

Wealth inequality and land ownership before and after the Black Death.

A quantitative analysis of peasant probate inventories from the Kingdom of Valencia (1283-1400)

by Luis Almenar Fernández

L'articolo analizza la proprietà della terra dei contadini del regno di Valencia per studiare le disuguaglianze nella distribuzione della ricchezza all'interno di questo gruppo. Analizzando un campione di 191 inventari di successione dal 1283 al 1400, si apportano nuove evidenze sul numero di appezzamenti posseduti dai contadini, sulla dimensione delle loro proprietà e delle relative coltivazioni. Tutto ciò offre un'opportunità unica per studiare le disuguaglianze in un periodo per il quale non sono sopravvissuti registri fiscali. L'analisi sostiene che prima della Peste Nera si potevano osservare importanti disuguaglianze tra i contadini in tutto il regno di Valencia, disuguaglianze che però sembrano aumentare nel mezzo secolo successivo alla Peste per quanto riguarda la proprietà della terra.

This article examines land ownership among Valencian peasants as a means of addressing internal wealth inequalities. Using a sample of 191 probate inventories from 1283 to 1400, we provide evidence of the number of plots owned by peasants, the size of their holdings, and the crops they grew. This provides a unique opportunity to explore inequalities in a period for which no tax records have survived. The study argues that before the Black Death there were significant inequalities among Valencian peasants across the kingdom, which appear to have increased in the fifty years after the plague in terms of land ownership.

Medioevo, secoli XIII-XIV, regno di Valencia, contadini, proprietà fondiaria, disuguaglianza della ricchezza, inventari post-mortem.

Keywords: Middle Ages, 13th-14th centuries, Kingdom of Valencia, peasantry, land ownership, wealth inequality, probate inventories.

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1. Introduction

Scholarship acknowledges that the arrival of the first wave of the Black Death in Europe (1348) had a serious impact on wealth distribution.¹ The pandemic reached most areas of the continent in a context of high population and low real wages, as a result of the extensive economic growth that had been developing in the central Middle Ages. The impact of mortality led to an inverse condition of low population and high real wages around the continent. How this situation developed locally and its effects in the long run are still the subject of debate, but it seems clear that, when it comes to the general dynamics of inequality between the thirteenth and fifteenth centuries, a European pattern existed: a sustained trend towards more unequal wealth distribution, being interrupted –and reversed – by the Black Death and its aftermath for several decades.²

Historians who have studied inequality in Iberia seem to be divided as to how far the peninsula followed this European trend. Economic historians basing themselves on econometrics seem to be in favour of more ‘exceptionalist’ positions, arguing that Iberia would not have experienced a decrease in inequality immediately after the plague, but a rise in it and a fall in real wages. It is contended that this would have been a result of the scarcity of population and the abundance of resources that was characteristic of ‘frontier economies’ in the period.³ Meanwhile, medieval historians relying on tax records and other contemporary sources have tended more to ‘standardist’ interpretations, stressing that Iberia would generally have followed the ‘standard’ trend that is detected elsewhere in Europe despite local differences.⁴ The devil, of course, is in the details, and very recently Guido Alfani has noted that the evidence provided by both groups of Spanish scholars could be compatible when studying the data more closely. At the very least, both positions would be reconcilable at some stages of the situation in the period. Particularly when it comes to Spain, a “period of decline in income inequality started in the late

¹ This paper is part of the research projects “Mercados, instituciones e integración económica en el Mediterráneo occidental (siglos XIII-XVI)” (PID2021-128038NB-I00) and “Pacto, negociación y conflicto en la cultura política castellana” (PID2020-113794GB-I00), based at the University of Valencia and Complutense University of Madrid, both of them awarded by the Spanish Government (Ministerio de Ciencia e Innovación). This paper is also part of the Generalitat Valenciana project “Rompiendo jerarquías. Movilidad social, dinamismo económico y desarrollo institucional en la Europa Mediterránea (siglos XIII-XVI)” (Prometeo CIPROM/2022/46). Abbreviations: AHN (Archivo Histórico Nacional); AMV (Arxiu Municipal de València); APCCV (Arxiu de Protocols del Corpus Christi de València); ARV (Arxiu del Regne de València).

² See review in Alfani, “Epidemics, Inequality, and Poverty,” as well as Scheidel, *The Great Leveler*.

³ Álvarez-Nogal, Prados, Santiago-Caballero, “Economic Effects of the Black Death;” Álvarez-Nogal, Prados, “The rise and fall.”

⁴ Furió *et al.*, “Measuring economic inequality;” Almenar, Chismol, Ruiz, “Aproximación a la desigualdad económica;” Furió, “Economic Inequality in Iberia.”

fourteenth century and continued until circa 1430, after which the growth of inequality resumed”.⁵

The current state of the art on inequality in late medieval Iberia is symptomatic of the need for further data and research. The need for more evidence for particularly remote periods – like the first half of the fourteenth century – is clearly urgent. Tax registries recording direct taxation are of course the most canonical and ideal sources that have been employed for this purpose. Their preservation in Iberia in the late medieval context proves to be nearly as abundant as in Italy, particularly in the areas of the old Crown of Aragon (the principality of Catalonia, the Balearic Islands, and the kingdoms of Aragon and Valencia). Many of these, and particularly those from the kingdom of Valencia, have been explored in recent years and have helped to construct much of this discussion.⁶ However, the problem of preservation remains, for extant tax records are rare from the period before the Black Death. This is why alternative sources could be important as a means of contributing to this scholarship, such as dowries, marriage contracts or, as we intend here, probate inventories.

The contribution of this study to this field of enquiry consists of the analysis of land ownership among the Valencian peasantry during this key moment of socioeconomic changes and shifts in the dynamics of inequality. This will be undertaken through a quantitative analysis of probate inventories of Valencian peasants who died between 1283 and 1400. The interest of this approach relies on three aspects: the object (land ownership), the subject (peasants) and the source (inventories).

Firstly, land was a basic part of medieval peasants’ wealth, as well as a production good in itself. This was particularly important in the kingdom of Valencia, where small peasant holdings with optimal conditions for tenants were mostly the norm. As will be explained later, Valencian peasants had a lot of room for decision-making and the commercialization of their agrarian produce. Moreover, land distribution and ownership were extremely sensitive to the demographic impact of the plague. As in other European scenarios, the Valencian system of inheritance involved the equal distribution of land among surviving heirs.⁷ The sudden death of a huge number of owners led to the fragmentation and re-composition of holdings. In fact, and despite very local disparity and often fragmented data, a process of increasing land ownership seems to be detected a couple of generations after the Black Death in various European areas, such as Brabant, Flanders, Normandy and Brandenburg.⁸ In what has been called a “buyer-friendly” market, with an abundant supply

⁵ Alfani, “Epidemics, Inequality, and Poverty,” 16.

⁶ See Furió *et al.*, “Measuring economic inequality,” 171-2.

⁷ Furió, García-Oliver, “Household, peasant holding and labour relations.”

⁸ Viciano, *Els peus que calciguen la terra*, 81-2, by compiling data from: Genicot, *Comunidades rurales*, Bois, *Crise du féodalisme*, and Rösener, *Los campesinos en la Edad Media*.

of land and high real wages,⁹ peasants could purchase additional plots in an active land market to increase their holdings.

The second area of interest in this research is the peasants themselves. Most scholarship on inequality relies on regional, national or trans-national data, often very long term, not paying much attention to specific social strata. While this information proves to be of paramount importance, it is our conviction that ‘zoom-in’ approaches to specific echelons of society should not be overlooked. By analysing peasants, who made up the bulk of medieval society, we address inequality from a more social angle that can be related to other historical phenomena that specifically affected this group.

Thirdly, the extant number of probate inventories from Valencia is a final strength that must be noted. Tax records from the kingdom of Valencia do not survive for the first half of the fourteenth century. The fourteenth-century specimens studied earlier correspond to a period after the plague, and most surviving tax records were written in the fifteenth century.¹⁰ Probate inventories, however, survive in Valencia from the late thirteenth century, also recording deceased peasants’ possessions.¹¹ These sources have been used in recent years to look at changes in consumption and material culture from a quantitative and qualitative perspective.¹² However, medieval economic historians have not studied these sources much when analysing land ownership, something that has been more popular for subsequent periods in other areas of Iberia and Europe.¹³

Valencian inventories record the goods of deceased individuals, and such documents are abundantly present in notarial records. These lists were ordered by heirs who wanted to secure the transmission of the deceased’s possessions, sometimes to avoid unwanted indebtedness. Inventories were imposed by law when heirs were minors, leading tutors to necessarily ask for these lists to be made.¹⁴ These documents are exhaustive and descriptive, and as well as everyday objects they provide references to plots of land, with

⁹ Alfani, “Epidemics, Inequality, and Poverty;” Alfani, “The Effects of Plague on the Distribution of Property.”

¹⁰ Furió, “Avant le cadastre.”

¹¹ Almenar, “Los inventarios post-mortem;” Almenar, “La cultura material de la alimentación campesina;” Almenar, “Why did medieval villagers buy earthenware?”

¹² Almenar, Belenguer, “The transformation of private space;” Almenar, “La cultura material de la alimentación campesina.” Almenar, “Why did medieval villagers buy earthenware?” For a recent inter-disciplinary set of contributions see: García Marsilla, *Espacios de vida*.

¹³ Moreno, “Els inventaris post mortem Catalans a l’època moderna,” 45-7; Congost, Ros, “Els inventaris de la gent humil,” 83-4. Early modern English inventories, perhaps the most studied quantitatively for a number of purposes, do not record real estates, but documents recording land, which help to approach land ownership in combination with probate accounts and wills (Overton *et al.*, *Production and consumption*, 14). See other classic work on agrarian change based on inventories in Overton, “English probate inventories and the measurement of agricultural change” and Overton, “Probate inventories and the reconstruction of agrarian landscapes.” The possibilities of these sources for studying agricultural change were already addressed in the first methodological book on inventories, by Van der Woude, Schuurman, *Probate inventories*.

¹⁴ Almenar, “Los inventarios post-mortem.” See also Riello, “Things seen and unseen.”

occasional acreages and crop types. All of that can be used to explore agrarian structures and land ownership inequality in the fourteenth century, in the years immediately before and after the Black Death.¹⁵

The sample analysed in this article consists of 191 inventories, which will be approached in two 'artificial' periods – 115 from 1283 to 1350, and 76 from 1351 to 1400. These documents come from a variety of Valencian archives from across the realm and refer to rural communities, or to peasants living in medium-sized or large towns.¹⁶ Those written by 1350 are virtually all surviving inventories, while the rest have resulted from selections of notaries whose clientele was focused on craftsmen and peasants. Although the size of the sample is arguably small compared to other historical periods, the relative abundance must be noted of this set of documents for a period from which there are normally no extant specimens in most of Europe.

2. Land ownership and landlessness

The predominant agrarian unit of labour in the kingdom of Valencia was the small peasant holding. These were present on both seigniorial and royal land. Small peasant holdings normally consisted of scattered plots of land in various municipal territories. Farmsteads on irrigated land (*alqueries*) or mountainous dryland (*masos*) were often provided with larger compact holdings. Yet this was not particularly common in the kingdom of Valencia. Here, as in other regions of Eastern Iberia, for instance in the south of the principality of Catalonia (the so-called *Catalunya Nova*), the dynamics of the conquests from the Muslims during the thirteenth century led to the proliferation of this type of holding that was highly beneficial for peasant families. It was a political strategy to attract migrants from the places of origin of the Christian conquerors, who were essential for the creation of the new feudal societies.¹⁷

In juridical terms, most households managed their land under the legal figure of emphyteutic tenure (*enfiteusi*), which effectively implied absolute decision-making as to crop types, purchase and sale of land and other business. Valencian peasants could thus do as they wished with their holdings as

¹⁵ This method could be approached with other fourteenth-century inventories of the Mediterranean. Italian inventories from the fifteenth century, at least, could also be potentially analysed to explore land ownership. See: Mazzi, Raveggi, *Gli uomini e le cose*, 323-408.

¹⁶ The populations under analysis in this article will be clustered into five categories corresponding to areas or locations of the realm: 'Morvedre' (the town of this name and its hinterland), 'North' (Vilafranca, Morella and their rural hinterland), 'Centre-South' (the regions of La Safor, La Ribera and l'Alcoià), 'Valencia city' (the capital of the kingdom) and, finally, 'Valencia hinterland' (historically known as *horta*, meaning its surrounding villages and farmsteads). The validity of the sample is addressed in-depth in Almenar, "La cultura material de la alimentación campesina," 54-78.

¹⁷ Viciano, *Els peus que calciguen la terra*, 160-1.

tenants and vassals, while their lords – whether nobles or the king – retained two basic rights: on the one hand, priority in the purchasing of real estates of vassals (*fadiga*); on the other hand, a fine on land transactions (*lluïsmes*, called *lods-et-ventes* in French), consisting of a percentage of the sale price that was paid to the lord (normally 10%). Most Valencian peasants held their holdings by way of emphyteutic tenure, while other tenancies were allodial (*alous*) and therefore held in full ownership. Therefore, the peasants of this realm had a lot of room to make what they wished of their lands, within the logical limits of a management model that had to meet domestic needs and additional and increasing forms of taxation (royal, urban, seigniorial). Leasing and sharecropping existed and were ubiquitous in the kingdom of Valencia during the late medieval period. However, historians acknowledge that resorting to these two contracts was mostly a way to complement the centrality of the other figures, rather than being an essential way of life for dispossessed peasants. Prior analysis of leasing contracts concluded that these figures did not act as a way of introducing urban capital or new crops, but they followed a rent-seeking logic that underpinned the familial nature of small peasant holdings. Leaseholders were predominantly peasants themselves, most of them landowners too, who rented scattered plots to meet the requirements of their family size. According to some authors, only a minority of peasants were landless individuals who turned to lease-holding to avoid waged labour.¹⁸ Meanwhile, the study of agricultural wage-earners (*bracers*) in the realm contends that there was no substantial, compact social group of landless agricultural workers during the later Middle Ages. Rather, most agricultural waged labour manifested itself in the shape of young peasants from the neighbouring kingdom of Castile, who came to the kingdom of Valencia to work seasonally.¹⁹

This nature and the features of Valencian small peasant holdings has led scholars to generally assume that landlessness would not have been a widespread reality across the realm. Inventories however appear to provide a less positive image. The 191 specimens analysed make it possible to identify peasant landowners and landless peasants. Table 1 classifies these individuals as to this condition, as well as by region and chronology. In general terms, these data suggest landlessness was effectively twice as widespread as land ownership in the fourteenth century. Around one third of inventoried peasants possessed some sort of land, while the other two thirds owned none. This analysis reveals similar, stable figures in both chronological periods or perhaps a subtle increase in land dispossession (see percentages in ‘Landless’, ‘Total’).

¹⁸ Mira, Viciano, “Arrendaments i parceries.”

¹⁹ Viciano, “Treballar per a altri,” in particular 346.

Table 1. *Landowner and landless peasants*

	1283-1350						1351-1400					
	Landowners		Landless		All		Landowners		Landless		All	
	N.	%	N.	%	N.	%	N.	%	N.	%	N.	%
<i>Valencia (city)</i>	4	57,1	3	42,9	7	100	1	20	4	80	5	100
<i>Valencia (hinterland)</i>	17	58,6	12	41,4	29	100	5	50	5	50	10	100
<i>Morvedre</i>	16	28,6	40	71,4	56	100	0	0	0	0	0	100
<i>North</i>	0	0	4	100	4	100	6	18,8	26	81,3	32	100
<i>Centre-South</i>	4	21,1	15	78,9	19	100	13	44,8	16	55,2	29	100
Total	41	35,7	74	64,3	115	100	25	32,9	51	67,1	76	100

Source: dataset of the author based on the 191 inventories studied in this article.

A more regional approach allows us to refine these findings. As shown also by Table 1, more than half of the inventoried peasants living within the walls of the city of Valencia and its hinterland would have had a plot of land by 1350 (57 and 58%). Meanwhile, in more peripheral areas of the realm, in the centre-south of the kingdom and in a medium-sized town like Morvedre, agricultural properties appear to be owned by a quarter of the peasantry (21,1 and 28,6%). It is worth noting that none of the peasant inventories from the northern regions of the kingdom reveal lands in this period, although this may perhaps be explained by the very few extant cases forming that sample by 1350. Therefore, there seems to have been a certain hierarchy, with land ownership being more widespread among peasants in the central areas of the realm, and more particularly in the area of the capital. During the second half of the fourteenth century, land ownership proves to be more present in inventories from the peripheral areas of the kingdom compared to the pre-1350 period, leading these interregional inequalities to be not so acute. Inventories from those years show land ownership decreasing among peasants of the city of Valencia (from 57,1 to 20%) and in its hinterland (from 58,6 to 50%). It is at this time when northern peasants appear recorded with agricultural possessions for the first time (18,8%), while inventories from more southerly areas of the realm reveal a significant increase in land ownership (44,8%, from 21,1% in the pre-1350 period).

This apparent importance of landlessness according to the inventories, which does not seem to fit the image provided by scholarship, could be explained if the forms of indirect management of land use were more important than has traditionally been considered. More Valencian peasant families may possibly have lived from leasing and sharecropping than previously thought. Regardless of that, landownership and landlessness as depicted in inventories provide a first clear image of the existence of important real estate inequalities among peasants even before the Black Death, at the level of the kingdom and also within its regions.

Differences were also present among landowners themselves, who were far from equal. Acreages of land holdings would represent a remarkable indi-

cator for assessing wealth inequalities. Yet the size of most pieces of land was generally not specified by the notaries who wrote the inventories of this period, recording them simply as ‘plots’ (*trossos*). The next section of this article will endeavour to infer some basic – although certain – findings from scant references to plot sizes. By now, and even if they are not the best indicator, inequalities among the peasantry can easily be detected in inventories through the number of plots of land. This information is recorded abundantly enough to be studied quantitatively and, moreover, it is liable to cross-referencing with tax and notarial records from other Valencian areas to assess the consistency of the image they provide. Table 2 shows the number of landowners in each area, along with the total, maximum, minimum, mean and median number of plots. The table reveals that many peasant land holdings were in fact a combination of many plots, often scattered across different municipal territories. A total of 374 plots were owned by these 191 peasants. While some owners possessed just a couple of pieces of land, others possessed more than 30. The mean number of plots reveals figures of between 2 and 6 pieces, depending on the areas. These numbers are roughly consistent with those inferred from other sources. In the hinterland of Valencia, Antoni Furió and Antonio José Mira estimated through notarial records that peasants possessed between 6 and 12 pieces of land in the fifteenth century,²⁰ not very different from the 3 to 14 range that can be observed in Table 2 (minimum and maximum figures from 1351-1400, ‘Valencia (hinterland)’). Similar data has been obtained from tax records from 1370 in Vila-real, a town in the north of the kingdom, where the average number of plots per owner was 4.2. The same type of register showed that in Castelló, not far away from Vila-real, peasant holdings were made up of 5 or 6 pieces, while in Sueca, a more rural community in the central-southern region of La Ribera, the average could still be placed between 6 and 8 plots in the second half of the fifteenth century.²¹

Table 2. *Ownership of land plots*

	Period	Lan- downers (N.)	Plots (N.)	Max	Min	Mean	Median
<i>Morvedre</i>	1348-50	16	92	17	1	5,75	5
<i>Valencia (city)</i>	1283-1350	4	11	5	1	2,75	2,5
<i>Valencia (city)</i>	1351-1400	1	3	3	3	3	3
<i>Valencia (hinterland)</i>	1283-1350	17	138	35	1	8,11	6
<i>Valencia (hinterland)</i>	1351-1400	5	30	14	3	6	5
<i>North</i>	1351-1400	6	17	6	1	2,83	3
<i>Centre-South</i>	1283-1350	4	13	5	2	3,25	3
<i>Centre-South</i>	1351-1400	13	70	33	1	5,38	3

Source: dataset of the author based on the 191 inventories studied in this article.

²⁰ Furió, Mira, “La ciudad y el campo,” 238.

²¹ Viciano, *Els peus que calciguen la terra*, 161, footnote 4, based on local data from those places.

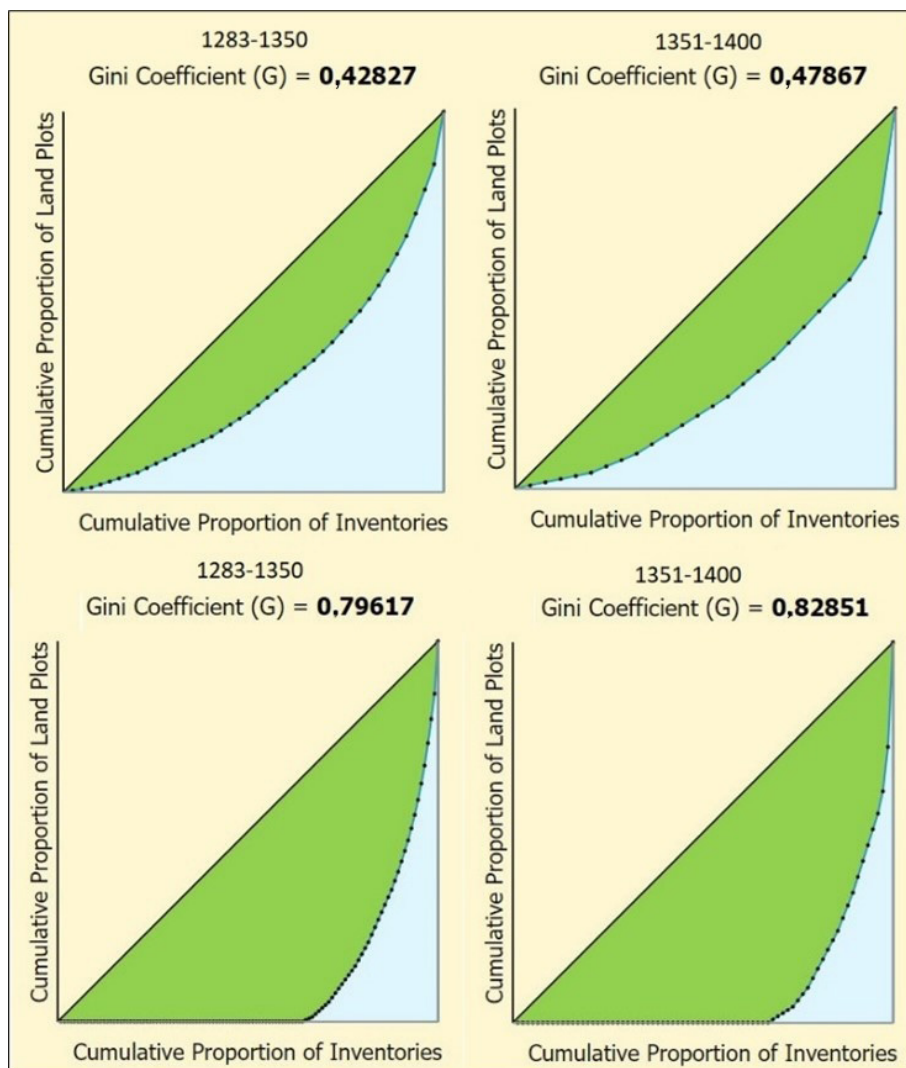


Figure 1. *Gini coefficients and Lorenz curves as to plot ownership distribution*
Note: the upper two figures correspond to land plot distribution across peasant landowners only, while the two figures below consider also landless peasants. See text for details.
Source: dataset of the author based on the 191 inventories studied in this article.

Ownership of plots of land in probate inventories is thus similar to the picture painted by other contemporary sources. In the absence of land acreage in most inventories, Figure 1 shows Lorenz curves as to land plot ownership distribution across all peasants in two periods. The top two figures consider peasant landowners only, while the two figures below also include landless peasants. This method suggests inequalities in plot ownership would have slightly increased when comparing the period before 1350 with the subsequent one. The Gini coefficient among landowners would be 0,42 by then, and 0,47 thereafter. When including landless peasants – whose plots of land are taken as ‘zero’ – the coefficients are logically much higher, but they still reveal the trend towards higher inequality, increasing from 0,79 to 0,82. Replicating this method on a local level would help us to understand whether these dynamics are representative of the entire realm or revealing of inter-regional changes in landownership. The samples are however not large enough to extract Gini coefficients on that minor scale.

3. *Acreages of peasant holdings and their distribution*

The number of plots per holding provides a rough idea of the abundance and scarcity of land but acreage figures actually prove to be a better indicator. The issue is that probate inventories from this period, as explained earlier, do not refer to plot sizes in most cases. When land is measured, it appears described in *jovades*, *cafissades* or, essentially, in *fanecades* (0,08 ha.).²² Only 75 out of the 374 plots owned by these peasants provide usable references to their size, from which various findings can be inferred. The very first one to note is that plot sizes are revealed as particularly tiny, consistent with the alleged smallness of plots of land that was characteristic of the Valencian agrarian structure. As shown in Table 3, plots of land in the various areas of the realm studied rarely exceeded 2 ha., and many of them were as small as just 1 *fanecada*. In fact, the mean size per plot does not reach 1 ha. in any location. This data agrees with evidence from tax records in other locations. In 1398 in Castelló, the average size per plot was 0,62 ha. The situation was similar a century later, not only in Castelló, but also in villages in the centre like Catarroja, close to the city of Valencia, as well as in Lliria, a town located towards more inland areas of the kingdom. In the rural hinterland of the city of Valencia other sources have suggested that plots of land ranged from 0,25 to 0,83 ha. over the course of the fifteenth century.²³

²² 1 *jovada* = 6 *cafissades* = 36 *fanecades*.

²³ Viciano, *Els peus que calciguen la terra*, 161-2.

Table 3. Sizes of land plots (in hectares)

	Period	Measured plots (N.)	Max	Min	Mean	Median
<i>Morvedre</i>	1348-50	10	5,76	0,08	0,89	0,16
<i>Valencia (city)</i>	1283-1350	5	0,88	0,24	0,49	0,4
<i>Valencia (city)</i>	1351-1400	3	1,44	0,48	0,85	0,64
<i>Valencia (hinterland)</i>	1283-1350	25	2	0,08	0,44	0,48
<i>Valencia (hinterland)</i>	1351-1400	13	1,28	0,08	0,29	0,16
<i>Centre-South</i>	1351-1400	19	2,4	0,08	0,49	0,32

Source: dataset of the author based on the 191 inventories studied in this article.

But one thing was plots and something very different were the peasant holdings made up by combining several of them. Internal inequalities are clearly seen when making an in-depth picture of tenancies at a regional level. The Valencian peasantry was far from monolithic or homogeneous, but importantly stratified all over the kingdom even before the Black Death. Tables 4 and 5 provide a full breakdown of the composition of the 36 peasant households that owned the aforementioned 75 plots of land described with a size, alongside the acreage of each crop type and the sum total per family. The figures include the number of inventoried plots of no specific size possessed by these individuals. For example, Joan Liminyà from Morvedre, who died in 1350, is described in his inventory as being in possession of 17 plots of land, of which only 2 appear with a total size of 5,84 ha.²⁴ The data therefore needs to be addressed carefully, combining quantitative and qualitative comparisons to achieve concrete findings.

A look at the tables shows that only eight fully measured holdings exist. All others provide plot sizes in combination with a variable unmeasured number of plots. Those 'reliable' eight cases significantly reveal the smallness of most peasant holdings across the kingdom and, even within these humble dimensions, the existence of important patrimonial wealth inequalities. These eight cases correspond to: Pere Canós, from Canet (hinterland of Morvedre); Joan d'Arcanyira and Aparisi Garcia from Gandia; an unknown woman from Alzira (central-southern areas); Andreu Avellà from Ternils (close to the previous location); Sabrina and Pere Oller, the widow of a peasant and a peasant living in the city of Valencia; and Jaume Roiz from Manises (hinterland of the capital).²⁵ Their holdings ranged from 0,4 to 2,5 ha., five of them being less than 1 ha., and only two of them more than 2 ha. The comparisons of these fully measured holdings with some of the partly measured ones highlights

²⁴ AMV, Domingo Joan, I-2, 13 September 1350.

²⁵ AMV, Domingo Joan, I-1, 15 October 1348; AHN, Nobleza, Osuna, Miquel Bungal, 26 May 1397; AHN, Nobleza, Osuna, Ramon Agualada, leg. 1.172, no. 5, 25 September 1391; AMAlz, Bernat Llorens, 040/6, 29 June 1381; AMAlz, Bernat Llorens, 040/8, subsequent to 3 February 1384; APCCV, Vicent Queralt, 1.412, 23 September 1381; ARV, Aparisi Lapart, 10.408, 24 September 1326; AMV, Antoni Cortés, m-1, 11 August 1375.

the existence of severe agrarian patrimonial inequalities. As showed by Table 4, Pere Canós possessed 1,44 ha., while Joan Liminyà from Morvedre accumulated four times as much in just two plots: 0,08 ha. of 'land' – most likely cereal, as discussed in the following section – and the remarkable quantity of 5,76 ha. of vines.²⁶ Liminyà was also the owner of another 15 unmeasured plots. It is worth pointing out that in vines Liminyà possessed a larger quantity of land, compared to the basic cereal plots owned by the examples above. This suggests important involvement in the wine-making market that agrees with the orientation to this activity in the town of Morvedre.²⁷

The case of Liminyà, most likely an affluent peasant, is replicated in other areas of the kingdom. In the central-southern areas of the realm, Miquel Segura possessed 2,88 ha. in three measured plots, as well as twenty-two other unmeasured pieces. While the known size of his holding might appear unsurprising compared to Liminyà, it is still larger than the aforementioned eight cases from which measured holdings could be addressed. More important is the fact that Segura's case shows a diversified group of crops, including the only reference to a measured piece of land sown with flax, of 0,4 ha. This was a wholly commercial crop, the produce of which was then transformed into linen, a basic fabric for ordinary people.²⁸

These contrasts are the most reliable ones that can be established from the limited evidence on acreage provided by inventories from this period. All other data provided by the tables need to be treated carefully, for there is no way of knowing how large unmeasured plots actually were. Therefore, the picture provided by partial acreages alone cannot lead to conclusive findings. It can be seen that the total acreage for partially measured holdings ranged effectively from 0,08 ha. (one *fanecada*) to 2,88, with the exception of the aforementioned case of Liminyà. Meanwhile, unmeasured plots per inventory consist essentially of up to three pieces, with exceptions far in excess of that figure. The most striking case is that of Jaume Sobirats, from the hinterland of Valencia, who possessed 34 plots of land, only two of them being described with a size (0,88 ha. together).

Table 4. *Acreage of land holdings owned by peasants from Morvedre and central-southern areas of the kingdom of Valencia*

Owner	Year	Plots with size (N.)	Total acreage (ha.)	'Land' (ha.)	Vineyard (ha.)	Olive groove (ha.)	Terra <i>campa</i> (ha.)	Flax (ha.)	Orchard (ha.)	Plots with no size (N.)
<i>Morvedre (1348-50)</i>										
Llorens Majol	1348	3	1,12	0,16	0,96					2

²⁶ AMV, Domingo Joan, I-1, 15 October 1348. AMV, Domingo Joan, I-2, 13 September 1350.

²⁷ Guinot, "Morvedre."

²⁸ Aparisi, "El cultivo y procesado del lino."

Wealth inequality and land ownership before and after the Black Death

Pa-squal Radio	1348	1	0,08	0,08				2
Pere Canós	1348	1	1,44		1,44			0
Caterina	1349	1	0,16	0,16				7
Pere Rodrigo	1349	2	0,32	0,16		0,16		3
Joan Lliminyà	1350	2	5,84	0,08	5,76			15
<i>Centre-South (1380-94)</i>								
Andreu Avellà	1380	5	2,08	2,08				0
Unknown women	1384	1	0,4	0,4				0
Micaela	1384	5	0,88	0,8	0,08			2
Joan d'Arcanyira	1390	2	0,4	0,4				0
Aparisi Garcia	1391	1	0,96		0,96			0
Miquel Segura	1391	3	2,88	2,4		0,4	0,08	22
Bertroumeu Llavata	1394	2	1,76	1,44		0,32		3

Note: only the cases with references to acreages from this period and locations are included in this table. See text for details.

Source: dataset of the author based on the 191 inventories studied in this article.

Table 5. *Acreage of land holdings owned by peasants from the city of Valencia and its hinterland*

Owner	Year	Plots with size (N.)	Total acreage (ha.)	'Land' (ha.)	Vineyard (ha.)	Terra campa (ha.)	Plots with no size (N.)
<i>Valencia (city) – 1322-8</i>							
Pere Pich and his wife	1322	1	0,24	0,24			1
Francesca	1326	1	0,4	0,4			2
Pere Oller	1326	1	0,888	0,888			0
Pere Aninou	1328	2	0,96	0,96			3
<i>Valencia (city) – 1381</i>							
Sabrina	1381	3	2,568	2,568			0

<i>Valencia (hinterland) – 1298-1336</i>						
Jaume Rapacius	1298	3	1,06	0,34	0,72	1
Ponç de Ape and Guillamo-na	1298	2	0,32	0,32		2
Eximén Llopis	1325	2	2,12	2	0,12	13
Jaume Sobirats	1326	2	0,88	0,88		32
Arnau Gaçó	1330	3	0,64	0,16	0,48	3
Bartomeua	1330	1	0,08	0,08		2
Doméneç Mateu and his wife Joana	1330	1	0,48	0,48		15
Doméneç Pere de Pedrola	1330	1	0,08	0,08		2
Guillem Conques	1330	4	2,4	1,2	1,2	3
Sancho Llopis and his wife	1330	1	0,08	0,08		1
Doméneç Almenar	1332	1	0,48	0,48		9
Miquel Fortanet	1332	2	1,04	0,08	0,96	4
Mateu Rubió	1336	2	1,44		1,44	5
<i>Valencia (hinterland) – 1375-81</i>						
Jaume Roiz	1375	5	0,52	0,52		0
Sancho Roiz	1375	1	0,08		0,08	1
Pere Moliner	1381	2	1,76		1,76	1
Pere Oliva	1381	1	0,72		0,72	2
Sancho Cola	1381	4	0,72	0,72		10

Note: only the cases with references to acreages from this period and locations are included in this table. See text for details.

Source: dataset of the author based on the 191 inventories studied in this article.

Inequalities in land ownership were clearly ubiquitous in the realm during the fourteenth century. Yet how did they develop over the century and what was the presumable impact of the Black Death? It is generally acknowledged that Valencian peasant land holdings tended to be smaller between the thirteenth and the fifteenth century. This is because the kingdom was founded in 1238 when earlier Islamic political entities were destroyed, and as a result of that a process of land distribution took place to reward the Christian conquerors. Brand new, particularly large land holdings were created to fuel the war against the Muslims and to stimulate the process of conquest of the emerging new kingdom of Valencia. The *Llibre del repartiment* (1237-45, 1252) (book of distribution, a record similar to the English *Domesday Book*), reveals that these original land holdings measured 9 ha. on average during the second half of the thirteenth century. It is worth noting that, in this period, French, English and Flemish equivalents would average 3 to 4 ha., as a result of the limits of the demographic growth that developed during the high Middle Ages.²⁹ This original Valencian situation of large agrarian properties lasted a couple of generations. The active land market and the inheritance system, which involved the equal division of property among heirs, rapidly led to a process of fragmentation. The phenomenon has not been studied in depth, but it is accepted that the ubiquity of small rather than large peasant holdings was already consolidated by the beginning of the fourteenth century.³⁰ The small acreages of holdings provided by inventories, as seen in the tables in this section, would support and confirm such a chronology.

How fragmentation developed in the fourteenth century and its implications for peasant inequality are unknown, but some ideas can be inferred if we take the evidence of the probate inventories from the former tables together in order to provide data for the whole kingdom. Table 6 shows the average size of peasant landholdings of landowners with partly or fully measured holdings (36 out of the 191 households). By 1350 this would have been 0,9 ha., and 1,2 in the second half of the century. If a process can be inferred from this arguably patchy evidence, it would be one of a slight increase in the mean size of holdings. If fully measured holdings are taken alone, figures of 1,1 ha. emerge for both periods, although relying on an overly small sample. In line with this evidence is Table 7, in which the distribution of partly and fully measured holdings can be seen, providing a broader image than that of average hectares. According to this latter table, landowners with less than 1 ha. would have decreased slightly, from 65 to 61,5%, while those with 1 to 3 ha. increased from 30 to 38%. It is important to remember that previous data on landlessness has shown that peasant households deprived of land would have increased slightly between the two periods (from 64,3 to 67,1%, Table 1, percentages in 'Landless', 'Total'). Since the proportion of landless peasants rose,

²⁹ Viciano, *Els peus que calciguen la terra*, 83.

³⁰ Viciano, 161.

while landowners expanded their patrimonies, a growth in peasant wealth inequality can be argued as far as land ownership is concerned.

Table 6. *Mean acreage of land owned by all studied peasants*

Period	Landowners with partly or fully measured holdings (N.)	Mean size (ha.)	Landowners with fully measured holdings only (N.)	Mean size (ha.)
1283-1350	23	0,9	2	1,1
1351-1400	13	1,2	6	1,1

Source: dataset of the author based on 36 of the 191 inventories studied in this article. See text for details.

Table 7. *Number of peasant holdings according to their size (in hectares)*

Period	Landowners	Less than 1	1 to 3	3,1 to 5	More than 5
1283-1350	23 (100%)	15 (65%)	7 (30%)		1 (4%)
1351-1400	13 (100%)	8 (61,5%)	5 (38%)		

Source: dataset of the author based on 36 of the 191 inventories studied in this article. See text for details.

In sum, peasant households with larger holdings would have increased after the Black Death, while those with less land would have diminished. The balance would have been positive for landowners, as suggested by the slight boost in the mean acreage of land. However, a substantial mass of landless peasants remained the same or increased slightly, and thus land ownership inequality grew as well, which would agree with the rising Gini coefficients on plot ownership presented earlier. An arguable reason is that peasant households with land were probably wealthier and had better income sources to purchase new plots on the market to enlarge their holdings. This would have been particularly possible once real wages began an upward trend. On that, Carlos Álvarez-Nogal and Leandro Prados de la Escosura suggest that real wages in Spain increased from 1275 to the Black Death in 1348, when they would have fallen sharply until the 1360s. After that time, they would have grown back to pre-plague levels by around 1400, a situation that lasted until the 1450s.³¹ Specifically Valencian data provided by Antoni Furió, from the capital of the kingdom and from the town of Alzira, shows that between 1375 and 1450 agricultural real wages doubled, while urban ones multiplied by 1,3, both of them remaining relatively stable thereafter until 1500.³²

As suggested by tax records there might have been a trend towards a more egalitarian land distribution from at least the late fourteenth century

³¹ Álvarez-Nogal, Prados, "The rise and fall," 6.

³² See review of these data in Almenar, "La cultura material de la alimentación campesina," 235-7.

until the middle of the fifteenth century. According to those from Castelló, Pau Viciano identified the average plot size as 0,62 ha. in 1398, moving to 0,7 ha. in 1468.³³ This scholar has suggested that the change was due to a fall in demographic pressure, following the pandemic outbreaks of the fourteenth century.³⁴ Those registries also reveal a decrease in population (886 to 729 taxpayers) and Gini coefficients with regard to wealth distribution (0,548 to 0,492). Both variables would be increasing in subsequent years (in 1497, 653 taxpayers, Gini 0,509; in 1599, 1.239 taxpayers, Gini 0,616).³⁵ It is from the mid-fifteenth century when tax records suggest an unstoppable upward trend in inequality around the realm, in both town and countryside. In Sueca, a rural community of 1.000 inhabitants, Gini coefficients show a rising trend thereafter (0,41 in 1453, 0,52 in 1494, 0,46 in 1509). In Alzira, a larger place with 5.000 people in the same region, the Gini coefficient was 0,51 in 1468, increasing slightly until 1515 (when it was 0,54). In its rural hinterland, inequality was lower, 0,48 in 1474-9, and subsequently similar.³⁶

It is these fifteenth-century tax records that have led us to establish a model of Valencian peasant land distribution that consists of much higher acreages than those revealed by fourteenth-century inventories. This fact might suggest that, indeed, the formation of larger agrarian patrimonies that seems apparent for the post-plague period would continue during the subsequent century. According to such a model, in the fifteenth century 60% of the Valencian peasantry would own less than 5 ha., 25% from 5 to 10 ha., and only 15% possessed more than that. While local disparities existed, these sizes are found across the kingdom. In central-southern regions like La Ribera, 70% of holdings were under 5 ha, similar to the situation in the rural hinterland of the city of Valencia in 1468 (60% of holdings under 5 ha.). In northern rural communities like Culla, 40% of locals owned 4-5 ha.³⁷

4. *Crop types: subsistence and commercialization*

Crop types are identified in many inventories and are important for assessing peasant wealth levels, as they hint at their involvement in agrarian commercialization and other activities. Some pieces of land were even referred to with popular terms that were in use by rural communities as part of the local geography. For instance, the inventory of a peasant from Albal, in the hinterland of the city of Valencia, called Jaume Sobirats, describes one of his plots as the one “called the piece with the little springs”, while another

³³ Viciano, *Els peus que calciguen la terra*, 161.

³⁴ Viciano, 85.

³⁵ Data from Furió *et al.*, “Measuring economic inequality,” 190.

³⁶ Furió, “Economic Inequality in Iberia,” 16.

³⁷ Viciano, *Els peus que calciguen la terra*, 84-5.

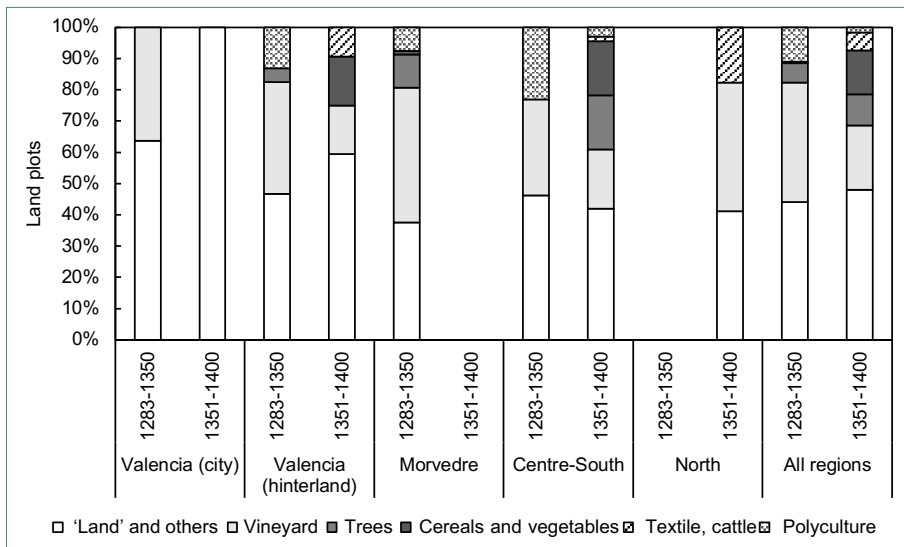


Figure 2. Incidence of crop types in peasant inventories
 Source: dataset of the author based on the 191 inventories studied in this article.

one was referred to as “the one with the large olive tree”, suggesting it was an olive grove.³⁸

The range of land types recorded in inventories is consistent with a model of Mediterranean agriculture, with wheat, olives and vines as the main crops, in combination with other species like carob and fig trees, holm oaks, and other minor cereals like barley and sorghum. An analysis of the importance of all these crop types necessarily involves relying on numbers of plots, given the relatively scarce references to acreages that was discussed in the previous section. Figure 2 shows the incidence of plots of each species on the total per period and region, suggesting changes of type and inter-regional agrarian differences.

One of the first things to notice is the overall importance of vines among Valencian peasants during the fourteenth century, both in the shape of mature crops (*vinya*) and young ones (*mallol*). At a regional level, higher numbers of plots of this crop are present in the northern areas of the kingdom, as well as in Morvedre. Environmental reasons may be the reason for this difference, since vines are essentially a dryland crop, while irrigated land was more characteristic of the other farmed areas, like the hinterland of Valencia and the middle-southern areas of the realm. Morvedre was known in the period for its medium-quality wines, and many locals were involved in its

³⁸ *Un troç de terra, apellat lo troç de les fontanelles, un troç de terra, apellat de la olivera grossa*: ARV, Aparisi Lapart, 10.408, 29 July 1326.

production.³⁹ Even so, it is worth noting how important this crop was, even in those places more noted for irrigated agriculture, where vineyards appear in between 20 and 30% of inventoried plots, depending on the area and period.

Another set of crop types are trees, of which olives are the most important, but also other ones like carob trees, fig trees and holm oaks (*carrascal*). Orchards thus appear to be fewer in number than vineyards, from 10 to 20% of plots depending on the place and period. At a local level, the importance of trees seems particularly clear in Morvedre and in the central-southern areas of the kingdom. In actual fact, the ownership of these trees was generally higher, since they were often grown in combination with other crops in the same plot. The category called 'polyculture' in Figure 2 is precisely formed by vines or cereal crops, recorded in inventories together with fig trees, olive trees, holm oaks, or all of them together. Nevertheless, the relatively lower incidence of this category also stresses the importance of single-crop farming over polyculture in Valencian peasant holdings.

A further general aspect that developed particularly during the second half of the fourteenth century according to Figure 2 is the emergence of species oriented towards textile production or husbandry. This can be seen particularly in the hinterland of the city of Valencia and in the northern areas of the realm. This includes flax farming, but also the growing of fodder and alfalfa as animal feed.

One must assume that cereals and vegetables predominated over all other species. Paradoxically, inventories barely identify these species in cultivation, not even wheat. The low incidence of the category 'cereals and vegetables' in Figure 2, in fact, emerges from anecdotal references and reasonable deductions. This label includes plots identified as 'clear land' (*terra campà*), a term that was used in the period for fields with no trees or vineyards, normally used for cereals and vegetables. Of course, cereals were essential for household consumption and their sale in the market, so it is most likely that this crop was present in those plots called simply 'land' (*terra*). In fact, this generic term predominates over any of those already described. Figure 2 considers plots of these unspecific fields in the 'land and others' category, which is formed essentially of plots of *terra*, alongside occasional mentions of marshlands (*terra marjal*) and orchards (*orts*). Some particularly well described plots of 'land' do refer to the species under cultivation. Eximén Llopis possessed 25 *fanecades* (2 ha.) of 'land' in 1323 in Alfafar, in the hinterland of the city of Valencia, of which 1,5 were "planted with onions".⁴⁰ This is the earliest of the few specific descriptions of vegetable and cereal crops. Later in the century, Sancho Cola from Torrent, a village in the southern hinterland of the capital, owned in 1381 "a piece of land, planted with sorghum" (*adacça*) in Foios. This latter village was also in the hinterland of the capital, but in the northern area, showing the characteris-

³⁹ Guinot, "Morvedre."

⁴⁰ *Plantada de cebes*: ARV, Aparisi Lapart, 2.855, 28 July 1325.

tic scattering of plots of land that made up Valencian peasant holdings.⁴¹ In 1391 Miquel Segura, from the more central-southern region of La Safor, possessed in Ràfol de Valldigna various plots “planted with wheat” (*forment*), as well as one piece “planted with barley” (*ordi*).⁴²

The inventory of Miquel Segura is particularly revealing, for it describes the agrarian possessions of what seems to have been an affluent peasant owner. Out of his many pieces of land planted with wheat, the case of one measuring 30 *fanecades* (2,4 ha.) must be noted, “planted with wheat, which were leased out by the deceased”.⁴³ This exceptional reference, the only one of this kind found in this sample, highlights the fact that affluent landowners could generate an additional source of income by transferring the land use of some plots to other peasants. Miquel Segura also owned in the same place a plot “on irrigated land, half of it planted with wheat, the other half being left fallow”.⁴⁴ This, again, is an exceptional reference in this sample, one that reveals the peasants’ strategies to regenerate their lands and to maintain substantial and sufficient productivity levels.

The evidence from the town of Morvedre is particularly relevant for assessing how consistent the picture of crop types provided by other regions is. Regional sets of inventories rely on the gathering of scattered specimens of these documents in various notarial records from different years in the time spans under analysis. Conversely, the case of Morvedre is unique in documentary terms, for an extraordinary corpus of 56 peasant inventories are contained in the same notarial record mostly from the year 1348. This means an important number of deceased who most likely passed away due to the Black Death. Therefore, those inventories provide a fixed image of land ownership as it developed up to the arrival of the plague. The Morvedre sample shows, as seen in Figure 2, that 40% of plots were vineyards and another 35% were ‘land and others’ (essentially ‘land’ or *terra*, as explained earlier, likely for cereals). The remaining plots consisted of trees and polyculture. Therefore, this sample itself supports the hierarchy of crop types that can be inferred through the other regional samples that rely on inventories from more varied years.

Finally, inventories also provide exceptional references to income diversification beyond agricultural labour, as can be seen particularly with Jaume Sobirats from Albal. This peasant possessed in 1326 a piece of “land and vines, in which there is a brick kiln”.⁴⁵ The inclusion of the kiln (*forn de rajoles*) in the inventory proves it was owned by him, but not necessarily that he worked

⁴¹ *Sembrat d’adacça*: ARV, Arcusio de Collent, 2.563, 26 June 1375.

⁴² *Terra sembrada de forment*: AHN, Nobleza, Osuna, Joan Llorca, leg. 1.136, no. 4, 4 January 1391.

⁴³ *XXX fanecades de terra sembrada de forment, les quals lo dit defunt tenia arrendades*: AHN, Nobleza, Osuna, Joan Llorca, leg. 1.136, no. 4, 4 January 1391.

⁴⁴ *Un troç de terra en los orts, sembrat la meytat de forment, l’altra meytat guaret*: AHN, Nobleza, Osuna, Joan Llorca, leg. 1.136, no. 4, 4 January 1391.

⁴⁵ *Un troç de terra e vinya, en què ha un forn de rajoles*: ARV, Aparisi Lapart, 10.408, 29 July 1326.

in it. It is more likely that the structure was leased out to potters. These craftsmen needed to dig holes for their clay supply, and they often built their kilns next to excavated pieces of land, particularly in brick production (*rajola*). This led them to come to various sorts of agreements with landowners.⁴⁶

5. Conclusion

As in other parts of Europe, the demographic impact of the Black Death prompted a reconfiguration of landownership in the kingdom of Valencia that has yet to be explored in depth. In a peasant society marked by internal differences, larger agrarian patrimonies were formed, which widened the gap between peasant landowners and landless peasants. The rising standard of living that seems undeniable at least from the 1370s was taken advantage of more by wealthier peasants to purchase new plots, in an active land market triggered by the properties of deceased neighbours that would be sold by heirs, lacking the will or the capability of maintaining inherited agrarian patrimonies. This all went hand in hand with the introduction of new crops and agrarian innovation, contributing to the commercialization of a market-oriented, noticeable economy in the north-western Mediterranean context. As far as land ownership and distribution is concerned, the data presented in this article focuses on the immediate post-plague period as a moment of rising wealth inequality. It would be in a period yet to be analysed in depth, halfway between the fourteenth and the fifteenth century, when inequalities in land ownership and wealth diminished, as revealed by tax records. The same sources reveal also that the upward trend would return around the mid-fifteenth century, at least for the rest of the Middle Ages and the beginning of the early modern period.

The evidence provided by probate inventories shows the importance of the use of alternative sources for remote periods of the Middle Ages for which tax records barely survive. The same interest can be mentioned for studying particular social groups, like the peasantry. In this case, their study as a historical subject allows for a closer approach to the social contexts, causes and effects of inequality. Land ownership as revealed by these sources has helped us to reconstruct the chronological dynamics of inequality in the fourteenth century, to reflect upon the impact of the Black Death, and upon the reaction of the peasantry to new land market opportunities. In the end, what the Valencian (and perhaps Iberian) process would reveal is a certain singularity at the 'starting point' of this story, with the boost in inequality upon the arrival of the plague in 1348 contended by economists. The Iberian originality, however, only lasted until the 1370s. Inequality decreased after that until the mid-fifteenth century, when the peninsula joined in the upward trend that was present in other European scenarios.

⁴⁶ Almenar, "Explotación y transformación de recursos naturales," 405-6.

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