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The *Longue Durée* in Polish Towns: Agriculture from the Sixteenth to the Nineteenth Century

Abstract: The paper deals with the ruralisation of small Polish towns in the long-term perspective. This is a particularly important trend because the urban network in Poland was, with the exception of a few cities, dominated by small towns. The present state of research suggests that for more than 50 percent of the inhabitants of these towns, agriculture was a primary source of income. This issue is reconsidered here using the example of small towns in southern Poland (in the period 1772–1918, the western part of Austrian Galicia). The following questions are addressed in detail: area and structure of agricultural land, size distribution of urban farms, general economic conditions for urban agriculture, types of farming, self-sufficiency in grain production, and strategies of urban farmers. These are examined above all on the basis of primary sources: the first Austrian land cadastre of 1785 (the Josephine Cadastre) and population censuses from the eighteenth to the twentieth century. The results of this research suggest that involvement in agriculture among town-dwellers was on the whole relatively stable until the mid-nineteenth century, but varied considerably from individual to individual depending on a range of factors (e.g. material status). They also indicate that agriculture had more of a supplementary than a primary role in urban families' income structure.

Key Words: urban farming, small towns, Poland, early modern, nineteenth century

Introduction

The urban network in Poland was – with the exception of a few cities – dominated by small towns, most of which have traditionally been considered as semi-rural settlements.[1] This opinion became widespread from the end of the eighteenth century, above all among the civil servants of the partitioning powers and the more enlightened among Polish economists.[2] It is also worth quoting a few contemporary opinions of owners or holders of royal estates on

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1 Maria Bogucka, The network and functions of small towns in Poland in early modern times (from the 16th to the first half of the 17th century), in: Antoni Mączak/Christopher Smout (eds.), Gründung und Bedeutung kleinerer Städte im nördlichen Europa der frühen Neuzeit, Wiesbaden 1991, 219–233, 225; Andrzej Janeczek, Town and country in the Polish Commonwealth, 1350–1650, in: Stephan R. Epstein (ed.), Town and country in Europe, 1300–1800, Cambridge 2001, 156–175, 171.

2 Stanisław Staszic, O statystyce Polski. Krótki rzut wiadomości potrzebnych tym, którzy ten kray chcą oswobodzić i tym, którzy w nim chcą rządzić, Warszawa 1807, 19; Wacław Tokarz, Galicya w początkach ery józefińskiej w świetle ankiety urzędowej z roku 1783, Kraków 1909, 333, 338, 339.

the incomes of townspeople: "Some citizens of this town are engaged in craft and agriculture, others in agriculture and selling alcohol, but almost none in trade" (Myślenice, a town in the castellany of Kraków), "Citizens […] produce and sell alcohol, they conduct trade and craft, but above all they live off the land" (Pilzno, a royal town), "Shoemakers […] work [in their craft] until the summer and during the summer they are employed on the land; weavers […] work [in their craft] no longer than four months [in the year]; they live primarily off the land" (Przecław, a noble town).[3] All these present bleak views of the townspeople's non-agricultural occupations, but the question is whether they did not have an interest in expressing such judgements.

However, the role of agriculture in Polish towns has tended to be ignored by historians, whose knowledge of the issue remains largely superficial, and whose area of research extends no further than the paradigm of the ruralisation of small urban centres.[4] The accuracy of this view, which is still widespread, is questionable. On closer investigation of individual towns, while it is hard to ignore the significance of agricultural activity – the more so given that most extant local source materials from before the mid-nineteenth century concern trade in real property, including gardens and arable land –, it nonetheless becomes clear that craft and trade were in fact practised much more extensively by town-dwellers than was previously assumed.[5] It was also typical of the less populous peripheries of Europe that, owing to the small number of middle-ranked and larger cities, small towns played a more important economic role in such regions than did similar towns in the core region.[6] Notwithstanding other urban activity, agriculture was an important part of the economy of urban households, and probably more stable than crafts and trade, which were sensitive to changing regional and even global economic conditions.

The paper will deal with urban agriculture in southern Poland (located until 1772 in the Polish-Lithuanian Commonwealth, and in the period 1772–1918 part of the Austrian Monarchy) in the long-term perspective, with a particular focus on the eighteenth and nineteenth centuries, taking into consideration an area encompassing 65 historical towns with city or town charters.[7] Of these, 48 were established during the Middle Ages and 17 in the Early Modern era. At the turn of the eighteenth and nineteenth centuries, only five (Biała, Bochnia, Wieliczka, Nowy Sącz, and Tarnów) were significantly bigger and more developed than the average.[8] The rest we could call market towns, although their population varied from about 500 to 2,500 inhabitants.

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3 National Archive in Kraków, IT 2294, 169 (1777); Central State Historical Archive of Ukraine in Lviv, 146/18, unit 4227 (1789); National Archive in Kraków, Deposit manuscript 459 (1792). Author's translation.

4 Maria Bogucka/Henryk Samsonowicz, Dzieje miast i mieszczaństwa w Polsce przedrozbiorowej, Wrocław 1986, 108, 448–451; Ireneusz Ihnatowicz et al., Społeczeństwo polskie od X do XX wieku, Warszawa 1999, 368, 371.

5 Such findings appear in local historical monographs of towns for which such materials have been preserved – craft guild documentation, local tax rolls, etc.; see also: Piotr Miodunka, Demograficzny i gospodarczy potencjał małych miast południowej Polski od końca XVI do początku XIX wieku, in: Roczniki Dziejów Społecznych i Gospodarczych 78 (2017), 131–161, 151–157.

6 Sven Lilja, Small towns in the periphery: population and economy of small towns in Sweden and Finland during the early modern period, in: Peter Clark (ed.), Small towns in early modern Europe, Cambridge 1995, 50–76, 75; Vera Bacskai, Small towns in eastern central Europe, in: ibid., 77–89, 87–89.

7 Historically parts of the Kraków province (not including Kraków) and the Sandomierz province (not including Sandomierz).

8 The largest, Wieliczka, had a population of around 4,500, the other towns of approximately 3,000; three were the seats of local administration, and two were centres of salt mining.

Cities and towns in Poland were established according to a pattern which remained unchanged from the thirteenth until the eighteenth century. Beside the area given over to the urban infrastructure – a market square, streets, and the parish church – and individual building plots, allotments were also demarcated, as gardens for the owner of each house, within the city walls, perimeter fence, or ditch. One further fact of particular importance is that every town had agricultural land available to use for farming and grazing. In some cases, when a town was chartered on land occupied by a pre-existing village, or when a village was established on land granted to a town bailiff (Polish: *wójt*, the successor of the founding administrator of the town), the boundaries of the agricultural land belonging to each settlement were not immediately obvious. The citizens themselves knew exactly where the urban land was, but tax collectors would sometimes treat the town together with a nearby rural suburb or suburbs as a single entity for tax purposes. This problem was perpetuated by the Austrian officials who surveyed the land for the purposes of the first land cadastre: the Josephine Cadastre, 1785–1787. In some cases, they listed towns together with nearby villages as single cadastral entities; such cases are excluded from further analysis of urban agriculture in the present study.

Gardens, arable land, and meadows were owned by citizens on an individual basis, though sometimes in private noble towns some restrictions on sale applied. Pastureland belonged to the whole community, and sometimes there was also one unit of arable land (Polish: *rola*) which was administered by the municipal council. In the few larger cities there were larger swathes of land at the disposal of the community, along with buildings: farms called *folwarks*, or even whole villages. Urban arable land was owned exclusively by the Christian population. The Jews, who in the seventeenth and eighteenth centuries populated particularly the noble towns in great numbers, cultivated small homestead gardens at most. Thus, the notions of burgher farmers and Christian burghers are identical.

In summary, then, the paper will discuss questions regarding land used for agriculture that was under the jurisdiction of towns; the distribution of agricultural land of various types; and, for individual farms, volume of crop production, numbers of livestock kept, and other information crucial for determining the capabilities which farming offered to town-dwellers. Given the lack of relevant materials facilitating quantitative analyses of the economic role of craft, services, and trade, we will examine the importance of these areas by negative proof, that is, by demonstrating the probability that agriculture was not an occupation from which one could make a living or even be self-sufficient in feeding one's family.

Data

One fundamental problem experienced by those working on this subject is the scarcity of sources and studies facilitating broader comparison. Two categories of region-wide source materials dating from before 1800 show the overall area of arable land in towns: first, the state tax lists from the end of the sixteenth century; and second, cadastral surveys, the first of which was undertaken at the end of the eighteenth century. For the nineteenth century we have access to farming statistics, but in very few cases do these reference towns only. Many more detailed issues can only be studied for a sample of towns, using locally specific source materials.

Of the pre-1772 tax-related materials pertaining to land, only the late sixteenth-century registers mentioned above are considered relatively reliable. Information on arable land

(excluding gardens, meadows, and pastureland) in towns was supplied by the townspeople themselves – under oath, but not on the basis of any empirical measurements, so it is of very limited accuracy. In later periods the tax sums assessed at this time were used as the basis for calculating the amounts of tax levied, without new assessments to reflect changes in taxable units, but the land tax declined in overall importance relative to the poll tax. This only changed when the southern part of Lesser Poland was annexed by Austria; the process of submitting new tax declarations, in which once again arable land was the most important factor, began while Maria Theresa was still on the throne.

Her successor, Emperor Joseph II, initiated a fiscal reform, one of the most important elements of which was the first land cadastre, known as the Josephine Cadastre, or *metryka józefińska* in Polish, compiled for Galicia between 1785 and 1787. Surviving materials from this undertaking include cadastral land surveys (without maps), which supply information on the results of land measurements as well as estimations of yields, harvests, and gross value of grain produce.[9] All the profitable plots of land for each holder were inventoried and categorised as one of the following types of culture: arable land, garden, meadow, pasture, pond, permanently uncultivated land (not including fallow fields in the three- or two-field rotation system), or forest. Arable fields were also divided into classes by their fertility. For each class the volumes of seed sown and the yield-seed ratio were determined. Next, the three-year harvests of each plot were estimated using these factors. For arable fields only four crops were taken into account: wheat, rye, barley, and oats. Any other crops cultivated were amalgamated with the main ones according to price: peas and flax with wheat; proso millet, broad beans, and hemp with rye; and buckwheat with barley. The resulting divergence between the cadastral figures and the real area under cultivation was only 2 to 3 percent in the case of wheat and rye. For barley there is greater uncertainty because buckwheat was grown on at least 5 percent of arable land, but probably even more.[10] What is especially important is that harvests from gardens were recorded in the same way as those from meadows, that is, as hay harvests.

The accuracy of plot measurement is generally evaluated as satisfactory, whereas the question of the credibility of the estimates of the quantity of seeds obtained from one sown is more controversial.[11] Personally, I believe that the procedures by which this survey was conducted were advanced, involving the use of manorial accounts, testifying the very precise data on seed and yield, testimonies of peasants from nearby villages, and the supervision by district

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9 The principles of this reform are discussed in detail by Roman Rozdolski, Die große Steuer- und Agrarreform Josefs II. Ein Kapitel zur österreichischen Wirtschaftsgeschichte, Warszawa 1961, 30–83. Key materials are stored in the Central State Historical Archive of Ukraine in Lviv, and summaries in Vienna, in the Finanz- und Hofkammerarchiv (AT-OeStA/FHKA NHK Kaale Steuer-Reg.HK Summ 80–84), they are partially published: Alicja Falniowska-Gradowska, Studia nad społeczeństwem województwa krakowskiego w XVIII wieku. Struktura własności ziemskiej i użytkowanie gruntów w świetle katastru józefińskiego, Warszawa 1982; Alicja Falniowska-Gradowska/Franciszek Leśniak, Struktura własności ziemskiej i użytkowania gruntów w Galicji w cyrkułach rzeszowskim, sanockim i tarnowskim w świetle katastru józefińskiego (1785–1787), Toruń 2009.

10 Jerzy Fierich, Kultury rolnicze, zmianowania i zbiory w katastrze józefińskim 1785/7, in: Roczniki Dziejów Społecznych i Gospodarczych 12 (1950), 25–67, 36–38.

11 Mateusz Troll/Krzysztof Ostafin, Use of late 18th and early 19th century cadastral data to estimate past forest cover change – a case study of Zawoja village, in: Prace Geograficzne 146 (2016), 31–49, 44 – precision of calculations in respect of the Zawoja forests; Falniowska-Gradowska/Leśniak, Struktura własności ziemskiej, 17–18.

commissions; and therefore the results may be accepted as plausible.[12] The yields which the cadastre shows are generally very low. In the western part of Galicia the yield-seed ratios of wheat varied from 2.2 to 4.2, those of rye from 2.5 to 4.1, of barley from 2.7 to 4.6, and of oats from 2 to 3.1, depending on geographical location. This corresponds with the results of other studies, which indicate a gradual decline in yields from the sixteenth century.[13]

General economic conditions for urban agriculture

Conditions for agriculture in towns were shaped by both the overall economic and political situation and by circumstances arising from the type of estate within which they were located: royal, clerical, or noble-owned. In the Polish-Lithuanian Commonwealth period before the partitions, until around 1600 royal cities played a major role, and their residents were active players in the lucrative trade in produce down the Vistula to Gdańsk. Thereafter, however, wealthy nobles began to found increasing numbers of small towns on their estates, whose primary role was to serve the local market. In the later seventeenth and the eighteenth century, the domination of the nobility not only over the grain trade with Gdańsk, but also over its processing into alcohol in their own breweries and distilleries, left little room for development of these occupations in the increasingly slow-growing towns. Nonetheless, the local market for trade in commodities was sufficiently lively that in the eighteenth century many villages were granted the right to hold markets without acquiring full municipal rights, though they increasingly began to resemble proper towns.[14] In considering the pre-1772 period, it is important to emphasise that the exemption of urban land from feudal duties imposed on the peasantry, above all the corvée, was a positive impulse for towns. However, all towns saw an overall deterioration in their economic condition as a result of competition from the landed gentry, which consequently amplified the importance of arable farming and animal husbandry to the townspeople.

After the annexation of the region by Austria in 1772, the role of the state increased, though ultimately smaller private towns remained at the mercy of their owners. Over an area approximately equal in size to that under study, of around 21,780 square kilometres (slightly larger than the historical parts of the former Kraków and Sandomierz provinces), there were 75 localities with historical municipal privileges functioning in this period, or one per just 290 square kilometres. The Austrian administration raised the status of many market villages to level with that of private towns. These policies also brought an increase in the concentration of Jews in towns, thereby raising the proportions of craftspeople and traders in their overall

12 Some of the descriptions of the quality of land have annotations by the supervisors regarding increases in estimated yields or other changes.

13 Andrzej Wyczański, Le niveau de la récolte des céréales en Pologne du XVI^{e} au XVIII^{e} siècle, in: Fernand Braudel et al. (eds.), Première conférence internationale d'histoire économique, Stockholm aout 1960, Paris 1960, 585–590, 588; Leonid Żytkowicz, The peasant's farm and the landlord's farm in Poland from the 16th to the middle of the 18th century, in: The Journal of European Economic History 1 (1972), 135–154, 146.

14 Józef Maroszek, Targowiska wiejskie w Koronie Polskiej w drugiej połowie XVII i w XVIII wieku, Białystok 1990.

populations.[15] Nonetheless, it would be fair to say that until the mid-nineteenth century the "old" towns continued to play their traditional role as centres of certain crafts, such as shoemaking, and trade – above all plied by Jews, but also the Christian trade in swine. After 1848, however, economic factors came to the fore; in that year holders of land in villages and towns became full proprietors, and feudal duties were abolished. In 1856 the eastbound railway line being built in the direction of Lwów (Lviv) from Kraków reached the little town of Dębica, bisecting this region along its latitudinal axis. Finally, in 1859 the monopoly of the guilds was abolished. On the one hand, then, the towns were now liberated from the constraints of their subordinate status, but on the other they had lost what little legal advantage they had enjoyed over the villages.

Prior to the partitions, the ownership of towns determined the extent of freedom to trade in agricultural land, and hence the possibilities for developments to farm structure. In royal towns this freedom was greater, while in towns owned by noble families, trade in land was at times subject to oversight, partly in order to curtail the emergence of a real property elite. On the other hand, freedom of trade in land often meant that it was easier for plots in towns – often the most attractive of them – to fall into the hands of the church as endowments. This was especially significant from the end of the sixteenth century, when, as the Counter-Reformation gathered pace, new benefices such as prebends or fraternities were founded and endowed alongside parish churches. Religious orders, both old and new, also benefited. Thus in 1785 in the small town of Skawina, around 70 percent of the arable land was owned by burghers (something over 120 in number), while 22 percent was the property of local church institutions.[16] This land may or may not have formed part of urban farms there, in the form of leaseholds.

Area and structure of agricultural land

The area of cultivated taxable land pertaining to particular towns on which we have information from a tax list dating from about 1580 varies widely. Of the 38 towns for which we have data, the smallest area was approximately 50 hectares and the largest 1,090 hectares, but the largest and the third largest (800 hectares) certainly also included the two rural suburbs of the towns in question. Thus, actual arable area ranged between 50 and perhaps 500 hectares.[17] Overall, this information does not appear credible at first glance; the respective areas seem too small compared to the results of the first cadastral survey of 1785–1787. Cadastral communities which were created for its purposes covered the whole urban area, but there was no unified rule concerning incorporation of rural suburbs into towns. In the case of the town of Biecz, only the urban area proper, with gardens and pastures totalling 7.14 hectares, was taken into account. In other cases, conversely, neighbouring villages were included with

15 Józef Buzek, Wpływ polityki żydowskiej rządu austriackiego w latach 1772 do 1788 na wzrost zaludnienia żydowskiego w Galicyi, in: Czasopismo Prawnicze i Ekonomiczne 4 (1903), 91–130.

16 Central State Historical Archive of Ukraine in Lviv, 19/8, unit 170.

17 Adolf Pawiński, Polska XVI wieku pod względem geograficzno-statystycznym, vol. III: Małopolska (Źródła Dziejowe, vol. XIV), Warszawa 1886. The area was given in units called *łany* (hides), which were probably not standardised. Nevertheless, a conversion value of 25 hectares is used, which represents the unit known as the *łan frankoński* (German: *fränkische Hufe*), commonly used in southern Poland.

the town, blurring the picture of their mutual agricultural relations. Such cases are excluded from further analysis (Table 1).[18] The cadastral communities created in the towns included land belonging to the burghers and to the town as a whole, to church institutions, and to feudal lords. Ownership of woodland by towns or burghers was very rare and virtually only occurred in royal or church towns. Municipal land, whether individual or communal, was thus used almost entirely for agricultural purposes.[19]

Table 1: Agricultural land in towns in Western Galicia in 1785

Total agricultural area	No. of towns
> 1000 ha	8
500–1000 ha	9
250–500 ha	24
100–250 ha	10
< 100 ha	6
Total for 57 towns: 29,144.2 ha	Mean average: 511.3; median: 354.8 ha

Sources: Alicja Falniowska-Gradowska, Studia nad społeczeństwem województwa krakowskiego w XVIII wieku. Struktura własności ziemskiej i użytkowanie gruntów w świetle katastru józefińskiego, Warszawa 1982; Alicja Falniowska-Gradowska/Franciszek Leśniak, Struktura własności ziemskiej i użytkowania gruntów w Galicji w cyrkułach rzeszowskim, sanockim i tarnowskim w świetle katastru józefińskiego (1785–1787), Toruń 2009.

One fundamental aspect of the agricultural profile of the towns which can be derived from the 1785 cadastral data is the ratio of farm land (arable land and gardens) to grassland (meadows and pasture). This is presented in Table 2.

Table 2: Basic forms of agriculture in towns in Western Galicia in 1785

Type of land cultivation	No. of towns
Farmland > 90%, grassland < 10%	13
Farmland 75–90%, grassland 10–25%	27
Farmland 50–75%, grassland 25–50%	12
Farmland < 50%, grassland > 50%	5

Source: see Table 1.

In most of the towns crop production was the dominant form of agriculture. There were just five in which grassland accounted for over 50 percent of the agricultural land, and each of

18 Only land in the possession of municipal institutions and individual citizens was taken into account. Land within the town's administrative borders but belonging to the landlord's demesne farms, and Church land, was excluded.

19 The townspeople of Nowy Targ and Piwniczna – both submontane royal towns – had exceptionally large swathes of forest (over 1,000 ha).

these had a total agricultural area of over 1,000 hectares. This means that arable fields also occupied a considerable area, further strengthening the observed dominance of crop farming. Three of these five towns were situated in mountainous areas, so that geographical conditions at least partially determined their specialisation. Conversely, the lowest share of grassland is mostly seen in the towns with the least land: eight of 13 towns with over 90 percent farmland were in the category with less than 250 hectares of agricultural land overall. Other than in the five towns mentioned above, grassland did not account for a significant area in either absolute or relative terms (Table 3).

Table 3: Descriptive statistics of grassland in towns in 1785

	ha	% of total agricultural land
Mean	147.5	21.7
Median	55.3	18.9
Standard deviation (SD)	237.5	15.5
SD excluding the 5 towns with >50% of grassland	113.0	10.0

Source: see Table 1.

Although data from different periods are not entirely comparable (for instance, later data also include agricultural land belonging to church institutions), they do show a clear trend (Tables 4 and 5). In the first half of the nineteenth century only the area of arable fields increased, which was partly due to the transformation of meadows and pastures. In the second half of that century increases may be observed in the areas of land devoted to all types of cultures, probably due to improvements in drainage techniques. These tables refer to different groups of towns as a result of the varying availability of data for each.

Table 4: Changes in agricultural land use in 54 towns, 1785–1850

	1785	1850	1785–1850	
	ha	ha	ha	%
Arable land	19,738	24,402	+ 4,664	+ 23.6
Meadows & gardens	3,625	3,269	- 356	- 9.8
Pastures	5,868	4,735	- 1,133	- 19.3
Total	29,229	32,406	+ 3,177	+ 10.9

Sources: see Table 1; Skorowidz wszystkich miejscowości położonych w Królestwie Galicyi i Lodomeryi wraz z Wielkiem Księstwem Krakowskiem, Lwów 1868.

Table 5: Changes in agricultural land use in 24 towns, 1785–1900

	1785	1850	1785–1850		1900	1850–1900		1785–1900	
	ha	ha	ha	%	ha	ha	%	ha	%
Arable land	9,093	11,295	+2,202	+24.2	12,323	+1,028	+9.1	+3,230	+35.5
Gardens	368	1,308	-464	-26.2	280	+197	+15.1	-88	-23.9
Meadows	1,404				1,225			-179	-12.7
Pastures	2,721	2,000	-721	-26.5	2,559	+559	+27.9	-162	-5.9
Total	13,586	14,603	+1,017	+7.5	16,387	+1,784	+12.2	+2,801	+20.6

Sources: see Table 1; Gemeindelexikon von Galizien, Wien 1907.

Size distribution of urban farms

The towns under study here varied considerably in regard to both the total land area used for agriculture and to the areas devoted to particular cultures such as arable land or meadows. The spread was much smaller when calculated in terms of average land per inhabitant or the average size of the urban farm (Table 6).[20]

Table 6: Agricultural land and urban farms in selected towns in 1785

Town	Total agricultural land of town (ha)	Arable fields and gardens of burghers (ha)	Number of owners	Average farm size (ha)
Brzostek	214.21	193.43	91	2.13
Kolbuszowa	302.20	242.08	107	2.26
Limanowa	-	81.89	62	1.32
Mielec	216.29	200.30	108	1.85
Pilzno	238.01	226.28	104	2.17
Przecław	157.57	135.45	86	1.57
Radomyśl	335.20	317.36	131	2.42
Rzochów	211.61	158.27	74	2.14
Skawina	560.87	528.15	127	4.16
Tymbark	-	236.33	59	4.01
Uście Solne	-	548*	267	2.05
Wojnicz	359.16	224.03	119	1.88
Zakliczyn	-	194.65	165	1.18

* including meadows

Sources: Central State Historical Archive of Ukraine in Lviv, 19/7, units 145, 248, 255, 351, 19/8, unit 170; Józef Szymański (ed.), Państwo wojnickie w metryce józefińskiej z 1785–1787 roku,

20 Piotr Miodunka, Could residents of Polish small towns actually be considered farmers? (paper presented at 13th International Conference on Urban History, Lisbon 4th–6th Sept. 2014), 2–3.

Wojnicz 2000, 14–31; Zofia Daszyńska-Golińska, Uście Solne. Przyczynki historyczno-statystyczne do dziejów nadwiślańskiego miasteczka, Kraków 1906, 100, 117; Bogdan Stanaszek, Terytorium, zabudowa i ludność Brzostku w pierwszym półwieczu rządów austriackich w Galicji, in: Bogdan Stanaszek, Z dziejów Brzostku. Studia i materiały, vol. 2: Okres staropolski i czasy zaborów, Brzostek 2009, 133–163; Józef Półćwiartek, Panowie feudalni na Kolbuszowej i ich majętność w XVII–XIX wieku, in: Jacek Bardan (ed.), Kolbuszowa. 300 lat miasta. Materiały z sesji naukowej, 6–7 X 2000 r., Kolbuszowa 2001, 9–21, 18–20; Kazimierz Karolczak, W czasach absolutyzmu austriackiego, in: Feliks Kiryk (ed.), Limanowa. Dzieje miasta, vol. 1: 1565–1945, Kraków 1999, 213–254; Łukasz Jewuła, Galicyjskie miasta i miasteczka oraz ich mieszkańcy w latach 1772–1848, Kraków 2013.

The mean area of arable land and gardens per urban farm tended to be well below the five hectares considered the minimum necessary to feed a family. Nonetheless, the mean says little about the actual distribution of the size of plots owned by individual householders (Table 7).

Table 7a and 7b: Distribution of the sizes of urban farms in selected towns in 1785 (%)

Farm size (ha)	Mielec n=108	Pilzno n=104	Przecław n=86	Radomyśl n=136	Skawina n=127	Wojnicz n=119
> 15	1.9	2.9	-	0.7	3.9	2.6
10 – 15	0.9	1.0	-	2.9	3.9	0.8
5 – 10	7.4	12.5	4.7	10.3	27.6	5.9
2 – 5	21.3	8.6	22.1	27.9	32.3	19.3
1 – 2	8.3	18.3	24.4	24.3	15.0	16.8
< 1	60.2	56.7	48.8	33.8	17.3	54.6

Farm size (ha)	Brzostek n=74	Tymbark n=59	Uście Solne n=237	Zakliczyn n=161
> 11.5	2.7	-	0.4	-
5.8 – 11.5	5.4	25.4	7.2	1.9
2.9 – 5.8	18.9	27.1	16.0	8.1
1.2 – 2.9	25.7	27.1	30.4	20.5
0.6 – 1.2	20.3	8.5	22.4	9.3
< 0.6	27.0	11.9	23.6	60.2

Note: The two divergent classifications by size brackets are necessitated by the use of different sources: firstly, the original data, which were converted from Austrian measures, and secondly, published studies with data without conversion from the Austrian *Joche* and *Klafter*.
Source: see Table 6.

The data from ten of the towns cited here have one fundamental feature in common: in all of them there were very few larger farms with over ten hectares of agricultural land, or even no such holdings at all. We might attempt a classification of these towns into three types by spread and relative numbers of farms of various sizes. The first type, represented by the largest

number of towns in the table (Brzostek, Mielec, Pilzno, Uście Solne, and Wojnicz), is characterised by a high degree of polarisation. In each of these towns there was a small group of large and very large farms over ten hectares, while the vast majority of the townspeople possessed only garden plots less than one hectare in size. A variant on this type is that represented by two small towns (Przecław and Zakliczyn) in which there was an elite band of urban farmers, but even the largest farms were little over five hectares in size.[21] Third, there is the distinctly egalitarian type (Radomyśl, Skawina, Tymbark); in these towns, medium-sized farms (in the size range from two to ten hectares) were far more numerous, while burghers owning only garden plots constituted a relatively small minority.

Sporadic earlier data (variously local land inventories or tax registers) sourced from towns in the "elite" category (Mielec 1548, Zakliczyn 1567, Wojnicz 1660, 1734, 1752, and Pilzno 1772) confirm that a similar distribution of urban farm sizes had been in evidence for a long time.[22]

Given the lack of extensive studies and available statistics, little can be said on the fragmentation of urban land in the nineteenth century. The examples of small towns studied – Limanowa and Uście Solne – show that there was some correlation with demographic development.[23] In Limanowa, which as a seat of district administrative offices from the mid-nineteenth century saw a marked increase in its population, urban farms became progressively smaller and more fragmented. In Uście Solne, which saw demographic stagnation for over one hundred years, the farm structure in 1900 was very similar to that recorded in the Josephine Cadastre.

Types of production

Grain production and other field crops

In the Early Modern period, agriculture in both urban and rural settings was dominated by grain crops. The proportions of particular cereals were determined by environmental conditions and by the production profile of the town. In small towns which had good soil, such as Uście Solne, the main crops were barley and wheat, which were processed into beer that was sold in places such as Kraków. Data from 16 small towns for the 1780s collected in the Josephine Cadastre seem to suggest that these two cereal crops were far more frequently grown by urban farmers than by peasants. In submontane towns such as Nowy Targ, oats constituted around 85 percent of cereal output. Aside from the four main grain crops, buckwheat, millet, and peas were also sown.

These conclusions notwithstanding, the volume of crop production and the overall degree of self-sufficiency of towns is a very interesting question. Although the majority of townspeople had too little land to produce enough grain, it may have been the case that the

21 Limanowa as described by Franciszek Bujak in: Limanowa: miasteczko powiatowe w zachodniej Galicyi. Stan społeczny i gospodarczy, Kraków 1902, 30, seems to have been representative of a similar type.

22 Miodunka, Demograficzny, 149.

23 Bujak, Limanowa, 65–67; Zofia Daszyńska-Golińska, Uście Solne. Przyczynki historyczno-statystyczne do dziejów nadwiślańskiego miasteczka, Kraków 1906, 99–102.

minority was able to supply the shortfall. There are few Polish studies regarding the issues of how towns were fed, and consumption in cities. The classic monograph by Andrzej Wyczański is devoted mainly to rural populations and spans only the sixteenth and early seventeenth centuries.[24] There are also a few studies concerning two larger Polish cities: Gdańsk and Poznań.[25] A simple calculation was proffered by Jerzy Ochmański, who assumed that an urban family of six needed 1,800 kilogrammes of grain per year.[26] This seems rather excessive, as does Wyczański's calculation. By way of comparison, Annika Björklund assumes a grain consumption in eighteenth-century Swedish towns of approximately 202 kilogrammes per resident.[27] The most controversial figure is that for beer consumption. I would assume that a normal consumer required about 20 kilogrammes of barley annually for beer production. Following the cited studies, and others which underline the great importance of rye for the common people in pre-industrial Poland, I would propose an annual quantity of grain consumption and distribution over the four main grains as follows (Table 8), equivalent to a daily consumption of 2,140 kilocalories.

Table 8: Estimated annual grain consumption per adult consumer in the eighteenth century

Type of grain	Annual consumption (kg)*	Distribution (%)
Wheat	25	11.4
Rye (incl. proso millet)	120	54.5
Barley (incl. buckwheat)	65	29.6
Oats	10	4.5
Total	220	100.0

* To convert the amount of groats to grain I assumed that a given weight of grain (for all kinds of cereals: barley, proso millet, and buckwheat) produced only 50 percent of that weight in groats.

Data on average yearly harvests were gathered for 16 towns. As mentioned above, only the four main grains were taken into consideration. The original cadastral surveys give figures for average three-year gross harvests, eliminating the need for certain complicated conversions associated with different types of crop rotation.[28] Seed for the next year was deducted,

24 Andrzej Wyczański, Studia nad konsumpcją żywności w Polsce w XVI i w pierwszej połowie XVII w., Warszawa 1969. This work has been translated into French: La consommation alimentaire en Pologne aux XVI^{e} et XVII^{e} siècles, Paris 1985.

25 Jan Baszanowski, Konsumpcja zbóż, mięsa i masła w Gdańsku w połowie XVIII wieku, in: Kwartalnik Historii Kultury Materialnej 32/4 (1982), 491–523; Bogusław Więcławski, Zaopatrzenie i konsumpcja w Poznaniu w drugiej połowie XVIII wieku, Warszawa 1989.

26 Jerzy Ochmański, W kwestii agrarnego charakteru miast Wielkiego Księstwa Litewskiego w XVI wieku, in: Aleksander Gieysztor et al. (eds.), Studia Historica. W 35-lecie pracy naukowej Henryka Łowmiańskiego, Warszawa 1958, 279–294, 291.

27 Annika Björklund, Historical urban agriculture. Food production and access to land in Swedish towns before 1900, Stockholm 2010, 128–129.

28 Where three-field rotation was used, the harvests from two years (winter and spring crops) were noted. If a two-field rotation without fallow was practised, then the harvests from a year and a half for both cereals were calculated.

of course, leaving about 71 percent of harvests for consumption.[29] After calculating the net annual output of the four main cereal crops, it is possible to establish both the level of self-sufficiency in each grain type for each town, and the overall level of grain self-sufficiency using weighted averages of self-sufficiency levels for each particular crop (Table 9).[30]

The information in Table 9 invites a number of conclusions and generates further questions. First, it is clear that there was no universal model of farming in towns. It depended above all on soil fertility, but also on other factors. Another surprising conclusion is that little rye was cultivated in any of the towns. The absence of certain crops in some towns despite information about their cultivation in earlier periods is, however, very suspicious. This is the case in Nowy Targ, where many sources document that rye was cultivated both before and after the 1780s, and there is certainly no doubt that wheat was grown from the sixteenth to the eighteenth centuries.[31] At the other end of the scale we have the cases of Rzochów and Uście Solne, where unexpectedly large quantities of wheat and barley were apparently produced.

The relation between grain supply and the overall threshold of self-sufficiency for the towns' Christian populations varied, but as a rule production was too low, reaching less than half of the volume needed for consumption. It is also important to note the considerable spread of this variable – from less than 20 percent in submontane towns to almost 70 percent. This divergence increases further still if we take into account the entire population, including the Jewish population, which did not cultivate the land but was quite sizeable in some towns. Of course, we must remember that consumption patterns could also vary according to local production. For example, people in Rzochów and Uście Solne may have eaten more wheat bread than those in other towns. This hypothesis is supported by the survey of 1877, which shows immense local differences in grain consumption; in Nowy Targ county, for instance, oats were listed as the most popular cereal consumed by peasants.[32] We should also take into consideration that the data generally ignore output from gardens, where cereals were sometimes also cultivated, but above all peas. Potatoes were still a garden plant in the 1780s, so they were of little importance in people's diets. This leads to the conclusion that the amount of food obtained from plant production, and in consequence the level of self-sufficiency, was probably in fact slightly higher than that calculated above. This does not alter the fact that none of the towns analysed produced enough grain even for their own Christian populations.

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29 In the case of wheat, rye, and barley, where yield was 3.5 grains to one sown, output is assumed to be on average 71% of total harvests. In the case of oats this ration was only 67%, at a yield of three grains from one sown. Grain was not tithed because the tithe was often levied in monetary form.

30 Where production of a given grain was higher than the theoretical demand for consumption, a level of 100% is assumed. The final result is a weighted average (based on coefficients from the third column of Table 8) of figures for each grain type (the ratio of people whose needs could be satisfied to total normal consumers). The results obtained are fuller than those offered by Björklund, Historical urban agriculture, who was only able to calculate the overall grain output of Swedish towns.

31 Mieczysław Adamczyk, Miasto w latach 1770–1867, in: Mieczysław Adamczyk (ed.), Dzieje miasta Nowego Targu, Nowy Targ 1991, 163–194, 167; Kazimierz Baran et al., Z przeszłości Nowego Targu, Nowy Targ 1948, 156–157; S. Czajka, W pierwszej Rzeczypospolitej (1573–1770), in: Adamczyk (ed.), Dzieje miasta Nowego Targu, 71–113, 83, 103, 104.

32 In most highland counties there was no wheat consumption. The quantities of grain intake indicated by county authorities are probably unreliable, but the proportions may be plausible. Józef Kleczyński, Stosunki włościan w Galicyi, in: Wiadomości Statystyczne o Stosunkach Krajowych 7/1 (1881), 5–86, 74–76.

Table 9: Level of grain self-sufficiency in selected towns in 1785–1787

	Population (1800)		Level of self-sufficiency in four cereals (%). Christians only*				Total level of self-sufficiency (weighted average, %)	
Town	Christians	Total	Wheat	Rye	Barley	Oats	Christians only	Total population
Brzesko	550	1,215	0	21	17	105	21	12
Brzostek	613	613	97	42	117	105	68	68
Czchów	1,330	1,358	8	34	37	156	35	34
Dobczyce	1,780	1,780	66	49	27	228	47	47
Kolbuszowa	724	1,286	0	38	3	181	26	17
Limanowa	450	473	11	3	28	278	16	15
Lipnica Murowana	735	735	0	53	81	132	57	57
Mielec	1,090	2,076	15	23	12	238	22	14
Myślenice	1,939	1,939	12	14	14	92	17	17
Nowy Targ	2,454	2,463	0	0	23	858	11	11
Pilzno	1,229	1,246	39	22	16	167	26	26
Radomyśl	877	1,238	23	51	61	153	53	39
Rzochów	457	491	331	6	122	22	45	45
Skawina	803	803	50	67	57	337	64	64
Uście Solne	1,253	1,253	425	23	196	13	54	54
Wadowice	1747	1747	39	45	14	424	38	38

* Following Annika Björklund (Historical urban agriculture, 130), a coefficient of 0.8 was applied to convert total town populations to numbers of normal – that is, adult – consumers. This is close to Tadeusz Sobczak's (Przełom w konsumpcji spożywczej w Królestwie Polskim w XIX wieku, Wrocław 1968, 21, 22) estimates (0.77) based on the population of the Warsaw department in 1810.

Source: author's own work based on: Central State Historical Archive of Ukraine in Lviv, collection 19, I/10, I/20, I/84, I/175 (via: https://www.familysearch.org/search/catalog), VII/145, VII/248, VII/351, VII/367, VIII/124, VIII/170; Feliks Kiryk, Opis gruntów gminy katastralnej Nowy Targ w Metryce Józefińskiej z 1785–1787 r., in: Mieczysław Adamczyk (ed.), Dzieje miasta Nowego Targu, Nowy Targ 1991, 267–274; Konrad Meus, Wadowice 1772–1914. Studium przypadku miasta galicyjskiego, Kraków 2013, 168; Kazimierz Karolczak, W czasach absolutyzmu austriackiego, in: Feliks Kiryk (ed.), Limanowa. Dzieje miasta, vol. 1: 1565–1945, Kraków 1999, 213–254, 230; Zofia Daszyńska-Golińska, Uście Solne. Przyczynki historyczno-statystyczne do dziejów nadwiślańskiego miasteczka, Kraków 1906, 100, 117; Bogdan Stanaszek, Terytorium, zabudowa i ludność Brzostku w pierwszym półwieczu rządów austriackich w Galicji, in: Bogdan Stanaszek (ed.), Z dziejów Brzostku. Studia i materiały, vol. 2: Okres staropolski i czasy zaborów, Brzostek 2009, 133–163; Józef Półćwiartek, Panowie feudalni na Kolbuszowej i ich majętność w XVII-XIX wieku, in: Jacek Bardan (ed.), Kolbuszowa. 300 lat miasta, Kolbuszowa 2001, 9–21, 18–20.

Cultivation of potatoes in towns is first documented at a relatively early date – in the 1780s. This crop probably spread rapidly in urban conditions because its higher yields allowed the typically small allotments of townspeople to generate enough food to feed their families.[33] We have no quantitative data to support this thesis, but the spread of potato cultivation certainly contributed to a rise in the level of food self-sufficiency in towns – especially those with slower population growth – over the course of the nineteenth century.

Until the end of the eighteenth century, it is hard to speak of any particular system of crop cultivation in towns. Several factors played a role. The classic three-field system was employed essentially only by larger farms, cultivation without fallow on well-fertilised fields, and long-term rotation systems on more distant plots and the least fertile soils. In the nineteenth century, after the introduction of potatoes and clover as urban crops, a form of crop rotation including them was implemented. On the whole, however, in spite of the reduction of the influence of soil-related factors as fertilisation with natural fertilisers improved and artificial fertilisers were introduced, only larger burgher farms had more extensive possibilities for employing crop rotation. Franciszek Bujak, describing the small town of Limanowa around 1900, found that agrarian farming using crop rotation was only viable for burghers with more than one hectare of land – less than 20 percent of the town's population. The rest grew only potatoes and cabbages. The former crop took up approximately 30 percent of the land cultivated by the townspeople of Limanowa in that period, wheat and clover a further 20 percent respectively, oats 15 percent, and the remaining 15 percent was divided between various other crops.[34]

Livestock

The extent of animal husbandry in the towns of Lesser Poland is a difficult issue to research, particularly for the period prior to the partitions. After 1772 the greatest quantity of information refers to draught animals, meaning horses and oxen, records of which were kept for the army's purposes. According to the earliest data, which are from 1773 and cover three towns (Lanckorona, Pilzno, and Skawina), townspeople did not keep a very impressive number of teams. Counting two oxen as the equivalent of one horse, there were just five to six horses per 100 inhabitants in those towns, and in practice only 20 to 30 percent of households owned any at all. It was extremely rare for a burgher to have both horses and oxen.[35] This seems to have been a sufficient quantity, however, since townspeople were not subject to the corvée, unlike landed peasant farmers, and rarely engaged in trade. There was also the possibility – and we know it was used – of employing local peasants for field labour.

According to the military's population and livestock census of 1799, oxen were more numerous in both large and small towns, but they were kept in greater number than horses chiefly in submontane regions or in areas with a dominance of heavy, fluvial soils. In this

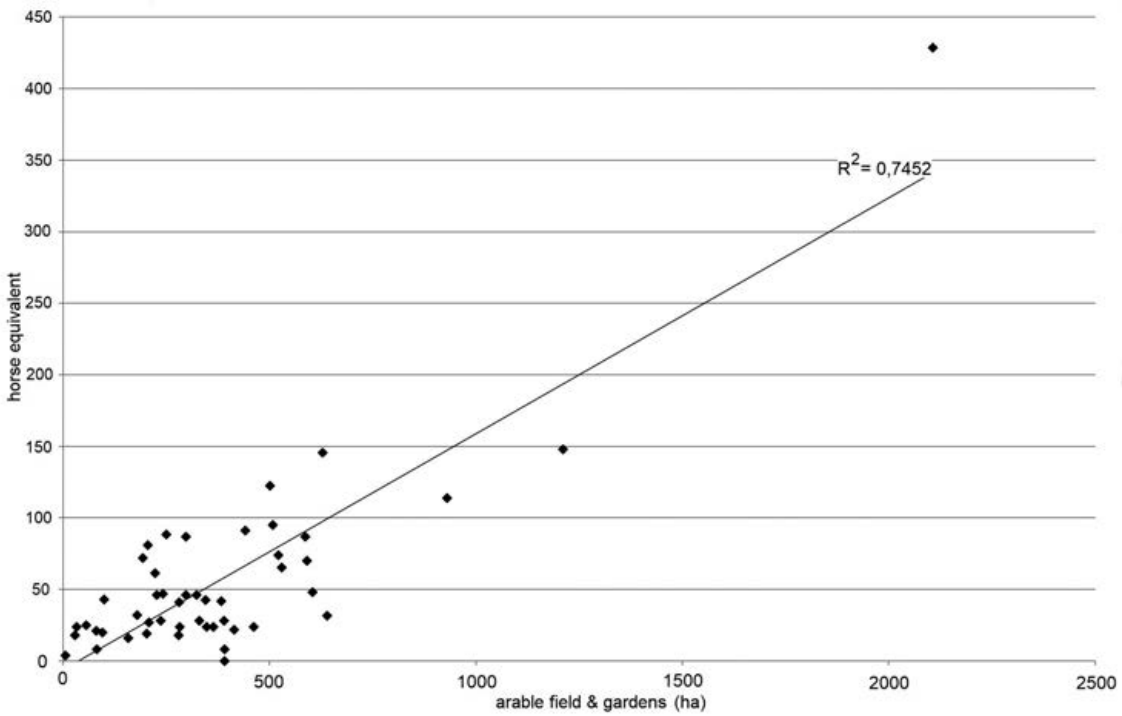
33 Piotr Miodunka, L'essor de la culture de la pomme de terre au sud de la Pologne jusqu'au milieu du XIX^{e} siècle, in: Histoire & Sociétés Rurales 42/2 (2014), 67–84.

34 Bujak, Limanowa, 67–69.

35 Central State Historical Archive of Ukraine in Lviv, 146/16 units 354, 575, 1621 (tax lists of 1772/73).

period there were 4.4 horses (or equivalents) per 100 townspeople.[36] This ratio was fairly well correlated with the overall area of fields and gardens owned by the population (Figure 1, Table 10).

Figure 1: Relation of number of horse equivalents to area of arable fields and gardens in 1799



Source: see Table 1; National Archive in Krakow: Teki Schneidra, Military census 1799.

Table 10: Number of horse equivalents in towns 1799–1921

	1799/1800	1815	1824	1900*	1921*
Number of towns	49	32	20	65	47
Horse equivalent per 100 inhabitants	4.4	3.6	5.9	1.9	2.0

* Horses only
Sources: National Archive in Krakow: Teki Schneidra, Military censuses 1799, 1815, 1824; Gemeindelexikon von Galizien, Wien 1907; Skorowidz miejscowości Rzeczypospolitej Polskiej, vol. 12: województwo krakowskie, Śląsk cieszyński, Warszawa 1925.

Later data show a decline in numbers of draught animals in towns after the Napoleonic wars, but a marked rise in subsequent years. Horse numbers fell in the second half of the nineteenth

36 Data from 49 towns.

century, in the context of a gradual cessation of use of oxen, but above all in larger towns. In less developed towns (which from the end of the nineteenth century were no longer subject to urban laws), there were still five horses per 100 inhabitants in the year 1900.[37] Comparison with the data for all types of settlements reveals that in the first half of the nineteenth century, the ratio of draught animals to population was over 2.5 times higher in the countryside than in towns, while in later periods this difference increased further.

The most significant type of animal husbandry was cattle rearing. According to the lists from 1773, the three towns they covered each had between 17 and 52 cows per 100 residents, meaning that, statistically speaking, every family had at least one head of cattle. The reality was somewhat different, but cows were owned by between 59 and 86 percent of burgher households. The further development of cattle rearing is shown in Table 11. It is worth noting that in the early part of this period only twice as many cows were kept in the countryside as was the case in towns, but by 1900 this proportion had risen to almost four times more.

Table 11: Cows in towns, 1815–1921

	1815	1824	1900	1921
Number of towns	32	20	65	47
Cows per 100 inhabitants	14.0	16.6	10.5	9.8

Source: see Table 10.

The number of cows per 100 townspeople was highest in 1824, but in the second half of the century it fell at a slower rate than did that of draught animals. As late as 1921, Tarnów – at a population of 35,000 the second largest city in this part of Poland after Kraków – still had 747 cows. In less developed towns, in the year 1900 the scale of cattle rearing was still very large, at a mean of 30.5 head per 100 inhabitants. Official data on livestock numbers tend to come from the winter months, but we also have information from the early twentieth century which shows that some townspeople purchased extra cattle for the summer only. In previous periods, given the poorer access to fodder, this practice can only have been more common.[38]

Livestock rearing was correlated in certain respects with the area of meadow and pastureland at the townspeople's disposal; this correspondence is more clearly visible in 1900 than a century earlier. Initially there was no clear connection between the population of a given urban centre and the relative volume of livestock rearing, expressed in numbers of animals per 100 inhabitants. This situation was essentially unchanged in the year 1900, except for the fact that for towns of over 10,000 this indicator was at a consistently low level, rarely exceeding five cows per 100 people.

Very few statistics are available for pig rearing. Trade in swine, which was popular in many towns in Lesser Poland in the eighteenth and nineteenth centuries, did not translate into numbers kept on farms. In the two towns for which we have data, in 1773 there were seven pigs per 100 residents. The next available data – which do not appear until 1900 – may suggest a certain decline in the significance of pig rearing, to 5.4 pigs per 100 residents. However, it is

37 16 towns with populations of between 730 and 2,300.

38 Bujak, Limanowa, 72. The regulations for use of common pastureland in Pilzno from 1652 confirm this pattern (National Archive in Krakow, Pilzno city files, 113A, 265).

important to note that while in towns that had retained their urban status in the nineteenth century this ratio was 4.7, in centres with only historic urban charters, it was as high as 12 pigs per 100 inhabitants.[39]

Sheep rearing was of marginal and diminishing significance, except in a few highland towns with extensive pastureland: Krościenko, Muszyna, Nowy Targ, Piwniczna, and Tylicz. In these five towns in 1900, the level of sheep husbandry was almost high as in the countryside, at 13 animals per 100 residents versus 18 per 100.[40]

Others

Many sources indicate that the towns of Lesser Poland specialised in fruit-growing – meaning that some, or even most, of the allotments were orchards, comprising above all plum, apple, and pear trees. Industrial crops such as flax and hops were probably cultivated, though more extensively in some regions than others. We do not know whether an attempt at tobacco growing in the mid-eighteenth century in the town of Wojnicz was successful, or whether it was also practised in other small towns.[41] For some places we also have information concerning beekeeping.[42]

Strategies of urban farmers

It is hard to establish with any precision the significance of agriculture in the towns of southern Lesser Poland. The information given to the new Austrian authorities at the end of the eighteenth century by landowners themselves, or by tenants in the case of former royal towns, emphasised the considerable importance of agrarian activities and suggested that crafts were essentially a sideline, pursued above all in the winter.[43] The few detailed studies contradict this picture, pointing first to the small size of most urban farms and second to the ubiquity of artisanry – though this was restricted to a very few crafts, chiefly shoemaking and linen weaving – and of trade, such as that in pigs. Nonetheless, land undeniably provided the wherewithal for satisfaction of at least a minimum of a family's own needs, and possession of a garden, small field, or meadow – at least sufficient to feed a cow – was a privilege keenly fought for. The lack of draught animals – which were not common in towns – was made good by hiring local peasants with their teams. Bujak mentions this expressly in his description of relations in Limanowa, which had 1,800 inhabitants in the year 1900. The townspeople considered themselves above working in the fields but were happy to oversee the work of hired

39 We may assume that in towns in southern Poland cow breeding was less popular and pig breeding more so than in Danish towns: Trine Lockt Elkjær, Market town agriculture, in: Søren Bitsch Christensen/Jørgen Mikkelsen (eds.), Danish towns during absolutism. Urbanisation and urban life 1660–1848, Aarhus 2008, 263–289, 280.

40 The counties of Nowy Sącz and Nowy Targ.

41 Miodunka, Lʼessor, 73.

42 Daszyńska-Golińska, Uście Solne, 113.

43 See footnote 3.

peasants. The only tasks that did not impugn the burghers' dignity were digging potatoes and bringing in the mown crops at harvest.[44]

The ubiquity of keeping at least a single cow and sowing even small plots of land with cereal crops, particularly until the end of the eighteenth century, meant that stables and barns adjacent to homes were commonplace in towns. Barns might also be located in dedicated areas outside the interior urban matrix of the market square and surrounding streets.[45]

A different strategy is evidenced among the narrow stratum of those who owned the largest urban farms. For this group, who tended to also practise lucrative crafts or trade, the farm not only supplied considerable income, but was also a symbol of prestige.[46] Where arable land was concentrated on a single site, a complex of residential and farm buildings would be erected alongside it, and after the manner of the gentry would be called a *folwark* or manor farm. Like those of the gentry, larger urban farms also evolved into agricultural enterprises which processed their cereal crops in their own breweries. What is more, in the small town of Pilzno at the end of the eighteenth century, wealthy urban farmers settled peasants as their own serfs. Burghers in Myślenice and Pilzno pursued a policy of expansion beyond their modest urban plots by leasing land from peasants in the adjoining villages. After 1848, when restrictions on purchasing land from the gentry were lifted, the same was practised at Limanowa in respect of lands owned by the gentry. Ultimately, in the second half of the nineteenth century, when many noble estates were put up for auction and sold off, townspeople began to buy up individual manor farms, thus essentially themselves becoming the landed class, as at Radomyśl.[47]

Summary: the agricultural *longue durée* in Polish towns

The functioning of agriculture in the towns of southern Poland is a good example of the *longue durée* as expounded by Braudel. Endowment with gardens, arable land, meadows, and pastures was a vital element of every town foundation. The provision of arable land was essentially proportional to the projected size of the town. In view of the economic crisis of the seventeenth century, the decline of active urban life in pre-partition Poland, and the consequent attractiveness of the landed gentry model, possession of a plot of land or even a small urban farm was a priority for burghers, not only for economic reasons. This state of affairs persisted in Galicia, a part of the Austrian Monarchy, until the mid-nineteenth century, when with the enfranchisement of the peasants and burghers in 1848 and the abolition of the monopoly of guilds in 1859, the time-sanctioned privileged role of towns over villages changed. The expansion of the railways after 1856 and the administrative reforms of 1855 and 1867 brought growth to some towns, while others stagnated in their old structures. In the former, agriculture very gradually began to wane in significance, though as recently as in

44 Bujak, Limanowa, 70.

45 Good examples are: the towns of Rudnik, http://www.skany.przemysl.ap.gov.pl/show.php?zesp=126&cd=0&ser=0&syg=1440M, and Skawina, http://mbc.malopolska.pl/dlibra/doccontent?id=18648 (last visited 30 Apr. 2018).

46 In the town of Pilzno, Wojciech Rządzki, a rich coppersmith, had the most animals: 4 horses, 4 oxen, 4 cows, 6 head of young cattle, 3 sheep, and 5 pigs (Central State Historical Archive of Ukraine in Lviv, collection 146/16, unit 1621).

47 Miodunka, Demograficzny, 151.

the interwar period (1918–1939) members of rich burgher families still took pride in running large farms, or in some cases ascended directly into the landed classes by purchasing indebted noble estates. In small towns on the periphery of change, crop cultivation (particularly after the spread of potatoes), and to an even greater extent cattle rearing, remained extremely important, at least until the period between the world wars.

Setting aside the issues of long-term patterns and cultural influences as explanatory factors, it appears that we are closer to defining the actual role of agriculture in Polish towns. Without a doubt, both crop cultivation and livestock had an important but supplementary function. This applied, though on different scales, to poor shoemakers as well as to rich merchants or brewers. Nonetheless, not even the smallest towns were self-sufficient, at least in terms of production of cereal, which was the dominant feature of the diet in this period. Thus, in small and medium-sized Polish towns, crafts and services for the local market, as well as slightly supralocal trade, supplied residents with the means to meet their food consumption needs, not to mention other needs. These settlements therefore had multiple economic functions as centres of agriculture, manufacture, and trade, and possessed the characteristics of the *Ackerbürgerstadt* as enumerated by Max Weber.[48] The conclusions of Henryk Samsonowicz, who sees in the burgher farmers a distinct, numerically significant professional group, varying in social and material status but sharing agriculture as their primary means of support, would seem to be a considerable oversimplification.[49] The problem of Polish cities was not so much the ubiquity of typically agricultural occupations, but the protracted nature of that state, which persisted well into the nineteenth century. Further research is necessary to fully explain the factors which contributed to such ossification of this urban economic model. It would also be interesting to study in greater detail the process of gradual but relatively slow departure from urban farming, which began in some centres in the second half of the nineteenth century but was not completed until the period of rapid industrialisation after World War II.

48 Max Weber, Economy and society, Berkeley 1978, 1217–1218.

49 Henryk Samsonowicz, Ackerbürgertum im östlichen Mitteleuropa, in: Kurt-Ulrich Jäschke/Christhard Schrenk (eds.), Ackerbürgertum und Stadtwirtschaft. Zu Regionen und Perioden landwirtschaftlich bestimmten Städtewesens im Mittelalter, Heilbronn 2002, 89–98, 97.