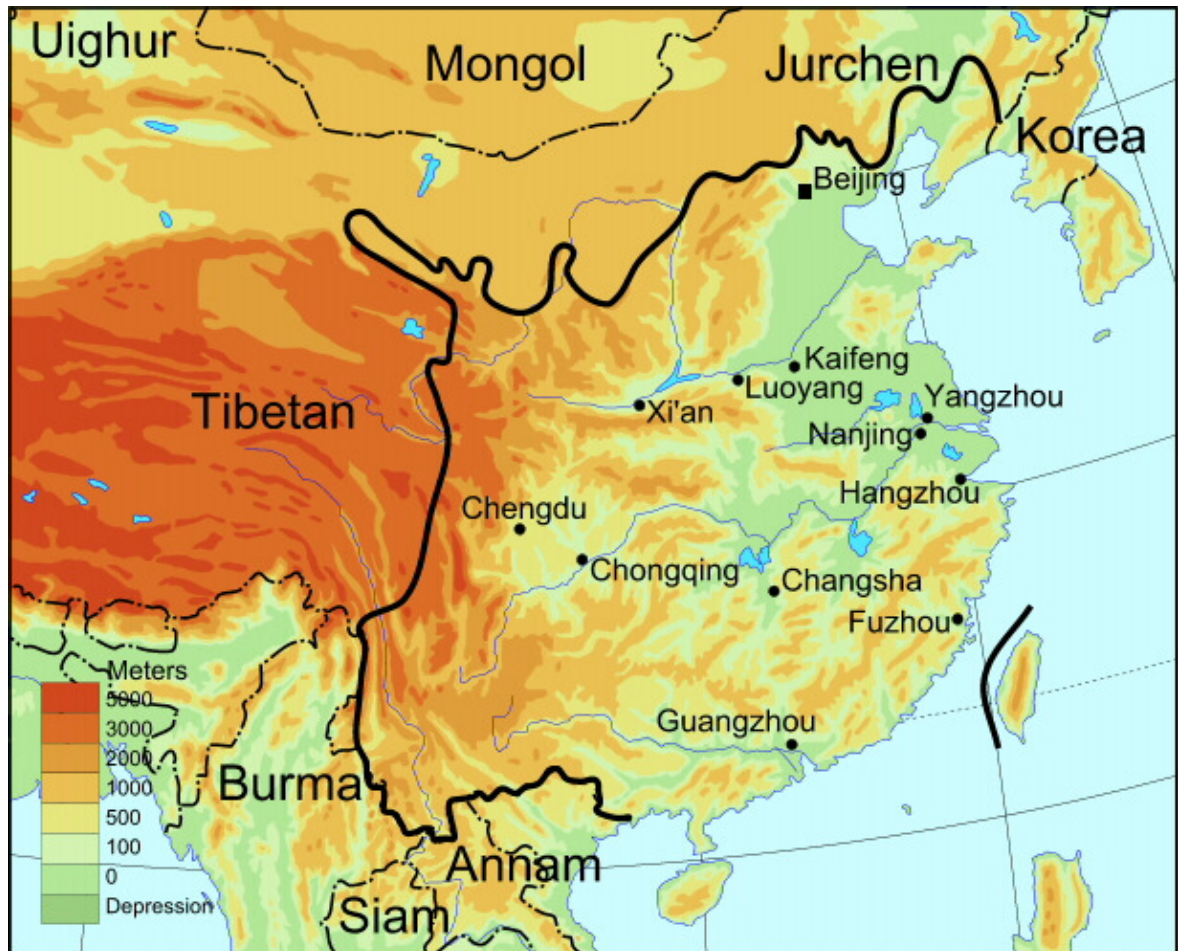


Notes to Database China 1500

Christine Moll-Murata

Region

In comparison to the preceding Mongol Yuan and the subsequent Manchu Qing dynasties, the territory of Ming China was smaller, and can be understood as little more than the “China Proper”.



Source: Patricia B. Ebrey (ed.), *A Visual Sourcebook for Chinese Civilization*, <http://depts.washington.edu/chinaciv/1xarprc1.jpg>.



Source: Ray Huang, p. xvi, Ming provinces

In the period from the High Ming to the Ming-Qing transition a commercial market system emerged, and state control of economy and society, which had been practiced in the early period of the dynasty by trying to register the population in specific, hereditary professions, and by inflicting the respective corvée services, receded. Corvée obligations of the agrarian population were for the most part – not entirely – transformed into monetary taxation (since the 1580s, the so-called “single whip

system”)¹. A similar process applied for the – mainly urban – professional artisan households that in 1386 been registered for periodic service for the state, but since 1485 could deliver their dues as monetary taxes. Beginnings of rural proto-industry, largely in cotton textile production, and cash-cropping can be found in this period. Interregional trade and migration intensified, which can be seen from first evidence of sojourning merchants’ guildhouses which originate from this period. Unfree labour in the form of bondservice, a kind of tenant-serfdom, persisted throughout the Ming; it gradually declined, but in limited areas lasted until the twentieth century.

The household registration of the Ming and early Qing reflects taxation policies rather than actual population figures. Such figures cannot be taken at face value. Estimates of the overall population range between a low of 100 million², 100–150 million³ 137–175 million in 1500⁴, for 1500 and 100–150 million on the other.

Clearly, critical change can be observed only in regional studies, and the “macro-regions”, a concept for spatial division developed by G. William Skinner, including the “North China” (Shandong, Henan, Northern Zhili), “Northwest China” (Shanxi and Shaanxi), „Lower Yangzi“ (Jiangsu, Zhejiang, Anhui); „Middle Yangzi“ (Hubei, Hunan, Jiangxi); „Upper Yangzi“ (Sichuan); „Yun-Gui“ (Yunnan and Guizhou); South-Eastern Coast (Zhejiang, Fujian); and „Lingnan“ (Guangdong and Guangxi)⁵ still proves too large for anything but exemplary treatment.

What we can offer here now is to project back the situation that has been assessed for 1800 (See “Notes to database China 1800”) to 1500, “guestimating”, in comparison to 1800, a higher percentage of subsistence agriculture and less proto-industry.

¹ Ray Huang, p. 118 describes it as a combination (therefore just one whip) of several obligations towards the state, to be discharged in silver payment, no longer in kind or services. However, it was not completely implemented.

² McEvedy, C., and Richard Jones, *Atlas of World Population History*. 1978, Middlesex: Penguin Book, cited in Lavelly and Wong, p. 717.

³ Perkins, Dwight, *Agricultural Development in China, 1368-1968*. Chicago: Aldine 1969, Perkins 1969, cited in Lavelly and Wong, p. 717. Compare also Chao Kang, p. 41, table 2.3, who cites, from John D. Durand, “The Population Statistics of China, A.D. 2-1953”, *Population Studies*, 13 (Mar. 1960), an estimated high of 200 million for 1592 and a low of 70.2 million in 1657.

⁴ Heijdra, p. 438. *Check Zhongguo renkou shi. Di si juan: Ming shiqi, □□□□□□□□□□□□□□□□ (History of Chinese Population. Vol. 4: Ming Period)*. Edited by Ge Jianxiong □□□. Shanghai: Fudan daxue chubanshe, 2001.

⁵ Skinner, p. 214, 215.

Economically active population

For the DB China 1800, I used Naquin and Rawski's scheme of 35% for the population between age 0 and 14, 58% between 15 and 60, and 7% at age 61 and over,⁶ which applies for "traditional China" – with some hesitation. The disadvantage of this pattern is that it doesn't further split into those from age 6, which the Collaboratory decided to include in the working force. Compared to Taiwan 1905, we find largely similar numerical structures for the age groups 0-15 (36%), 16-60 (60%) and above 61 (4%) as in Naquin. Therefore, I apply also the figures for the younger age groups, 14.2% from 0 to 5, 11.7% from 6 to 10, and 10.1% from 11 to 15,⁷ and thus in order to allow for a range of the economically active. Therefore, until we find more accurate age grouping that would prove this assumption wrong, we apply the ratios of Taiwan 1905 in order to decide the age group starting with age 6.

Likewise, the putative male/female ratio of M/F 110:100 as in the Database China 1800 is applied. This yields the following figures:

		Type activity
Estimated total population 1500 ⁸	150,00,00	P
Population age 0 to 5 (14.2%)	21,300,000	Not working
Population age 6 to 60 (81.8%)	123,000,000	E
Population age above 60 (4%)	6,000,000	Not working
Total : 210	714,285.7143	
Men 110	78,600,000	P
Women 100	71,400,000	P
Economically active men	64,294,800	E
Economically active women	58,405,200	E

Occupational structures and labour relations

The Ming state, as pointed out by Harriet Zurndorfer, was basically built "on the ideals of an agrarian based centralized regime".⁹ These policies, which tried to promote the coexistence of independent small landowners, reached their apex around the mid-sixteenth century.¹⁰ Thereafter, tenancy rose, as well as bonded labour and

⁶ Naquin and Rawski, p. 110.

⁷ *Meiji sanjūhachi nen Rinji Taiwan*, p. 17, table 11.

⁸ Middle value in Heijdra, high value in Perkins.

⁹ Zurndorfer, p. 105.

¹⁰ Zurndorfer, p. 105.

self-submission to the households of influential persons, especially those who had passed official exams and were eligible for government office. Only they were entitled to hold slaves.¹¹ It is between the first and second cross-section year, in 1588, that an amendment was made to the Ming Code which reduced long-term hired workers, who were employed for a year or longer, to a legally inferior position in regard to their employers. Only in 1759 was this rule qualified to the point that even those employed on a long-term basis were to be treated as commoners before the law, unless they had a signed a written contract with their employers.¹²

Although the gradual emancipation of this kind of indentured agricultural labour seems to emerge clearly, the figures remain elusive. Two opposed trends seem to be, on one hand, the leasing of land rather than employing unfree labour, such as chattel slaves¹³, and on the other, the increase of hired labour in the countryside.

☉ As yet, without a quantitative clue as to the relative percentages of the one trend over the other, it is difficult to estimate the amount of free, bonded, and hired labour. Tentatively, interpreting Harriet's assessment that after 1550, (1) tenancy and bonded labour rose,¹⁴ and (2) the number of vagrants increased,¹⁵ and assuming a line of continuity between that point in time and c. 1800,¹⁶ I keep the percentages of bonded agricultural labour, but reduce that of permanently hired agricultural labour to half those of 1800.

☉ The size of the military has been qualified by Ray Huang as 1.7 to 2 million hereditary military households in the 1370s, of which 1.2 million men were on active service, while by c. 1500, only the north was still defended by the regular number, 300,000 men, while in the rest of the empire, only 10% of the original figures were actively engaged.¹⁷ Frederick Mote's estimate is higher: While confirming the figure of 300,000 active soldiers on the Northern frontier, he assumes that formally nearly three million officers and soldiers should have served the Ming army, but were reduced to about half by the mid-Ming.¹⁸ I estimate this to imply a figure of about one million active soldiers and officers.

¹¹ Chao, p. 145.

¹² Chao, p. 146.

¹³ Chao, p. 156.

¹⁴ Zurndorfer, p. 115.

¹⁵ Zurndorfer, p. 113.

¹⁶ Zurndorfer, p. 105.

¹⁷ Huang, p. 65.

¹⁸ Mote, p. 373

☉ The number of eunuchs, according to Mote, by 1485 had passed the 10,000 mark, thus equalling that of the ranked civil bureaucracy, and shortly later surpassed it.¹⁹

☉ Degree holders, according to Heijdra, increased from about 100,000 to 500,000; holders of the lowest, and most common, examination degree were 180,000 in 1513. Together with the other degrees, I assume the overall figure to be about 200,000.²⁰

The other figures remain speculative and await further verification.

Occupations and branches	Percentage	Population between age 6 and 60 (81.8%)	Labour relations
	100%	122,700,000	
Agriculture	94%	115,338,000	
<i>Agriculture, reciprocal and self-employed</i>	87%	106,749,000	Lab-rel 405: 75%, Lab-rel 12:25%
<i>Agriculture, bonded</i>	1%	1,227,000	Lab-rel 16
<i>Agriculture, hired permanent</i>	1%	1,227,000	Lab-rel 14
<i>Agriculture, hired temporarily</i>	5%	6,135,000	Lab-rel 14:25%, Lab-rel 12:75%
Non-agriculture	6%	7,362,000	
Cattle breeders	0.70%	858,900	Lab-rel 405: 75%, Lab-rel 12:25%
Salt makers (officially registered)	0.20%	245,400	Lab-rel 12
Artisans, miners, shipbuilders	1.20%	1,472,400	
<i>Artisans, miners, shipbuilders, self-employed: 45%</i>		662,580	Lab-rel 12
<i>Artisans, miners, shipbuilders, employers: 5%</i>		73,620	Lab-rel 13
<i>Artisans, miners, shipbuilders, self-employed, hired labour: 30%</i>		441,720	Lab-rel 14
<i>Artisans, miners, shipbuilders, self-employed, apprentices</i>		294,480	Lab-rel 15

¹⁹ Mote, p. 365.

²⁰ Heijdra, p. 561.

20%			
Merchants	1.20%	1,472,400	
Merchants, self-employed: 45%		662,580	Lab-rel 12
Merchants, employers: 5%		73,620	Lab-rel 13
Merchants, hired labour: 30%		441,720	Lab-rel 14
Merchants, apprentices: 20%		294,480	Lab-rel 15
Land owners, notability, civilian officials	0.30%	368,100	
Land owners, notability, affluent		48,100	Lab-rel 2
Land owners, notability, employers		200,000	Lab-rel 13
Civilian officials		10,000	Lab-rel 18
Eunuchs		10,000	Lab-rel 18
Bureaucratic sub-elite		100,000	Lab-rel 18
Military and low-echelon government service	0.80%	981,600	Lab-rel 18
Migrants and hired labour	1.00%	1,227,000	Lab-rel 14
Fishers, hunters	0.40%	490,800	Lab-rel 405: 75%, Lab-rel 12:25%
Priests	0.20%	245,400	Lab-rel 7

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