Social Inequalities and the Great Famine in the County of Flanders (1315-7)

by Mathijs Speecke, Thijs Lambrecht

La Grande Carestia del 1315-7 è uno dei momenti chiave della storia sociale ed economica del Nord Europa nel tardo Medioevo. Le avverse condizioni meteorologiche del 1315-6, combinate con l'elevata pressione demografica, generarono povertà estrema, carestia e una crisi di mortalità. In questo articolo ci concentriamo sull'impatto di questi eventi nei Paesi Bassi e in particolare nelle Fiandre. Nella prima parte presentiamo nuovi dati sugli effetti delle condizioni meteorologiche avverse del 1315 sulla produzione agricola e sui prezzi dei prodotti alimentari. Se ne deduce che le Fiandre fossero particolarmente vulnerabili alle carestie a causa della dipendenza dalle importazioni di grano dalle regioni vicine. La seconda parte si concentra sull'impatto differenziato a livello sociale della carestia. Mentre le grandi aziende agricole riuscirono ad assicurarsi enormi profitti grazie agli alti prezzi dei prodotti alimentari, i piccoli proprietari terrieri furono costretti a vendere le loro aziende per sopravvivere.

The Great Famine of 1315-7 is one of the key moments in the social and economic history of Northern Europe during the late Middle Ages. The adverse weather conditions of 1315-6 combined with high demographic pressures resulted in extreme poverty, famine and ultimately crisis mortality. In this paper we focus on the impact of these events in the Low Countries and the county of Flanders in particular. The aim of our paper is twofold. In the first part, we present new data about the effects of the adverse weather conditions of 1315 on agricultural output and food prices. Our data indicate that Flanders was particularly vulnerable to food shortages and famine due to its reliance on grain import from neighbouring regions. The second part focuses on the socially differentiated impact of the famine. Whereas large farms were able to secure enormous profits due to high food prices, smallholders were forced to sell their holdings to survive.

Medioevo, secolo XIV, Fiandre, contadini, Grande Carestia, diseguaglianze.

Middle Ages, 14th century, Flanders, peasants, Great Famine, inequality.

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The Great Famine of 1315-7 is widely regarded as one of the key economic and social turning points in the late medieval history of Northern Europe. In particular, the subsistence crisis is often considered the first in a series of calamitous events that marked the end of a long period of economic and demographic growth, ushering in a new era of crisis and contraction. Since Fritz Curschmann (1900) first drew attention to the Great Famine, the topic has been the subject of several significant studies and monographs, the most recent of which, authored by Philip Slavin, was published in 2019.[1] Whereas older research relied heavily on classical narrative sources and manorial accounts to reconstruct the causes, effects, and chronology of the harvest shortfalls of 1315 and 1316 and the subsequent mortality crisis, more recent studies have benefited from new climatological evidence and the integration of ecological perspectives. For instance, tree-ring analysis has shown that the 1314-6 summer mean represents the fifth wettest three-year summer period over Europe between 1300 and 2012 (or the second wettest if considering only 1300 to 1710). The summer of 1315 ranks among the ten wettest on record for many European countries.[2] Recent research has also examined the nature, spread and social, economic and ecological impacts of the European 'cattle panzootic' or 'great bovine pestilence' which followed the subsistence crisis and persisted in Ireland until c. 1325.[3] Given the availability of superior source material, most of the historiography on the Great Famine and its aftermath has focused on England. For the Low Countries – cited by contemporary chroniclers as one of the worst affected regions in Europe[4] – there is only limited historical discussion to match. In 1959, Hans Van Werveke analyzed mass burial accounts from the Flemish cities of Bruges and Ypres. He tentatively calculated that approximately 5,5% of the population of Bruges perished in 1316, compared to 10% or more in Ypres. Van Werveke attributed Bruges' lower mortality rate to the city's favorable position within maritime trade networks and its government's efforts to organize large grain imports

[1] In chronological order of appearance: Curschmann, *Hungersnöte*; Lucas, "The Great European Famine," 343-77; Kershaw, "The Great Famine," 3-50; Jordan, *The Great Famine*; Schofield, "Wales and the Great Famine," 143-67; Slavin, *Experiencing Famine*. See also the reflections in Bourin, Menant, "Les disettes dans la conjoncture de 1300," 9-33.

[2] Baek *et al.*, "A Quantitative Hydroclimatic Context," 1-7.

[3] Newfield, "A Cattle Panzootic," 155-90; Slavin, "The Great Bovine Pestilence," 1239-66.

[4] One well-informed chronicler from Lübeck, narrating how in 1316 and 1317 more than 2.300 patients of the Hospital of the Holy Spirit had died and that corpses could be found "on roads, near alleys, in fields and woods, in churches and in the streets", stated that the hunger and misery there was nothing compared to Zeeland, Holland and Flanders where, in many villages, everyone had perished. According to the chronicler the hardship and hunger in this region "had never been heard nor seen, nor shall there ever be, unless God decrees it" (*Binnen den twen jaren starf to deme hilghen gheste 2300 hostis unde de hunger was so grot, dat men over al in weghen unde bi steghen, in velden unde in busschen, in cercen unde in straten dat vollic dot vant over al. Dese hunger unde dese cummer was en nicht vor dat, dat was in Selant unde in Hollant unde in Vlanderen [...]. Dar weren vele dorpe, dar al vollic in vorstorven weren. De cummer unde de hunger, de dar was, de ne wart ni ghehort noch ghevresschit, noch nummer ene schal, jof Ghot ghebudit. [...],* cited in Bruns, *Die Chroniken*, 335-6).

from the Mediterranean starting in 1317. By contrast, Ypres, an industrial city reliant on grain imports from its rural hinterland, with a large proletarian population, was more vulnerable to disease and starvation.[5] Since Van Werveke's seminal study, however, few researchers have tackled the question of the Great Famine in the Low Countries and the County of Flanders in particular. A notable exception is Sam Geens, who utilized confiscation records and arrears of rents in kind owed to the Count of Flanders to assess the exacerbating effects of the Franco-Flemish War of 1314-6 on the subsistence crisis.[6]

This chapter examines the impact of the Great Famine in the northern part of the county of Flanders. Unlike the more inland regions of Flanders, the plains bordering the North Sea were reclaimed relatively late, resulting in the absence of lordship and low levels of surplus extraction by seigneurial elites. In exchange for strong property rights, landowners paid a fixed annual rent (mostly in kind) directly to the Count of Flanders.[7] Unlike their inland counterparts, rural households in this region were not subject to commutation fees, deathbed taxes or other personal seigneurial obligations.

For Coastal Flanders we have access to a unique combination of sources that allows us to analyse the effects of the Great Famine in detail. In particular, we will address the consequences of the crisis of 1315-7 and its implications for rural households in Coastal Flanders. In the first part, fiscal data are used to reconstruct patterns of peasant landownership in the northwestern Flanders at the onset of the fourteenth century. The second part discusses the impact of adverse weather conditions on agricultural output and price levels. The final section focuses on the experiences of different socio-economic groups and actors in Coastal Flanders during and after the famine.

1. *Coastal Flanders c. 1300: a bottom-heavy rural society*

Historians have long suspected that population growth in the county of Flanders during the High Middle Ages gave rise to a dramatic increase in the proportion of rural households living near or below subsistence level. However, the scale and impact of this increase remained difficult to determine due to a lack of quantitative records, especially compared to England. Data from expropriations, for example, suggest that small holdings of less than five hectares were already the dominant form of landownership in the Flemish coastal plain by the thirteenth century, but the samples are small and do not necessarily capture all land owned by the individuals.[8] Additionally, confis-

[5] Van Werveke, "La famine de l'an 1316," 5-14. We are currently preparing a revision of these mortality rates.
[6] Geens, "The Great Famine," 1048-72.
[7] Verhulst, "Die Binnenkolonisation;" Lyon, "Medieval Real Estate."
[8] Soens, *De spade in de dijk?*, 74-5.

cation records drawn up at the end of the Revolt of Coastal Flanders (1323-8) show that 74% of the 3,185 rebels from the rural districts of Furnes, Bergues, Cassel and Bailleul owned 5 'measures' (= 2,27 hectares) of land or less, and another 22% owned between 5 and 20 'measures' (2,27 to 9.09 hectares). Rebels from the northwestern district of Bruges, on the other hand, had access to more than three times as much land per individual compared to the southwestern districts, but these numbers also include leasehold. Moreover, it appears that, unlike the southwestern districts, the officers responsible for the confiscation in the Franc of Bruges only targeted rebels with land worth confiscating.[9] Thus, while historians agree that the rebels were primarily peasants, it remains to be seen how reliable these confiscation records are as sources for property relations and how representative they are for the Flemish coastal society as a whole.

The identification of new fiscal records, however, confirms that, c. 1300, the vast majority of the rural households in Coastal Flanders depended for their livelihood on small and even minuscule holdings. In the summer of 1304, a land tax of 3 s. *parisis* per 'bunder' or 12 d. *parisis* per 'measure' (one *mesure* equaled c. 0,44 hectares) was levied to cover the military expenses of the ongoing hostilities against France and the counties of Holland and Zeeland. Although most documentation for this land tax is lost, complete tax lists for five villages and another nine incomplete lists survived for the rural district of Bergues (Figure 1).[10] These tax lists are unique because they include all land *owned* by resident households not only in the place of residence itself, but also in surrounding villages, even across district borders. Willaumes Husman, resident of Hondschoote, for example, was taxed 9 shillings for ownership of one 'measure' of land in his place of residence, but also for 5,5 'measures' in the neighbouring village of Killem and 2,5 'measures' in *Capelle Saint Nicholay* (nowadays Oost-Cappel).[11] Table 1 shows that roughly 80% of the 1,254 taxpayers owned less than 5hectares, who together possessed around 43% of the taxed surface area. Land ownership rarely exceeded 10 hectares. In fact, modal land ownership in this district was only 1,32 hectares. (Table 2), which is far below the minimum considered necessary to feed and maintain a household in the Middle Ages even though the yields in the Flemish coastal plain were comparable to those of the most advanced European agricultural districts.[12] The picture that emerges from these tax lists is that of a bottom-heavy rural society characterized by the dominance of small

[9] For the data, see Pirenne, *Le soulèvement*, 1-162 and Mertens, "Les confiscations," 239-84, subsequently analyzed in TeBrake, *A Plague of Insurrection*, 139-42.

[10] State Archives of Ghent (SAG), *Graven en gravinnen van Vlaanderen*, Charters, Chronologisch supplement, 510-4; Gaillard, 146, 149, 150. For a more detailed analysis of these tax lists, see: Speecke, Lambrecht, "De nominatieve belastinglijste."

[11] SAG, *Graven en gravinnen van Vlaanderen*, Charters, Gaillard, 149.

[12] Based on the accounts of St. John's hospital (Bruges) from the 1360s, Jacques Mertens and Adriaan Verhulst were able to calculate a yield-ratio of 4 to 5 for wheat and a ratio of 6 to 7 for rye, see Mertens, Verhults, "Yield ratios in Flanders." Only in northern France were yield-ratios

landownership and a high degree of land fragmentation. In that sense, the socio-economic structure that emerges from the fiscal data for the rural district of Bergues was similar to that of densely populated Norfolk (England), where the modal holding size had dropped to no more than 1,21 hectares in the late thirteenth century.[13]

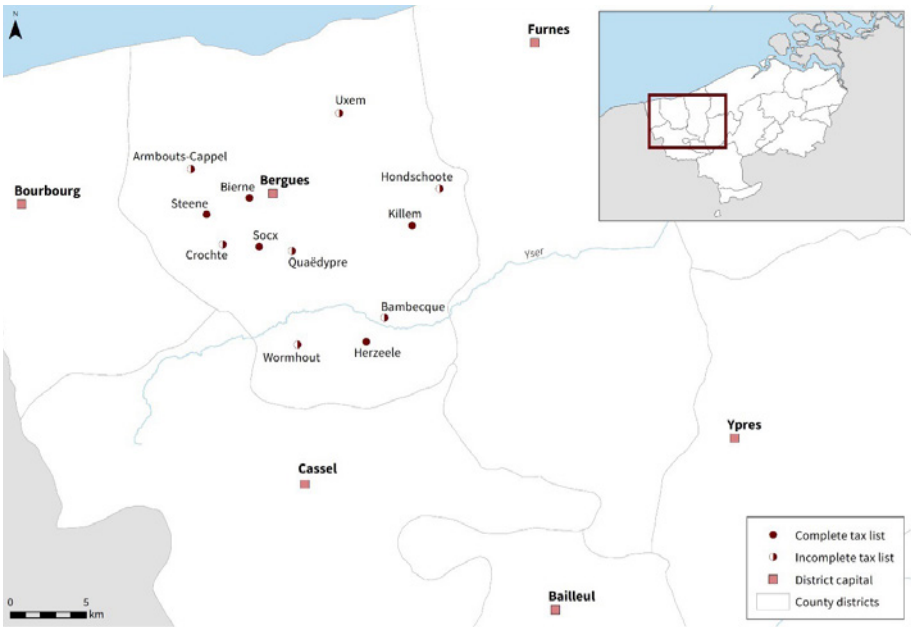

Figure 1. *Tax lists preserved for the district of Bergues in the county of Flanders (1304)*
Sources: SAG, *Graven en gravinnen van Vlaanderen*, Charters, Chronologisch supplement, 510-4; Gaillard, 146, 149, 150.

Table 1. *Land ownership (in hectares) in the district of Bergues in 1304*

Land ownership (ha.)	Taxpayers	Taxpayers %	Taxpayers cumulative %	Surface area (ha.)	Surface area %	Surface area cumulative %
<5	1.010	80,5	80,5	1.863,6	43,2	43,2
5-10	168	13,4	93,9	1.171,3	27,1	70,3
10-25	72	5,7	99,7	1.035,3	24	94,3
>25	4	0,3	100	248,1	5,7	100
Total	1.254	100		4.318,3	100	

Sources: see Figure 1.

significantly higher. In the later Middle Ages, the presumed minimum of self-sufficiency was 4 hectares, see Freedman, "Rural society," 83-4.
[13] Campbell, *The Great Transition*, 184-5.

Table 2. *Central tendency and dispersion of the tax records of the Bergues district in 1304*

Central tendency and dispersion	Land ownership (ha.)
Mean	3,44
Median	1,98
Mode	1,32
Standard deviation	5,4
Min	0,04
Max	132,12

Sources: see Figure 1.

Because the fiscal data from 1304 only record land ownership, the tax lists cannot be used to reconstruct total land use of each household or total holding size. However, indications about land ownership are nevertheless instructive as they strongly suggest that households in this region could not survive from the land they owned directly. In other words, the dominant group of small landowners in this region had to turn to complementary strategies to make ends meet. Most importantly, many of the peasant households in the region of Bergues must have held additional land through leasehold. The confiscation accounts of 1315 (see below) indicate that most persecuted landowners (lay and ecclesiastical) leased the land they owned in this region. Moreover, the pattern of small scale and fragmented landownership in the district of Bergues matches the research of Erik Thoen, Tim Soens and Lies Vervaet on the origins and development of leasehold in the county of Flanders. Their analysis shows that short-term leasehold developed early in Coastal Flanders and increasingly replaced other forms of tenure in the course of the thirteenth century.[14]

While our tax data does not inform us about leasehold, the data strongly indicate that there must have been a high demand for land in this region. Landowners capitalized on this demand by offering small parcels of land through short-term lease. In fact, one of the indicators of an active land market is the extreme fragmentation of land in this region. Although we have no data on individual plot size, the small median values of clusters of land owned by residents in all villages (1.3 hectares) hint at fragmented landownership. Also, the remarkable geographical distribution of landownership over different villages strongly suggests that land was in high demand. Many households owned land outside their village of residence. In Hondschoote, for example, more than 30% of all taxed villagers owned land outside their place of residence, mostly in the neighbouring villages of Killem and Leisele. In Socx, however, this percentage rose to almost half of the taxpayers. In a few cases

[14] Soens, Thoen, "The Origins of Leasehold," 35-6; Vervaet, "Goederenbeheer in een veranderende samenleving," 253-7.

the property was dispersed over five or even six different villages (Figure 2 and Table 3).

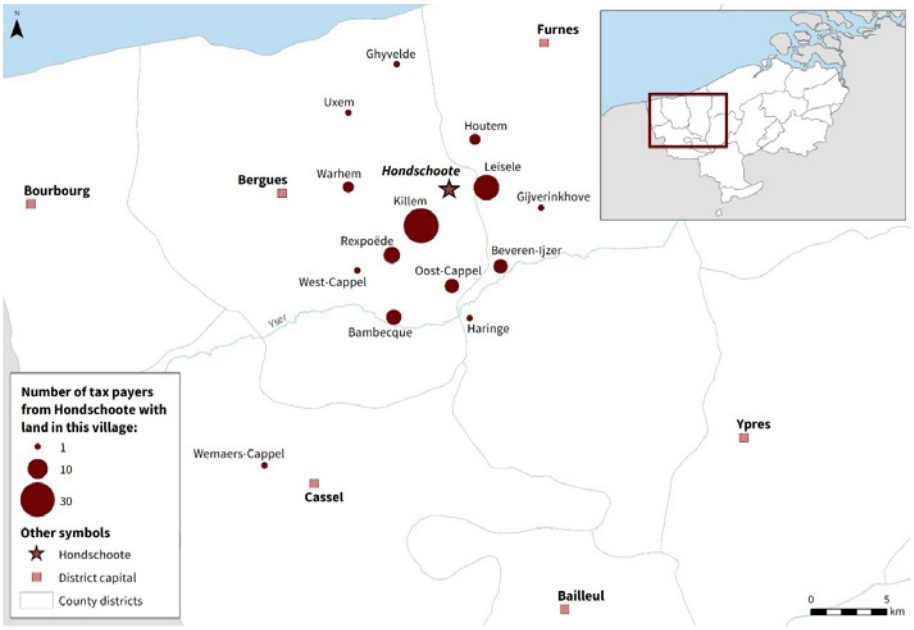

Figure 2. *Spatial dispersion of the land owned by taxpayers from Hondschote*
Sources: see Figure 1.

Table 3. *Quantitative analysis of the spatial distribution of the land owned by the taxpayers of the Bergues district in 1304*

Village	Number of villages where taxpayers owned land (excluding village of residence)					N	Total N	% of tax payers	Surface area of land owned outside village of residence (ha.)	Total surface area (ha.)	% of taxable surface area
	1	*2*	*3*	*4*	*5*						
Armbout-skappel	4	2				6	35	17,1%	10,8	188,2	5,7%
Bambeke	16	1	1			18	69	26,1%	21,0	159,0	13,2%
Bieren	43	17	1	1		62	139	44,6%	100,4	455,1	22,1%
Herzele	9	4				13	117	11,1%	38,2	536,6	7,1%
Hondscho-te	48	12	3			63	205	30,7%	69,9	525,4	13,3%
Killem	31	4	3			38	82	46,3%	72,5	324,2	22,4%
Krochte	21	3	3			27	82	32,9%	39,4	260,5	15,1%
Kwaadie-per	17	6	1			24	119	20,2%	50,8	397,6	12,8%
Socx	32	21	10		1	64	134	47,8%	152,9	518,0	29,5%
Stene	38	8		1		47	151	31,1%	99,3	557,8	17,8%

Uksem	2					2	39	5,1%	2,0	88,5	2,2%
Wormhout	22	3	1	2		28	81	34,6%	52,7	306,8	17,2%
Total	283	81	23	4	1	392	1.253	31,3%	709,9	4.317,7	16,4%

Sources: see Figure 1.

In addition to the lease market, households also ensured their survival through the cultivation of industrial crops. The cultivation of madder for the urban textile industry, for example, was widespread in Coastal Flanders during the late thirteenth century and early fourteenth century. The presence of fodder crops on many holdings also indicates that cattle were present.[15] Finally, to boost their income, households in this region also resorted to textile production. For the villages in the district of Bergues, evidence of rural textile production dates back to the 1270s.[16] Another compensatory strategy was off-farm employment. In the thirteenth and early fourteenth centuries the Flemish water boards (the institutions that were responsible for the maintenance of sea walls, drains, ditches and sluices in the coastal plain) offered such employment to large numbers of locally hired labourers whose wages were substantially lower than comparable wages paid in other parts of Flanders.[17] Although the available sources do not allow us to sketch a complete picture of the economic activities of the peasantries in this part of Flanders, the picture that emerges from the fiscal sources c. 1300 indicates that the majority of the households in this region must have depended on the market for their subsistence and therefore highly exposed to risk when markets were disturbed. The structural vulnerabilities of these populations explain why the Low Countries – the coastal areas in particular – were so heavily affected by the disastrous harvest failure of 1315.

2. *Harvest failure and famine (1315-6)*

As is well-known, the first harvest failure of 1315 was the result of excessive precipitation. The adverse weather conditions in 1315 resulted in heavy rainfall and flooding. One of the most insightful sources on the adverse weather conditions is a register of confiscations drawn up between July and December 1315 in the context of the Franco-Flemish War of 1314-6.[18] In order to eliminate political opposition within Flanders, Count Robert of Béthune (1305-22) ordered the confiscation of all goods belonging to partisans of the French king. Covering the entire harvesting season, the document contains numerous references to incessant rains, storms, large-scale inundations, rivers bursting their banks, and inaccessible roads (*le lait tans*, *le lait et mauvais*

[15] Thoen, "Technique agricole," 51-68.
[16] Coornaert, *La draperie-sayetterie d'Hondschoote*, 3-4.
[17] Soens, "Floods and Money," 341-2.
[18] Lille, Archives départementales du Nord (ADN), B6949.

tans, *les pleuvasses*, *les grans eauwes*, *damaige de tempieste*, *damaige* [...] *delle pleue* etc.).[19] In Wattendam, for example, the portage along the Aa river was reportedly on the verge of collapse due to the great current, urging the 'poor locals' to beg the comital officials for help.[20]

As a consequence of the extreme weather conditions, fields and crops were lost, especially in low-lying areas such as Coastal Flanders and the Scheldt valley. Comital officials responsible for the confiscation of goods in the Bourbourg and Cassel districts, for instance, frequently refer to 'wasted' and inundated crops and fields (*9 mesures de bleit ki estoit en l'iauwe*, *3 mesures de bleit* [...] *don't li plus grant partie fu wasteie*, *2 mesures d'orge* [...] *dont il y eut grant partie wasteit*, *li remanans à prendre en l'yauwe*, *le remanant gyssant en l'iauwe*, *li sourplus de ses warisons gist en l'yauwe et perist* etc.).[21] In Vieux-Berquin, officials reported 500 sheaves of wheat "floating in the water" that were nonetheless sold (*500 garbes de bleit vendues ki flotoient en l'yauwe*).[22] In other places as well, rotting straw and germinating sheaves of grain were put on the market.[23] To save what was left, labourers started harvesting at night[24] and began threshing immediately after the harvest, a task that was usually carried out during the calmer winter months.[25] In the village of Mater (Oudenaarde district), in the Scheldt valley, comital officials justified their high costs by the fact that the harvester wanted to be paid in hard cash (rather than in kind) and that the threshers "costed more than if they had carried out [the work] in the winter" (*pour le damaige ke li bateur couterent plus ke il n'en euyssent fait en yver*).[26] The torrential rains of spring and summer of 1315 also had a devastating impact on livestock. In Millam (Bourbourg district) 46 sheep were reportedly rescued from the river but six died nonetheless.[27] In Thiennes (Cassel district) another 28 sheep died of *claviel* (sheeppox), an outbreak presumably induced by reduced resistance and poor hygienic circumstances due to the persistent rainfall.[28]

Although it is difficult to quantify the approximate extent of crop failure, Geens calculated that in the summer of 1315 approximately one fourth of the cultivated area in the Bourbourg district was destroyed by the torrential rains.[29] However, the amount of land under cultivation does not necessarily provide a direct measure of the agricultural output. Instead, indications for production levels can be reconstructed from the deflated receipts from tithes collected by

[19] ADN, B6949, ff. 29*v*, 51*v*, 52*r*, 62*v*, 66*v*, 67*r-v*, 97*v*, 98*r* etc.
[20] ADN, B6949, f. 12*r*.
[21] ADN, B6949, ff. 9*r-v*, 10*r*, 11*r*, 29*v*, 30*r*.
[22] ADN, B6949, f. 30*r*.
[23] ADN, B6949, ff. 30*r*, 42*r*, 51*r*, 67*r*.
[24] ADN, B6949, ff. 9*r-v*.
[25] ADN, B6949, ff. 29*r-v*, 31*r*, 39v, 66*v*, 71*r*, 73*v*.
[26] ADN, B6949, f. 67*r*.
[27] ADN, B6949, f. 10*v*.
[28] ADN, B6949, f. 28*v*.
[29] Geens, "The Great Famine," 1059.

Saint John's hospital (Bruges) in Houtave and Koudekerke (Heist), both located in the coastal plain north of the city (Figure 3 and Table 4).[30] The results are striking: in both villages, the receipts of 1315, expressed in liters of wheat, are roughly between 70 and 80 percent below average (more precisely: the 'great' and 'small' tithes of Houtave stood at 76 and 75% below average, respectively, whereas the tithes of Koudekerke were 72% below average). To compare: based on manorial accounts the 'national' composite gross crop yields in England stood at about 25% below average in 1315, and around 36% below average based on a collection of tithe receipts.[31] Unfortunately, the hospital accounts of 1316 and 1318 are missing, but it appears that production recovered relatively quickly: although in 1317 tithe receipts were still roughly 10 to 20% below average, by 1319 and 1320 the receipts were again well above average.

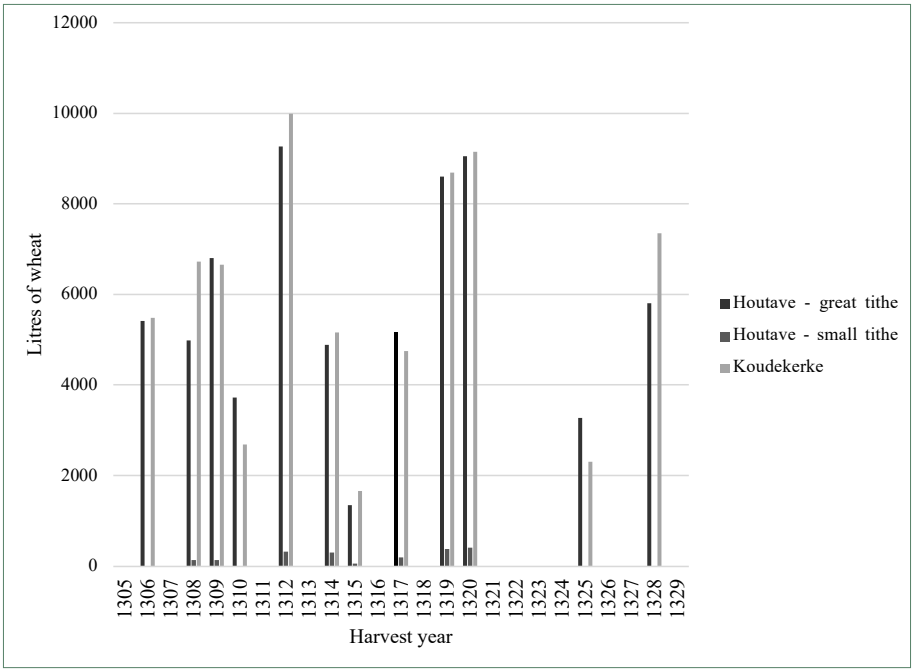

Figure 3. *Deflated receipts from tithes collected by Saint John's hospital (Bruges) in Houtave and Koudekerke (Heist) expressed in litres of wheat*
Source: CAB, *OCMW-archief*, Sint-Janshospitaal, Rekeningen 1306-28.

[30] City Archives of Bruges (CAB), *OCMW-archief*, Sint-Janshospitaal, Rekeningen 1310-20. For the deflation we used wheat prices for Bruges mentioned in Wyffels, Vandewalle, *De Rekeningen van de stad*, t. 2, 1197-9 (for the year 1310) and Soens, "Waterbeheer in een veranderende samenleving," 564-5 for the years 1312, 1314 and 1317, and the wheat prices mentioned in accounts of St John's hospital of 1319 and 1320. Note that the receipts from the tithes were recorded in *goeder paie*. To convert these sums to *groten tournois* we used Soens, *De spade in de dijk?*, XVIII.
[31] Slavin, *Experiencing Famine*, 44-59.

Table 4. *Deflated receipts of tithes collected by Saint John's hospital (Bruges) in Houtave and Koudekerk expressed in litres of wheat (1306-28)*

	Houtave – 'great tithe'		*Houtave – 'small tithe'*		*Koudekerke*	
Harvest year	litres of wheat	% of mean	litres of wheat	% of mean	litres of wheat	% of mean
1306	5.415,62	95			5.483,55	93
1308	4.987,83	88	137,28	56	6.726,70	114
1309	6.804,75	119	135,79	56	6.653,68	113
1310	3.722,83	65			2.688,71	46
1312	9.268,07	163	326,34	134	9.990,37	170
1314	4.890,53	86	301,00	124	5.160,00	88
1315	1.348,56	24	61,01	25	1.661,61	28
1317	5.161,29	91	193,55	79	4.748,39	81
1319	8.602,15	151	387,10	159	8.688,17	148
1320	9.054,90	159	407,47	167	9.145,44	155
1325	3.278,94	58			2.307,40	39
1328	5.806,45	102			7.354,84	125
Mean	5.695,16	100	243,69	100	5.884,07	100

Source: see Figure 3.

The sample, of course, is small and the relationship between tithe collections and arable production volumes is neither simple nor linear. During the dire years 1315-7 we might expect resistance from producers to pay their dues. Also, grain prices in Flanders do not perfectly reflect levels of domestic arable production. Because Flanders, like other densely populated and heavily urbanized regions in Europe, relied on import from neighbouring regions – northern France in particular – grain prices were also influenced by import volumes.[32] Since imports were hampered as a result of the Franco-Flemish wars (see below), the level of grain prices in Flanders probably does not accurately reflect the decrease in domestic production. Despite these caveats, however, there is little doubt that the trends of the deflated tithe receipts of Houtave and Koudekerke can be taken as evidence of a strong and calamitous decline in yields.

As a result of the harvest failure, prices quickly reached unprecedented heights. Contemporary administrative documents and later chronicles unequivocally refer to the famine years as "the expensive times" (*die diere tijt*,

[32] Note that Lombardy, like Flanders, was also heavily dependent on long-distance food imports, exposing cities like Genova and Parma to severe food insecurity whenever political or military events hindered trade flows, see Albini, "Carestie in area lombarda," 171-207.

le chier tans).[33] This was not without cause. In 1316 the price of rye was eight times higher compared to 1312 (Figure 4). This spectacular rise in prices during the famine year 1316 was not only the result of a drop in domestic production, but was also influenced by the political and military conflict with France. This conflict, and the subsequent export restrictions enacted by the French king, exacerbated the shortage of food and drove up food prices. As a result of the hostilities with Flanders, the king ordered a ban on export of foodstuffs to Flanders. In northern France, trade activities with Flanders came to a grinding halt during the famine years.[34] The French king also succeeded in isolating Flanders. Export of food to Flanders via the Duchy of Brabant or through Brabantine trade networks was prohibited in February 1315.[35] Cities in Brabant, such as Mechelen, also increased their policing efforts to ensure that no grain was exported to Flanders.[36] Import of grain through other border regions of Flanders also dried up. The political alliance of France with the count of Holland, Hainaut and Zealand ensured that no grain was exported from these regions to Flanders. The latter regions, however, were granted permission to buy grain and other victuals in northern France as early as October 1314.[37]

In other words, the French king strategically and successfully managed to isolate Flanders from grain import over land from neighbouring principalities. The only way Flanders could import grain was via the North Sea. However, the import of grain from Southern Europe or other grain exporting regions was also deliberately sabotaged by the French king. From the city of Calais, the French king had ordered his naval admiral to intercept ships loaded with victuals heading to Flanders.[38]

As a result of the strategic actions initiated and lead by the French kings, the county of Flanders experienced formidable challenges in obtaining sufficient food from abroad. The deliberate 'starvation strategy' of the French king should be taken into account to explain the unprecedented inflation of food prices in 1316. The hunger strategy of the France also proved successful. Despite state-sponsored attempts to hijack food transports at sea,[39] Flanders agreed to resume peace talks with France in the early fall of 1316 and, subsequently, grain could be imported again from northern France. As a direct result, mortality dropped in the cities of Bruges and Ypres.[40] In 1317, prices

[33] See e.g. CAB, *OCMW-archief*, Onze-Lieve-Vrouw van de Potterie, reg. 18, f. 8 and Magdalenaleprozerie, Charters, 422; Ghent University Library, ms. 3289 (*Memorieboek der stad Gent, 1301-1568)*, f. 9r; Meeus, "De 'Rymkronyk van Vlaenderen'," 45; Des Marez, De Sagher, *Comptes de la ville d'Ypres*, vol. 2, 34. These examples could be multiplied.
[34] Derville, *L'agriculture du Nord*, 87-8.
[35] de Laurière, *Ordonnances des roys de France*, 619-20.
[36] Peeters, "Het financieel-economisch profiel," 106-7.
[37] Sneller, Unger, *Bronnen tot de geschiedenis*, 5-6.
[38] Arnoux, "Famines, blés marocains;" Heebøll-Holm, *Ports, Piracy, and Maritime War*, 36 and 42.
[39] Speecke, "Isti ponerentur in officio scabinatus," 31, footnote 8.
[40] Van Werveke, "La famine de l'an 1316," 8-9.

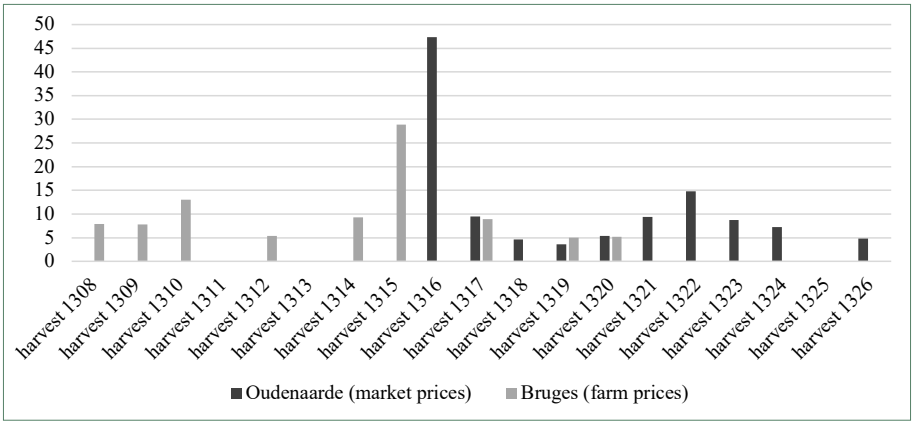

Figure 4. *Price of rye in Oudenaarde and Bruges (d. groten/100 litres) (1308-26)*
Sources: for Bruges: Schoutteten, "Het Sint-Janshospitaal," appendix 15; for Oudenaarde: see City Archives Oudenaarde (CAO), *Archives OLV Hospital*, 149bis.

normalized again (Figure 4). The precarious position of Flemish consumers during the famine years 1315 and 1316 is not only reflected in the price levels, but also in the volatility of food prices during these years. In the city accounts of Ypres, there are clear indications that the food supply was severely interrupted resulting in high price volatility. Between November 1315 and November 1316 bread weights were adjusted no less than forty-nine times by the city official. This meant that, on average, bread prices in Ypres changed every seven to eight days.[41]

However, just when grain prices were returning to pre-famine levels, the Low Countries were struck hard by another disaster that wreaked havoc in large parts of northern Europe. Based on over 3,000 manorial accounts Philip Slavin was able to calculate that, between 1319 and 1320, England and Wales lost about 62% of their bovine population, which caused a drastic fall in manure resources and animal traction, but also resulted in a significant decline in dairy production.[42] Although such detailed quantitative records are lacking for the County of Flanders, a similar mortality rate is not unlikely. One of the rare sources that gives us a glimpse of the impact of the cattle plague is a financial report of the governors of the leprosarium of Bruges presented to the aldermen of the city sometime in late 1318 or 1319. In this report the governors stated that "during the [years of the] cattle mortality sixty-one breeders died in our farm in Houtave and in our Bruges' farm nine cows died during the first year [i.e. 1317], and in the following year [1318] another seven

[41] Des Marez, De Sagher, *Comptes de la ville d'Ypres*, vol. 1, 600.
[42] Slavin, "The Great Bovine Pestilence," 1242.

out of eight newly purchased cows died [as well]".[43] The massive loss of cattle was especially problematic in Coastal Flanders since this was a cattle breeding region. While we know that the cattle herds of the large estates owned by Saint John's hospital had largely recovered by 1333 (Table 5), peasants would probably have had much more difficulty getting their livestock back to pre-pestilence levels due to the lack of capital. As we will explore in the next section, capital resources of peasantries were probably severely impacted as a result of the famine years 1315 and 1316.

Table 5. *Cattle held at the estates of Saint John's hospital of Bruges (1310-33)*

Estate	1310	1313	1315	1333
Altena				25
Briele	38	35	27	34
Donk	38	34	36	28
Moere	62	62	57	
Oedelem	16	16	15	22
Oostkamp	30	33	31	
Zuienkerke (Scueringhe)	104	96	101	99
Snellegem	18	21	19	22
Trente	22	24	20	29
Wenduine	11	16	19	
Westscure	43	44	36	
Total	382	381	361	259

Source: Mertens, "Enkele grote Vlaamse hoeven," 45-60.

3. *The socially differentiated impact of the famine*

The spectacular rise in grain prices in 1315 and 1316 had a profound effect on both the urban and rural populations in Flanders. Already in the summer of 1315, rural populations resorted to desperate measures to secure their food supply. The abovementioned confiscation records of 1315, for instance, mention the plunder of 10 'measures' of wheat, oats and beans by *chiaus de Saint Pierebruech*, indicating that a substantial number of villagers of Saint-Pierre-Brouck (Bourbourg district) participated in the forceful appropriation of these crops.[44] In Armbouts-Cappel (Bergues district) 170 'measures' of land were equally described as plundered by the commoners (*wasteies dou*

[43] *Item in die steerfte van den beesten so storven upt hof te Houtawe LXI hooft quekenoods ende upt hof te Brueghe so storven binnen upt eerste jaer IX coen ende upt ander jaer so storver VII coen van den VIII coen diere weder ghecocht waren* (CAB, *OCMW-archief*, Magdalenaleprozerie, Oorkonden, 422). For an analysis and dating of the report, see: Maréchal, "Het hospitaalwezen," 1415-9.
[44] ADN, B6949, f. 3*v*.

commun).[45] In the lordship of Rode (Kachtem), in the district of Ypres, so-called "skimmers" (*li escumeur*) forcefully entered a granary and took 550 of the 1.900 sheaves of oats stored there.[46] In the parishes of Velzeke and Denderwindeke (district of Alost), too, the comital officers report damage to the fields inflicted by looters.[47] In other areas, grain stocks had to be guarded by armed men (*par forche*), as was the case for the confiscated wheat of lord Walter of Gistel in the Belle and Warneton districts.[48]

Although comprehensive documentation for the following months is largely lacking, it appears that commoners had become increasingly inventive in coping with food shortages. In May 1316 Count Robert of Béthune ordered his bailiffs and court officers in Flanders to arrest and publicly punish all persons who went to abbeys for sustenance under the false pretext of belonging to the count's household.[49]

The theft of crops on the fields and grain stored in barns by large groups of rural dwellers in Coastal Flanders underscores the severity of food insecurity following the 1315 harvest failure. This is unsurprising in light of the patterns of landownership that we reconstructed for this region, which reveal inherent vulnerabilities and exposure to food shortages for the majority of rural households. We can illustrate this by analyzing the value of land owned by peasantries in relation to food prices during these years. In Table 6 we converted the land owned by peasants in Coastal Flanders into capital (using 1312-3 land prices from the Ypres region) and calculated how much rye could be purchased with the total capital value of the land owned by individual households.[50]

For example, in 1312, the capital value of the median landowner (Q2) was equivalent to 26.537,82 liters of rye. Based on a daily consumption of 0,9 liters of rye per person and a household size of four, the capital value of the median peasant landowner enabled him to feed his family for 7.371,62 days. For the lowest quartile (Q1) the capital value of the land owned was equivalent to 11,794.5 liters of rye, sufficient to feed a family of four for 3.276,27 days. However, using 1316 rye prices, a starkly different picture emerges, particularly for Q1 households. In 1316, the capital value of their land had dropped to a rye equivalent of 1.350,29 liters. This quantity would have sufficed to feed an average household during approximately one year (375,25 days). Beyond that, hunger was inevitable.

In reality, the material and economic situation of households at the bottom of the property ladder was likely worse than these calculations suggest.

[45] ADN, B6949, f. 16*r*.
[46] ADN, B6949, f. 40*r*.
[47] ADN, B6949, f. 67*r*.
[48] ADN, B6949, ff. 39*v*, 40*r*, 51*v*, 57*r*, 58*r*.
[49] Vleeschouwers, *De oorkonden*, 705, no. 638.
[50] The land price in the region of Ypres in 1312-3 was 16 pounds *parisis* per 'measure' or 727,27 *groten*/hectare, see Des Marez, De Sagher, *Comptes de la ville d'Ypres*, vol. 1, 444-7. For the daily grain consumption, see Vandenbroeke, *Sociale geschiedenis*, 237.

After all, land prices probably fell between 1312 and 1316 as rural households sold their properties to ensure their survival. Furthermore, this reconstruction does not account for other expenses, such as housing, heating, clothing, and other essential foodstuffs. Therefore, it is fair to assume that these calculations overestimate the real exchange value of land during this period.

Table 6. *Capital reserve of the rural population in the Bergues district in 1312 and 1316*

Quartiles	Land ownership (ha.)	Capital value (d. *groten*)	Capital value (litres of rye)		Capital reserve (number of days)	
	1304	*1312-3*	*1312*	*1316*	*1312*	*1316*
Min.	0,04	26,63	491,44	56,29	136,51	15,64
Q1	0,88	639,15	11.794,58	1.350,89	3.276,27	375,25
Q2	1,98	1.438,08	26.537,82	3.039,51	7.371,62	844,31
Q3	4,13	2.996,01	55.287,12	6.332,32	15.357,53	1.759,02
Max.	132,12	95.872,28	1.769.187,74	202.634,12	491.441,04	56.287,26

Note: The capital reserve is calculated for a household of four, based on a land price of 16 l. par. per 'measure' (= 727,27 *groten*/ha.) and a daily consumption of 0,9 litres of grain per person.
Sources: Des Marez, De Sagher, *Comptes de la ville d'Ypres*, vol. 1, 444-7; Vandenbroeke, *Sociale geschiedenis*, 237.

Although imperfect, these calculations are instructive as they demonstrate that the high food prices in 1315 and 1316 effectively drained the capital stored in land. The exchange value of land, measured in rye equivalents, dropped precipitously in 1316 compared to preceding years. This was especially dire news for those dependent on the market for their survival. Consumers in the cities too evidently struggled to make ends meet. In Bruges, the total sum of land rent arrears owed to the city increased tenfold between the financial years 1315-6 and 1316-7. Likewise, the number of defaulters rose sharply from five in 1315-6 to sixty-nine the following year (Figure 5).[51]

These data reflect not only financial stress but are also indicative of the mortality crisis that struck Bruges. As mentioned earlier, more than 1.800 bodies were collected and buried at city expense in 1316. Municipal legislation enacted during these years also hints at financial distress and crisis mortality. In October 1316, Bruges authorities issued new inheritance laws addressing situations where both husband and wife had died. The ordinance also included provisions concerning the acceptance or rejection of debts by heirs.[52]

In Ypres, the city government took advantage of widespread urban rent defaults to conduct a sanitation operation in Upstal, a proletarian suburb. In this part of the city, the inhabitants were reportedly "so impoverished – and many had died of poverty – that neither they nor their heirs could uphold the

[51] Wyffels, Vandewalle, *De Rekeningen van de stad*, t. 2, 1267, 1338, 1401, 1474, 1509-11, 1586-7.
[52] Gilliodts Van Severen, *Coutumes des pays*, vol. 1, 336-41.

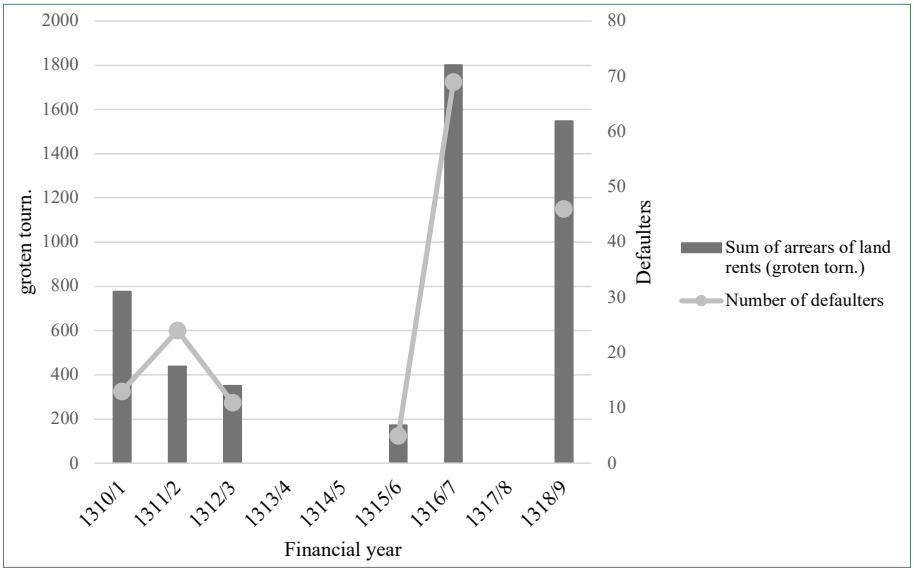

Figure 5. *Evolution of arrears of urban land rents and the number of defaulters in the city of Bruges (1310-9)*
Source: Wyffels, Vandewalle, *De Rekeningen van de stad*, t. 2, 1267, 1338, 1401, 1474, 1509-11, 1586-7.

land rents".[53] Municipal governments also used the subsistence crisis to tighten control over urban poverty relief by replacing private charity directly and by assigning a greater role to the parish poor tables that were arguably less selective and reached a wider audience than the poverty relief offered by the urban hospitals. In Douai, in the nearby county of Artois, a *Bourse commune* was reportedly established in 1317.[54] In Ypres extensive loans were granted to the poor tables of the Holy Spirit,[55] whereas in Bruges the municipal authorities transferred wheat rents from the Hospital of the Holy Spirit to the parish poor tables to be distributed weekly "for the common good and benefit of the poor".[56]

The available evidence from Flanders clearly indicates that those who were dependent on the market for access to food struggled during these years, both in urban and rural environments. There is no doubt that during the Great Famine, when the 'structural poverty' of those without sufficient land,

[53] *Item, rechut des vieses maisons, que on a vendues del Upstal à abatre et autrement, et pour liewage d'erbe, dont cil qui tinrent l'erbe et les maisons sont si apovri et pluseurs en sont mort par povreté qu'il, ne leur hoir, n'ont pooir de tenir le cense* (Des Marez, De Sagher, *Comptes de la ville d'Ypres*, vol. 2, 35).
[54] Dhérent, "Maladies et mortalités," 83.
[55] Des Marez, De Sagher, *Comptes de la ville d'Ypres*, vol. 2, 34.
[56] CAB, *OCMW-archief*, Onze-Lieve-Vrouw van de Potterie, reg. 18, f. 8.

employment or other means of support converged with "episodic or seasonal deprivation" caused by bad harvests and natural disaster, rural and urban populations in this county faced massive impoverishment, physical and mental distress, and ultimately, widespread mortality.[57] However, not everyone suffered equally during the grain shortages of 1315 and 1316.

Some groups benefited significantly from the high prices and food shortages of these years. Accounts of large landowning institutions, such as hospitals and abbeys, reveal that the famine years resulted in increased revenues. For example, the Cistercian abbey of Ter Doest in Lissewege (near Bruges), which had been plagued by debt since the late thirteenth century forcing the abbey to sell land and to shift from direct demesne farming to leasehold,[58] reported significant profits in 1315. In contrast to its 1279 deficit of over 228 pounds *parisis*,[59] the abbey's estates, which were scattered across the district of Vier Ambachten (Flanders) and Zuid-Beveland (Zealand), achieved a profit exceeding 411 pounds *parisis* in 1315. With the exception of one demesne farm, all holdings exploited by the abbey delivered profit in 1315.[60]

In much the same way the demesne farms of Saint John's hospital in Bruges even recorded their highest profits ever (Figure 6). Detailed crop and stock inventories for these demesne farms for 1310, 1313, 1315, and 1333 allow for comparisons of net financial profit relative to farm size.[61] Figure 7 shows that in 1315, four out of ten demesne farms achieved net profits exceeding 30 *groten tournois* per 'measure' of land, while in the other years under scrutiny net profits rarely surpassed 20 *groten tournois* per 'measure'. Unsurprisingly, the highest profits per unit of land were obtained in Zuienkerke (Scueringhe), the demesne farm with the largest surface area (551 'measures') and the highest percentage of sown land (74%, nearly half of which was sown with wheat). By contrast, the lowest profits (4 *groten tournois* per 'measure') were reported at farms with either the smallest surface area (Snellegem: 65 'measures') or the lowest percentage of sown land (Oostkamp: 45%).

This suggests that large farms producing food surpluses for the market thrived during these crisis years. Scarcity resulting from harvest failures and trade disruptions translated into high profits for large farms. Existing stocks of grains may also have contributed to the financial success of these institutions. For example, in August 1316, the monks of Ter Doest, faced significant criticism for exploiting the crisis by selling food stocks, originally intended

[57] For the distinction between 'structural poverty', 'life-cycle poverty', and 'episodic' or 'seasonal deprivation', see Dyer, "Did the rich really help the poor in medieval England?," 307.
[58] Dekker, Kruisheer, "Een rekening," 282-7.
[59] Public Library of Bruges, ms. 616, f. 1*r*. The revenues of the *grangiae* were 1.576 l. 12 s. *parisis*, but the expenses amounted to 1.804 l. 18 s. 2 d. *parisis*.
[60] Dekker, Kruisheer, "Een rekening," 306.
[61] Mertens, "Enkele grote Vlaamse hoeven," 45-60. The inventory dated "1300" should be read as "1313". See Augustijn, Rombaut, Vandermaesen, *Bronnen voor de agrarische geschiedenis*, 55-6 and Schoutteten "Het Sint-Janshospitaal."

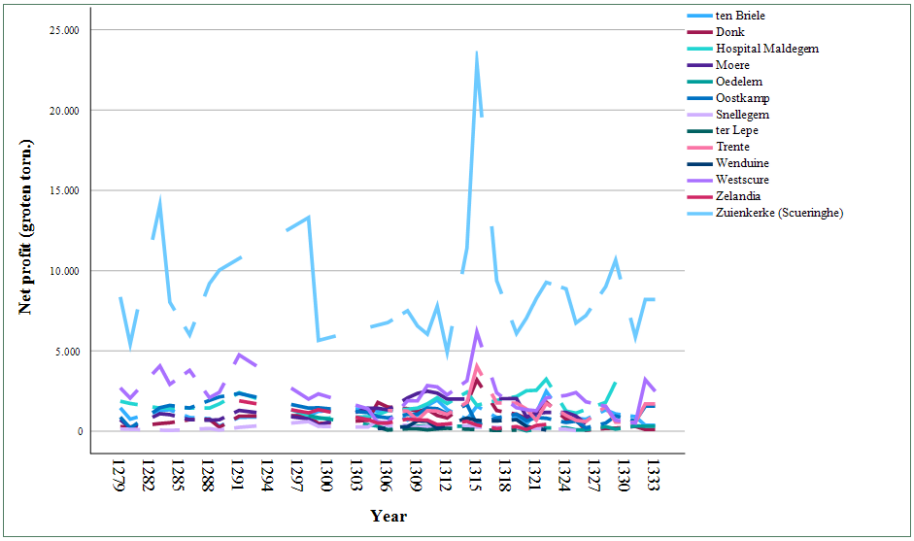

Figure 6. *Profits of the demesne farms of Saint John's hospital (Bruges) between 1279 and 1333*
Note: profits were recorded in d. *parisis* (1279-1309), *lichter paie* (1310-22) and *goeder paie* (1324-33). To be able to compare we converted them into *groten tournois* (conversion based on Soens, *De spade in de dijk?*, XVIII.
Source: CAB, *OCMW-archief*, Sint-Janshospitaal, Rekeningen 1279-1333.

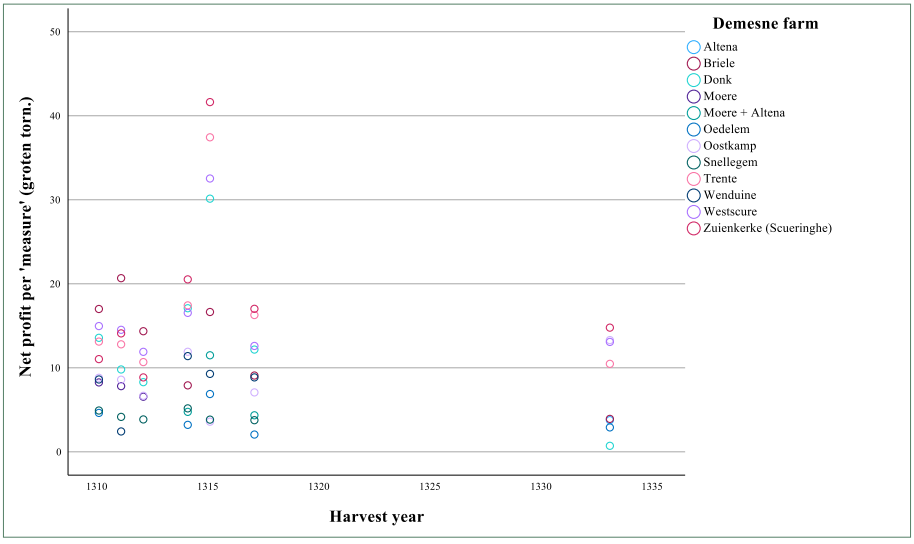

Figure 7. *Net financial profits per 'measure' of the demesne farms of Saint John's hospital (Bruges)*
Source: see Figure 6.

as alms for the poor, on the private market.[62] In sum, the demesne accounts of Flemish abbeys and hospitals show that the Great Famine also generated 'winners'. In particular, large farms and estates that produced surpluses for the market gained financially from the distress experienced by urban and rural consumers.

The harvest failure of 1315-6 not only provided short-term financial gains for large farm owners but also allowed institutional landowners such as abbeys and hospitals to strengthen their financial positions and expand their properties. Saint John's hospital in Bruges, for example, used the exceptional profits from its estates to pay off debts that had burdened its treasury.[63] Simultaneously, the hospital invested in acquiring annuities and immovable property, converting profits from its demesne farms directly into capital assets. Between 1315 and 1320 the hospital accounts recorded the acquisition of multiple plots of land in Wenduine, Zuienkerke, Sint-Andries, Maldegem, Oedelem, and Zealand to expand its demesne farms.[64]

In 1316 the leprosarium of Bruges also purchased more than 110 'measures' (44 hectares) of land to establish a new demesne farm in Loppem – probably the single largest land acquisition by the institution since its founding before 1227.[65] Similarly, the hospital of Oudenaarde, a town located along the Scheldt River in Interior Flanders, acquired small plots of land between 1315 and 1318. These acquisitions were strategic, as they were concentrated in villages where the hospital already owned significant immovable assets. The accounts of later years (1319 to 1327) show no further active land acquisitions.[66]

Although solid evidence only exists for rural land purchases by urban institutions, indications suggest that wealthy urban residents also sought to extend their rural estates during the famine years. Indirect evidence of this comes from a conflict between the city of Furnes and its rural district in 1316 and, again, in 1319 over extraterritorial jurisdiction. A recurring issue in these disputes was the tax exemption claimed by the burghers of Furnes for their rural estates (*que cil de nostre dite ville maintenoient aussi que cil de dehors ne pooient tailler leur bourgois de biens que il eussent gisant audit terroir*).[67] As these tax-exempt estates expanded, the taxable land area decreased, increasing the fiscal burden on the remaining peasantries.

In the neighbouring rural district of Bruges, tensions and conflicts with the city of Bruges over taxation, 'outburghership', and rural handicraft production also emerged and were settled in the so-called *Seventeen Points of*

[62] Archives Grootseminarie Bruges, *Ter Duinen*, Oorkonden, nr. 1582.
[63] Debts fell from 6.385 l. 14 s. 3 d. in 1314-5 to 1.353 l. 6 s. 6 d. in 1319-20, see: CAB, *OCMW-archief*, Sint-Janshospitaal, Rekeningen 1314-5, Schulden, s.f. and Rekeningen 1319-20, Schulden, s.f.
[64] CAB, *OCMW-archief*, Sint-Janshospitaal, Rekeningen 1315-6/1320-1, Uitgaven. In 1319-20 the hospital even built a new 'guesthouse' in Zuienkerke (Rekening 1319-20)
[65] Maréchal, "Het hospitaalwezen," 1418.
[66] CAO, *Archives OLV Hospital*, 149bis.
[67] Gilliodts Van Severen, *Coutumes des pays*, vol. 3, 74-8.

Agreement issued in February 1318.[68] The tensions between cities and their rural hinterlands in Coastal Flanders, as exemplified by the conflicts mentioned above, are quite possibly connected to the extension of urban capital into the countryside during and shortly after the Great Famine. More research is required, but the agreements between Furnes and Bruges with their rural hinterlands suggest that urban centers expanded their reach into the countryside during this period.[69]

4. *Conclusion*

The County of Flanders holds a central place in the historiography of the Great Famine. Notably, the detailed accounts of corpses collected by the city governments of Bruges and Ypres in 1316 have attracted scholarly attention. The thousands of corpses buried at the expense of these cities serve as hard quantitative evidence of the excess mortality recorded during the famine years. However, the particularities of the Flemish experience extend beyond the well-documented demographic effects.

This chapter has shown that the rural populations of Flanders – particularly in coastal regions– were structurally vulnerable to shocks. Population growth had fragmented landownership, and fiscal data from 1304 reveal that approximately 80% of resident landowning households possessed less than 5 hectares. When excessive rainfall resulted in a sharp decrease in yields, rural populations in Coastal Flanders clearly panicked, as evidenced by the numerous references to crop theft and barn pillaging. The effects of the harvest shortfalls of 1315 and 1316 were exacerbated by the Franco-Flemish conflict. As we have shown, the French king successfully managed to halt export of grain to Flanders from its neighbouring regions. Famine in Flanders was not only the result of domestic harvest failure, but also of the successful economic isolation strategy adopted by France.

The last section of our chapter has argued that the famine not only produced victims but also generated winners. Whereas net consumers faced dire times in 1315 and 1316, net producers of grain profited from food scarcity and high prices. The farming profits generated during the crisis accrued largely to urban landowners, both lay and ecclesiastical. These profits enabled those urban actors to acquire additional land in the countryside. Although our evidence is indirect and more research is required, the period of the Great Famine was likely characterized by a net transfer of land from rural to urban populations in Coastal Flanders. Also, the redistribution of political power and fiscal autonomy in favour of the cities in Coastal Flanders suggests that rural districts and their populations were weakened as a result of the Great Famine.

[68] Gilliodts Van Severen, vol. 1, 379-92.
[69] On urban bias in this region see also Lambrecht, "*Si grant inegalité?*," 153-67.

Despite these hardships, rural communities were not defeated. Confronted with high food prices and unequal fiscal pressures in the early 1320s, the peasantry of Coastal Flanders took up arms against the count of Flanders and the socio-economic elites governing this region. While speculative, it is possible that the willingness of entire villages to rebel against fiscal and economic injustices was fueled by the collective memory of deprivation, scarcity, and poverty during the famine and its aftermath.

Works cited

Albini, Giuliana. "Carestie in area lombarda tra fine Duecento e metà Trecento. Uno sguardo attraverso le cronache coeve." In *La congiuntura del primo Trecento in Lombardia (1290-1360)*, a cura di Paolo Grillo, e François Menant, 171-207 (Collection de l'École française de Rome, 555). Rome: École française de Rome, 2019. https://doi.org/10.4000/books.efr.37555

Arnoux, Mathieu. "Famines, blés marocains, marins génois et pirates français à Sandwich (1316-1318)." Dans *Orbis disciplinae : hommages en l'honneur de Patrick Gautier Dalché*, éd. par Nathalie Bouloux, Anca Dan, et Giorgos Tolias, 509-26. Turnhout: Brepols, 2017.

Augustijn, Beatrijs, Hans Rombaut, en Maurice Vandermaesen. *Bronnen voor de agrarische geschiedenis van het middeleeuwse graafschap Vlaanderen*, vol. 2. Gent: Belgisch centrum voor landelijke geschiedenis, 1990.

Baek, Seung H., Jason E. Smerdon, George-Costin Dobrin, Jacob G. Naimark, Edward R. Cook, Benjamin I. Cook, Richard Seager, Mark A. Cane, and Serena R. Scholz. "A Quantitative Hydroclimatic Context for the European Great Famine of 1315-1317." *Communications Earth & Environment* 19, no. 1 (2020): 1-7. https://doi.org/10.1038/s43247-020-00016-3

Bourin, Monique, et François Menant. "Les disettes dans la conjoncture de 1300 en Méditerranée occidentale." Dans *Les disettes dans la conjoncture de 1300 en Méditerranée occidentale*, éd. par Monique Bourin, John Drendel, et François Menant, 9-33 (Collection de l'École française de Rome, 450). Rome: École française de Rome, 2011. https://doi.org/10.1400/187646

Bruns, Friedrich, ed. *Die Chroniken der niedersächsischen Städte. Lübeck*, vol. 2 (Die Chroniken der deutschen Städte vom 14. bis ins 16. Jahrhundert, 26). Leipzig: S. Hirzel, 1899.

Campbell, Bruce M.S. *The Great Transition: Climate, Disease and Society in the Late-Medieval World*. Cambridge: Cambridge University Press, 2016. https://doi.org/10.1017/CBO9781139031110

Coornaert, Émile. *La draperie-sayetterie d'Hondschoote (XIVe-XVIIIe siècles) : un centre industriel d'autrefois*. Paris: Les presses universitaires de France, 1930.

Curschmann, Fritz. *Hungersnöte im Mittelalter. Ein Beitrag zur deutschen Wirtschaftsgeschichte des 8. bis 13. Jahrhunderts* (Leipziger Studien aus dem Gebiet der Geschichte, band 6,1). Leipzig: B.G. Teubner, 1900.

de Laurière, Eusèbe, éd. *Ordonnances des roys de France de la troisième race*, vol. 1. Paris: Imprimerie royale, 1723.

Dekker, Cornelis, en Jaap G. Kruisheer. "Een rekening van de abdij Ter Doest over het jaar 1315." *Bulletin de la Commission Royale d'Histoire* 133 (1967): 273-306. https://doi.org/10.3406/bcrh.1967.1505

Derville, Alain. *L'agriculture du Nord au Moyen Âge. Artois, Cambrésis, Flandre wallonne*. Villeneuve d'Ascq: Presses universitaires du Septentrion, 1999.

Des Marez, Guillaume, et Emile De Sagher, éd. *Comptes de la ville d'Ypres de 1267 à 1329*, 2 vol. Brussels: Kiessling et Imbreghts, 1909-13.

Dhérent, Catherine. "Maladies et mortalités à Douai au XIVe siècle." In *Santé, médecine et assistance au Moyen Âge. Actes du 110e Congrès national des Sociétés savantes, Montpellier, 1985. Section d'histoire médiévale et de philologie*, vol. 1: 81-92. Paris: Éditions du C.T.H.S., 1987.

Dyer, Christopher. "Did the rich really help the poor in medieval England?" En *Ricos y pobres: opulencia y desarraigo en el Occidente medieval. Actas de la XXXVI Semana de Estudios Medievales de Estella, 20 al 24 de julio de 2009*, 307-322. Pamplona: Gobierno de Navarra, 2010.

Freedman, Paul. "Rural Society." In *The New Cambridge Medieval History*, vol. 6, *c. 1300-c. 1415*, ed. by Michael Jones, 82-101. Cambridge: Cambridge University Press, 2000. https://doi.org/10.1017/CHOL9780521362900.006

Geens, Sam. "The Great Famine in the County of Flanders (1315-17): The Complex Interaction between Weather, Warfare, and Property Rights." *Economic History Review* 71, no. 4 (2018): 1048-72. https://doi.org/10.1111/ehr.12605

Gilliodts Van Severen, Louis. *Coutumes des pays et comté de Flandre. Quartier de Bruges*, vol. 1. Brussels: Fr. Gobbaerts, 1874.

Gilliodts Van Severen, Louis. *Coutumes des pays et comté de Flandre. Quartier de Furnes*, vol. 3. Brussels: Fr. Gobbaerts, 1897.

Heebøll-Holm, Thomas Kristian. *Ports, Piracy, and Maritime War: Piracy in the English Channel and the Atlantic, c. 1280-c. 1330* (Medieval Law and Its Practice, 15). Leiden: Brill, 2013. https://doi.org/10.1163/9789004248168

Jordan, William C. *The Great Famine. Northern Europe in the Early Fourteenth Century*. Princeton (NJ): Princeton University Press, 1996.

Kershaw, Ian. "The Great Famine and Agrarian Crisis in England 1315-1322." *Past and Present* 59, no. 1 (1973): 3-50. https://doi.org/10.1093/past/59.1.3

Lambrecht, Thijs. "*Si Grant Inégalité?*: Town, Countryside and Taxation in Flanders, c. 1350 – c. 1500." In *Inequality and the City in the Low Countries (1200-2020)*, ed. by Bruno Blondé, Sam Geens, Hilde Greefs, Wouter Ryckbosch, Tim Soens, and Peter Stabel, 153-67 (Studies in European Urban History (1100-1800), 50). Turnhout: Brepols, 2020. https://doi.org/10.1484/M.SEUH-EB.5.120443

Lucas, Henry Stephen. "The Great European Famine of 1315, 1316 and 1317." *Speculum* 5, no. 4 (1930): 343-77. https://doi.org/10.2307/2848143

Lyon, Bryce. "Medieval Real Estate Developments and Freedom." *American Historical Review* 63, no. 1 (1957): 47-61. https://doi.org/10.2307/1847111

Maréchal, Griet. "Het hospitaalwezen te Brugge in de middeleeuwen. Een institutionele en sociale studie." PhD thesis, Ghent University, 1974.

Meeus, Willem. "De 'Rymkronyk van Vlaenderen'. Een editie en inhoudelijke studie van een korte rijmkroniek." MA thesis, Ghent University, 2012.

Mertens, Jacques. "Les confiscations dans la Châtellenie du Franc de Bruges après la bataille de Cassel." *Bulletin de la Commission Royale d'Histoire* 134, no. 3-4 (1968): 239-84. https://doi.org/10.3406/bcrh.1968.1512

Mertens, Jacques. "Enkele grote Vlaamse hoeven in de eerste helft van de veertiende eeuw." *Handelingen van het Genootschap voor Geschiedenis te Brugge* 130 (1993): 45-60. https://doi.org/10.21825/hvgg.v130i1-2.4576

Mertens, Jacques, and Adriaan Verhulst. "Yield-Ratios in Flanders in the Fourteenth Century." *Economic History Review* 19, no. 1 (1966): 175-82. https://doi.org/10.2307/2592798

Newfield, Timothy P. "A Cattle Panzootic in Early Fourteenth-Century Europe." *Agricultural History Review* 57, no. 2 (2009): 155-90. https://www.jstor.org/stable/25684194

Peeters, Jean Paul. "Het financiëel-economisch profiel van de stad Mechelen tussen 1311 en 1336." *Handelingen van de Koninklijke Kring voor Oudheidkunde, Letteren en Kunst van Mechelen* 97 (1993): 55-123.

Pirenne, Henri. *Le soulèvement de la Flandre Maritime de 1323-1328* (Commission royale d'histoire. Publications in-octavo, 22). Brussels: Kiessling, 1900.

Schofield, Philipp. "Wales and the Great Famine of the Early Fourteenth Century." *Cylchgrawn Hanes Cymru | Welsh History Review* 29, no. 2 (2018): 143-67. https://doi.org/10.16922/whr.29.2.1

Schoutteten, Koen. "Het Sint-Janshospitaal te Brugge : een domeinstudie, eind 13de – begin 14de eeuw." MA thesis, Ghent University, 2003.

Slavin, Philip. *Experiencing Famine in Fourteenth-Century Britain* (Environmental Histories of the North Atlantic World, 4). Turnhout: Brepols, 2019.

Slavin, Philip. "The Great Bovine Pestilence and Its Economic and Environmental Consequences in England and Wales, 1318-50." *Economic History Review* 65, no. 4 (2012): 1239-66. https://doi.org/10.1111/j.1468-0289.2011.00625.x

Sneller, Zeger W., en Willem Sybrand Unger. *Bronnen tot de geschiedenis van den handel met Frankrijk*, vol. 1 (Rijks geschiedkundige publicatiën. Grote Serie, 70). Den Haag: Martinus Nijhoff, 1930.

Soens, Tim. "Floods and Money: Funding Drainage and Flood Control in Coastal Flanders from the Thirteenth to the Sixteenth Centuries." *Continuity and Change* 26, no. 3 (2011): 333-65. https://doi.org/10.1017/S0268416011000221

Soens, Tim. *De spade in de dijk? Waterbeheer en rurale samenleving in de Vlaamse kustvlakte (1280-1580)*. Gent: Academia Press, 2009.

Soens, Tim. "Waterbeheer in een veranderende samenleving. Een ecologische, sociaal-economische en politiek-institutionele studie van de wateringen in het Vlaamse kustgebied in de overgang van de middeleeuwen naar de moderne tijden. Testregio: het Brugse Vrije." PhD thesis, Ghent University, 2006.

Soens, Tim, and Erik Thoen. "The Origins of Leasehold in the Former County of Flanders." In *The Development of Leasehold in North-Western Europe, c. 1200 – 1600*, ed. by Bas van Bavel, and Philip Schofield, 31-55 (Comparative Rural History of the North Sea Area, 10). Turnhout: Brepols, 2008. https://doi.org/10.1484/M.CORN-EB.3.313

Speecke, Mathijs. "'Isti ponerentur in officio scabinatus': Brugge en het stadsbestuur onder graaf Robrecht van Bethune (1305-1322)." *Handelingen van het Genootschap voor Geschiedenis te Brugge* 156, no. 1 (2019): 3-49. http://hdl.handle.net/1854/LU-8647432

Speecke, Mathijs, en Thijs Lambrecht. "De nominatieve belastinglijsten van 1304 in het Rijksarchief Gent: reconstructie van een fiscaal-administratief dossier," forthcoming.

TeBrake, William H. *A Plague of Insurrection: Popular Politics and Peasant Revolt in Flanders 1323-1328*. Philadelphia (PA): University of Pennsylvania Press, 1993.

Thoen, Erik. "Technique agricole, cultures nouvelles et économie rurale en Flandre au Bas Moyen Age." In *Plantes et cultures nouvelles en Europe occidentale au Moyen Âge et à l'époque moderne*, 51-68 (Flaran, 12). Toulouse: Presses universitaires du Midi, 1992. https://doi.org/10.4000/books.pumi.23022

Van Werveke, Hans. "La famine de l'an 1316 en Flandre et dans les régions voisines." *Revue du Nord* 41, no. 161 (1959): 5-14. https://doi.org/10.3406/rnord.1959.2324

Vandenbroeke, Christiaan. *Sociale geschiedenis van het Vlaamse volk*. Beveren: Orion, 1981.

Verhulst, Adriaan. "Die Binnenkolonisation und die Anfänge der Landgemeinde in Seeflandern." In *Die Anfänge der Landgemeinde und ihr Wesen*, vol. I. *Vortrage und Forschungen* 7 (1964): 447-6. https://doi.org/10.11588/vuf.1986.0.15224

Vervaet, Lies. "Goederenbeheer in een veranderende samenleving. Het Sint-Janshospitaal van Brugge ca. 1275 – ca. 1575." PhD thesis, Ghent University, 2014.

Vleeschouwers, Cyriel. *De oorkonden van de Sint-Baafsabdij te Gent (819-1321)*, vol. 2. Uitgave. Brussels: Paleis der Academieën, 1990.

Wyffels, Carlos, en André Vandewalle, red. *De Rekeningen van de stad Brugge, 1280-1319*, 2, *1302-1319*, t. 2. Brussels: Paleis der Academiën, 1995-7.

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