladder and with the fruits of their labours were able to buy ploughland and orchards, to settle valuable dowries on their daughters, or build themselves luxury houses[95]. A number of agrarian contracts of the XIIIth century identify the owner of the pasture under lease as a *magister ferrarius* [96]. In the eyes of the notaries who drew up the deeds there was no hesitation in describing these master craftsmen as *boni, laudables, honesti, magnifici,* indicating that they were men who had achieved success in their particular occupations and as a result were immortalised in the documents that have survived down to the present day.

[93] Charters of the monastery of SS Cosma e Damiano, edited P. Fedele, Xth century *exeunte*.

[94] The *Liber Largitorium farfensis* cited above contains whole clans of artisans, particularly jugglers: see V. De Bartholomaeis, 'Giullari farfensi', in: *Studi Medievali*, n.s. 1928, n. 1.

[95] P. S. Leicht, *Operai, artigiani, agricoltori in Italia del sec. VI al XVI* (preface by C. Costantini), Milan, 1946.

[96] *Archivio capitolare di Rieti*, Contratti 1213.

But these were small and exclusive groups, whose fortunes were owed not only to their skill but also to the economic transformation of medieval Lazio which gave their crafts new significance. Yet the silence of the sources prevents us knowing more about the ways in which apprentices were recruited, the careers of the master craftsmen, the wages they earned, the influence of tradition, or about their participation in the *ministeria*, in the *scholae* and confraternities. We have only a few scant references to the *societates bobacteriorum* amongst cattle breeders, the *societates sandalariorum* of the ferrymen, or the *societates salinariorum* of the salt workers, but we know nothing of the human realities within these associations[97]. For this reason it is difficult to talk of the existence of permanent commercial centres in medieval Lazio.

The city of Rome was always a case apart. Here the notarial records show that artisans, tradesmen, and merchants were frequently involved in commercial transactions[98]. They also indicate that the merchants were concentrated in the districts of Trastevere and along the Lungotevere towards the harbours of Ripetta, Ripa Romea and Ripa Greca; there was also an important commercial centre within the confines of the Vatican near the Leonine walls. The *borghi* of St. Peter's thronged with activity and the narrow streets were filled with shops and stalls where medallions and statues and other medieval *souvenirs* delighted the pilgrims, as well as sellers of oil, figs, fish, and herbs which were obtained from the travelling wholesalers when they visited the city. There was another type of merchant as well, and at Rome the bankers ran an active and profitable business which guaranteed their social elevation. They constituted a new type of urban aristocracy and gave birth to a new style of urban building which reflected their wealth, as I mentioned previously. In this context it is worth remembering that Pope Anacletus 11 came from the Jewish Pierleoni family[99], who had been engaged in banking in Rome since the Xth century. The same was true of Gelasius 11[100], and of the better known representatives of the Boveschi[101], Frangipane[102], and other Jewish families about whom historians have had much to say concerning the profits they drew from their connections with the papacy. It was not by chance that the mint in Rome was reopened in the XIIth century, as I mentioned earlier, at a moment when the reputation of the district of the money-changers near the Colosseum was growing, and the new banking quarter of Rome between the Vatican and the Tiber was beginning to take shape.

97 P. S. Leicht, *op. cit.* and note (36) *supra.*

98 *Archivio capitolare di S. Pietro in Vaticano, Carte* ed. L. Schiapparelli; *Archivio Liberiano di S. Maria Maggiore, Carte* ed G. Ferri (VIIth-XIIIth centuries).

99 On the history of the Jews in medieval Rome, see A. Berliner, *Geschichte der Juden in Rom*, Berlin, 1895-6, 2 volls.

100 P. Fedele, *Le famiglie di Anacleto II e di Gelasio II*, Rome, 1904.

101 G. Marchetti-Longhi, *I Boveschi e gli Orsini*, Rome, 1960.

102 P. Fedele, *Sull'origine dei Frangipane*, Rome, 1910.

When the Popes and their courts began to visit the lesser towns and cities of Lazio both for pleasure and business, ripples of these commercial and banking activities followed the seasonal migrations of Popes, cardinals and noble lords as the *mercatores sequentes Curiam* gave new stimulus to local trade. But although these visits became much more frequent in the XIIIth century, by no means all the smaller cities were affected, and in fact this served to speed up the division of medieval Lazio into three distinct zones each with its respective dominant town: Campagna and Marittima focussing on Anagni; Sabina orientated around Rieti; Tuscia led by the city of Viterbo. Much less developped were Ferentino and Orvieto, for example, while Sezze, Terracina, and Segni were almost completely omitted from the itinerary of papal summer holiday visits.

To conclude, we can say that in medieval Lazio the cities lacked the prestige and economic dynamism that they had assumed in other parts of the peninsula. Such dynamism could only have been provided by an active urban middle class with a strong sense of civic independence, and a work force created by a major flux of emigration from the countryside. But in fact what prevailed in Lazio in these centuries was the peasant society and the agrarian property structures of the countryside. Although there is some evidence of changes taking place within this essentially agrarian society, and the development of new forms of organization, these had little effect on the towns and cities: indeed, in those areas where the most significant changes were taking place they were the result not of developments within the towns, but of spontaneous development within the agrarian economy.