

CHAPTER IV POPULATION, MINISTRY OF THE CAPITAL, IMMIGRATION AND LABOUR SUPPLY

Abstract: This chapter explores three related themes in Bangkok's development. Population growth, though lower in absolute terms than sometimes suggested, grew rapidly from the 1880s. This put pressure for administrative change, and one result was the formation of the Ministry of the Capital in 1892. The role of Chinese is considered.

Despite the overwhelming significance of Bangkok in Thailand's economic development, to the point that Bangkok is often cited as an archetypal "primate city", scholarly work on the historical details of Bangkok's development and role has been limited. This chapter forms part of wider study of Bangkok's economic history focuses on three related themes in Bangkok's development, population growth, Chinese immigration and the work of the Ministry of the Capital which together enable us to put the emergence of Bangkok as a primate city in the 19th century in clearer perspective.

First, we review population estimates for Bangkok. Here, the major point is this: Bangkok's population was much smaller than often suggested in the 19th century. Indeed, at the time of the Bowring Treaty in 1855, Bangkok's population would be numbered in tens, rather than hundreds of thousands, much of this population river dwelling and transient. The major changes came only from about the 1880s and 1890s, with a marked acceleration of population growth (much of it caused by Chinese migration) and an expansion of permanent land dwelling. As long as the area of Bangkok was confined, and the population small, city regulation could be maintained within the traditional Siamese social structures, with Bangkok being, in effect, a royal domain. But increasingly the strains of a burgeoning capital led to new forms of administration which had, nonetheless, to keep control in royal hands. Thus the second part of our paper looks at the creation and the role of the Ministry of the Capital, formed in 1892. The key point here is that the Ministry was a branch of royal supervision, rather than the sort of urban government independent of royal control which evolved in London and other European cities in earlier times. Thailand was an absolute monarchy until 1932 and absolutism had implications for Bangkok as well as for Siam's progress in general. The linking Bangkok administrative structure with royal interests produced both a physical and economic stamp on Bangkok which has had an enduring effect on Bangkok's development. Third, the role of Chinese immigrants is considered.

I

Population Change and Estimates of Bangkok's Population

The number of population and population movements are of significance when studying aspects of Bangkok's growth. Population change and economic change are interactive. To understand the relation between the growth of the economic activity and the city's population growth, Williams gave a clear example, he claimed:

To illustrate the principle, we can use the adoption of manufacturing establishments in a city, a process that has been one of the major ways cities grew in the past. The decision to locate a factory in an urban area stimulates general economic development and also accounts for population growth are obvious. Opportunities for employment and increased income are provided; business output increases due to a greater demand for products. Rising profits increase savings, which also causes investments to rise, in turn pushing up the demand for another level of profits. Increased productivity results in an increased demand for labour. The growing population then reaches a new level or threshold, again resulting in a new round of demands. As cities move to a new population level, whether 250,000 or 1 million, they are able to offer a greater number and variety of services than they could with fewer inhabitants. In sum, the growth of cities is cumulative and is strongly influenced by changes in economic functions provided. To explain why some cities fail to grow or even why they decline, we can merely reverse the cycle or process. Cities stagnate or die because they lose industries and population, conditions which create a negative circular and cumulative causation.¹

This chapter attempts to estimate tentatively the population in Bangkok in the 1900s and 1910s, and then to estimate growth rates in the prior and subsequent periods.

Bangkok's population until 1909/10

There are no reliable population statistics for Bangkok (or Siam as a whole) prior to the 1920s. Though there are some relevant data in the National Archives, for example labour registrations and tax collection records, all these are scant and difficult to interpret and compare. The figures of population in Bangkok and other places prior to 1909/10 were estimates by foreign visitors. These varied very widely (Table 4.1):

¹Jack F. Williams and Stanley D. Brunn, "World Urban Development," in Stanley D. Brunn and Jack F. Williams (eds), **Cities of the World: World Regional Urban Development**, New York: Harper Collins College Publishers, 1992, p. 108.

Table 4.1 Estimates of Bangkok's Population, 1827-1855

Year	Approximate Population	Sources
1827	133,940	Malloch
1828	410,000	Schuurman
1835	505,000	Dean
1840	350,000	Neal
1854	404,000	Pallegoix
1855	300,000	Bowring

Sources: B.J.Terwiel, *Through Travellers' Eyes: An Approach to Early Nineteenth Century Thai History*, Bangkok: Editions DuangKamol Table 9.1 p. 226 and Larry Sternstein, "The Distribution of Thai Centers at Mid-Nineteenth Century," *Journal of Southeast Asian History*, Vol7.no1 (March) 1966, p.67.

Estimates of population in the second most populous centre were not available. Indeed, we do not now exactly where such a centre was in Thailand, prior to 1900. There could have been two possible places, Chiang Mai or Ayutthaya. Ayutthaya's population was estimated at 41,350 in 1849, and 40,000 in 1855. The figures for Chiang Mai were 50,000 in 1855, and 100,000 in 1883.² Larry Sternstein assumed that Chiang Mai was the second largest centre, and calculated that the ratio of Bangkok to Chiang Mai increased from around 10:1 in the 19th century to 55:1 by 1980 (Table 4.2).

Table 4.2 Primacy of Bangkok 1780-1980

year	the ratio of Bangkok to Chiang Mai's population
1780-1900	10
1900	11
1910	12
1920	13
1930	14
1940	15
1950	23
1960	25
1970	35
1980	55

Source: Larry Sternstein, *Portrait of Bangkok*, Bangkok: Bangkok Metropolitan Administration, 1982, Table III. p.107.

Estimates of Bangkok's population between the mid-19th century and 1909 also vary widely (Table 4.3):

²Sternstein, "Settlement in Thailand," Appendix Table F. pp. 298-323.

Table 4.3 Estimates of Bangkok's Population, 1856-1909

Year	Approximate Population	Sources
1856	350,000-400,000	Das Konigreich Siam' Mittheilugen Von Peyerman, vol 2, 1856, p.159
1883	400,000-600,000	The Stateman's Yearbook, London, 1883, p. 276
1875	225,000	Whitaker's Almanac, 1875, p. 288
1889	500,000	Caddy, F., To Siam and Malaya, 1889, p. 214
1891	600,000	Whitaker's Almanac, 1891, p. 556
1895	200,000	The Stateman's Yearbook, 1895, p. 935
1896	500,000	Macgregor, J., Through the Buffer State, 1896, p. 60
1900	600,000	Greater Bangkok plan, p. 23
1902	600,000	The Stateman's Yearbook, 1902, p.,1060
1903	500,000	Carter, A. C. ed., The Kingdom of Thailand, 1904, p. 111
1906	400,000	The Stateman's Yearbook, 1906, p. 1395
1909	500,000	Graham, Siam, vol 1, p. 113

Source: Adapted from Lawrence Sternstein, "Settlement in Thailand: Patterns of Development", Ph.D. thesis, The Australian University, 1964, Table Appendix, pp. 298-324.

It should be emphasised that Dr Larry Sternstein discussed these estimation some thirty years ago (in 1964), and since then both he and other scholars have produced more refined estimates. Reasons for such varied estimates are not hard to find.

One major and continuing problem is the boundaries of what we may consider "urban Bangkok". Even with settled administrative boundaries, the nature of development is such that urban settlements often spill over into other administrative areas, and only later does legislation catch up with reality. In Bangkok before 1892, no provincial administration was established. The boundary of Bangkok's administration³ remained unclear, hence the estimation of population was a difficult task, definitions of residents and of the city itself were varied, and this made any assessment exceedingly complicated. The physical nature of Bangkok by itself made it difficult to assess the correct number of people. Many settlements in Bangkok prior were on water.

³Some aspects of Bangkok provincial administration, see Tongtoa Kluaymai Na Ayutthaya, **General Condition of Bangkok Metropolis**, Bangkok : Bangkok Metropolitan Administration, 1984, pp. 31-43.

Numerous floating houses or shops were located along the banks and waterways of the Chaophraya river and the various canals.⁴ An excellent recent description of settlements in Bangkok prior to 1880 is given by Askew:

The first land-based settlements clustered along waterways near the wat which served religious, educational and recreational functions. These "Bang" [which may be translated as "water hamlet"] settlements formed a loose network around the terrestrial urban core of the palace and its moats. Given that rights to occupy land (and transmit land to offspring) stemmed from the king, settlement on land followed the progressive granting of land to the nobility and other royal servants, as well as the foundings of temples. While the great mass of the urban population continued to live on the water until at least the close of Rama IV's reign, the movement onto land was pioneered by the nobility building palaces and the establishment of temples. After 1855 European traders settled along the southern reaches of the river and were soon occupying houses and shops on land. More important to the ecology of the emerging land-based city than the farang, however, were various distinctive ethnic and occupational communities. The ethnic mosaic which comprised settlement groups such as the Chinese at Sampeng, the Indians of Pahurat, the Vietnamese of Wat Yuan, the Khmer of Samsen spread in a loose pattern of "Yarn" (districts) around the city wall. The clustering of Bang and Ban (villages) was the earliest pattern of settlement.⁵

Secondly, the techniques employed to estimate Bangkok's population by foreign visitors were very doubtful. For example, Neal's 1840 estimate of 350,000 people rested upon two principles: (1) the number of floating houses or shops equaled the total number of residential houses or shops and amounted to some seventy thousand; and (2) the number of people per housing unit equalled five⁶. Bowring's figure of 300,000 was also questionable, and his estimation was confined to the eastern part of the Chaophraya river.⁷

Thirdly, the wide range of population estimates was affected by fluctuations in the number of Chinese migrants. The Chinese constituted a substantial component of the entire Bangkok's population prior to 1950, and Chinese migrants, mainly males, would typically live in Thailand for a few years and return home after they accumulated enough wealth. It was therefore difficult to assess their numbers accurately.

⁴There are a number of accounts dealing with Bangkok in the aspects of floating houses in the early 19th century. For example, Crawford, Journal of an Embassy, pp.78-79; Robert, E, Embassy to the Eastern Courts of Cochin China, Siam and Muscat during the years 1832-3-4, New York: Harper & Brother, 1837, p.261 ; D. B. Bradley, " Description of the City of Bangkok, Bangkok Calendar, 1870, p.134 ; and F.A. Neal, Narrative of a Residence in Siam, London : Office of the National Illustrated Library, 1852, p. 130

⁵ Askew, Interpreting Bangkok, pp. 162-63.

⁶Sternstein, "Settlement in Thailand", pp. 1-8.

⁷Ibid., p.119 based on Bowring, The Kingdom of Siam, 1857, Vol.1, p. 402.

A recent and careful consideration of the problem of various widely differing estimates by Terwiel concludes that the city contained no more than 50,000 to 100,000 around the 1850s.⁸ That is far from the 300,000-500,000 often quoted. A postal census in 1883 suggests a population then of perhaps 120,000 people.⁹ According to Terwiel, in the early 19th century Bangkok was still a very new city whose small size still reflected the Burmese attacks. There is nothing to warrant the idea of spectacular growth within half a century to 300 000 or even 500,000 people. In addition, life expectancy was not high. There were serious diseases, such as smallpox which took its yearly toll of children, and two very serious epidemics of cholera in 1820 and 1849.¹⁰

Bangkok's population 1909/10-1932

Again, there are many and varied estimates of Bangkok's population between 1909/10 and 1932 (Table 4.4). Estimates vary in part because the survey areas were not the same. Some covered the area of Bangkok city proper; some excluded Thonburi; some excluded eight outer Amphurs; and some focused on both Muang Pranakorn and Muang Thonburi. Thus, it is impossible to use these figures to plot the real growth of Bangkok's population in various periods.

Table 4.4 Estimates of Bangkok 's Population, 1909/10 -1932

Year	Approximate Population and Areas	Sources
1909-10	606,706 (Monthon Krungthep ?? ?)	N.A. R.5 M.of the Capital 30/10(1910).
1913	412,905 (Pranakorn including 8 inner Amphurs)	N.A. M. of the Capital 27/8 (1920-21).
1919	478,994 (Pranakorn &Thonburi)	Wilson, <i>Thailand : a Handbook</i> , p.32.
1919-20	359,846 (Pranakorn)	N.A. M. of the Capital 30/10 (1922-23).
1919-20	356,572 (Pranakorn)	M. of Interior, <i>Thailand Population Census</i> , vol I, 1947, p.9.
1919-20	345,000 (Bangkok city proper)	W.A. Graham , <i>Siam Vol I</i> , London:1924, p113.
1927-28	548,400 (Pranakorn)	<i>The Directory for Bangkok and Siam</i> , 1927-28.
1929	702,544 (Pranakorn and Thonburi)	Wilson , <i>Thailand: a Handbook</i> ,p.32.
1929	529,751 (Pranakorn)	M. of Interior, <i>Thailand Population Census Vol I</i> , 1947, p.9
1930	687,966 (Pranakorn and Thonburi)	N.A. M. of Finance 0301.1.1/13 (1931).
1932	550,000 (Pranakorn)	<i>The Directory for Bangkok and Siam 1937-38</i> , p 225.

⁸ Terwiel, *Through Travellers' Eyes* ,p. 233.

⁹ *Ibid.*, p. 232.

¹⁰ *Ibid.*, p. 232.

The first population census in 1909-10 does not include a figure for metropolitan Bangkok. The high figure (606,706) shown in Table 4.4 obviously included areas outside the true built-up area. More interesting is an estimate from 1913 of 412,905 which excluded Thonburi and covered 19 Tumbons in Pranakorn (Table 4.5). The population still clustered around the river and canal boundaries in the districts of Chakkrawat, Prarajawang, Sumphuntawong, Pomprab, Bangrak and Pahurad.

Table 4.5 The Distribution of Population in Bangkok in 1913

Tumbon	Number of Population
Prarajawang	34,804
Sathorn	14,992
Sumphuntawong	30,454
Chanasongkram	20,154
Bangrak	21,624
Phayathai	11,926
Samyak	9,996
Samsen	9,556
Pomprab	29,638
Nanglemg	13,062
Dusit	4,296
Prachairchin	4,588
Sarapatum	19,696
Bantawai	12,716
Sumranraj	15,618
Samyord	16,490
Pahurad	28,071
Bangkhunprom	10,252
Chakkrawat	46,730
Total	412,905

Source: N.A.R.6.M. of the Capital 27/8 (1920/2).

The 1919 census counted 478,994 in Bangkok-Thonburi of which 337,236 lived in Changwat Pranakorn and 141,758 in Changwat Thonburi¹¹ (Table 4.4). Surprisingly, Bangkok's population residing in Pranakorn declined compared to the previous estimate in 1913 shown in the Table 4.5. Possibly, the previous census in 1913 gave an overestimation.

The census of 1919-20 counted the population of Changwat Pranakorn as 356,572-359,846.¹² The distribution by ethnic groups was: Thais, 225,729; Chinese, 116,431; Indians, 14,193; Europeans and U.S.A., 1,447; Vietnamese, 716; Cambodian, 523; Burmese, 511; Japanese, 232; other, 64.¹³ Graham quoted the

¹¹ Wilson, *Thailand: A Handbook*, p. 32.

¹² N.A. M. of the Capital 30/10(1922/23).

¹³ N.A. M. of the Capital 30/10(1922/23).

revised population census in 1919/20 indicating some 345,000 as the population of the city proper.

In 1927-28, the **Directory for Bangkok and Siam** gave the population of the *registration area of Bangkok* [Pranakorn] as 548,400. In 1932, Bangkok's population [Pranakorn] had increased to 550,000.¹⁴ In 1929, a census indicated that number of population in Bangkok was 702,544 of which some 529,971 lived in Pranakorn, and some 172,573 were in Thonburi.¹⁵

Not until 1960 was there a census for what might reasonably be considered "metropolitan Bangkok", and even today the census figures may be inaccurate by a factor of one-fifth (because of unregistered and uncovered slum dwellers, for example).

Figures for earlier years need to be reconstructed. I will not attempt to re-estimate figures for the 19th century, but will start with the first moderately reliable figure in the early 20th century. The authorities took considerable pains to come up with an accurate figure for the population of Pranakorn and Thonburi in the 1910s. Following the 1909-10 census, resurveys were carried out each subsequent year in an attempt to refine the figure. All wards [tumbon] in the inner Amphurs in Pranakorn and Thonburi¹⁶ were selected as units of survey. A comparison of the original figure and the third revision in 1913 showed considerable variation in all the 25 tumbons in the eight inner districts (Table 4.6).

¹⁴ **The Directory for Bangkok and Siam**, Bangkok: Bangkok Times Press, 1937/38, p. 225.

¹⁵ Wilson, Thailand: A Handbook, p. 32.

¹⁶ The inner Amphurs under the administration of Ministry of the Capital in the late 1900s were as follows; Pranakorn, Sampeng, Dusit, Eangrak, Bangkok noi, Sarapatum Bangkok Yai and Banglumpoo lang, the outer Amphurs comprised Bangkokapi, Bangsue, Bangkokhen, Bangkokhunthien, Rajaburana, Talingchan, Pasricharoen, and Nongkharr. (N.A.R.5 M. of the Capital 1.4/1 (1906-1910)).

Table 4.6 The Comparison of Bangkok's Population Basing on the Population Census in 1909/10 and 1913

<i>tumbons</i>	No of population 1909/10 Census (second revision) Year 1909/10 (1)	No of Population 1909/10 revised Census (third revision) Year 1913 (2)	(Increase +) (Decrease-) (3)= (2)-(1)
Rajakrea	4,024	3,881	-143
Samyaek	10,488	5,157	-5,331
Samsen	9,771	4,353	-5,418
Bangkhumprom	10,734	5,297	-5,437
Prachairchin	4,588	2,802	-1,786
Phayathai	1,926	624	-1,302
Samyod	16,765	8,367	-8,398
Prarajchawang	34,804	14,703	- 20,101
Bukkkalo	5,434	5,981	+547
Samphuntawong	30,454	15,144	-15,310
Amarin	15,403	13,328	-2,075
Nanglerng	13,432	8,260	-5,172
Dusit	4,772	2,924	-1,848
Chanasongkhram	20,655	10,427	-10,228
Pomprab	30,050	16,323	-13,727
Sathorn	14,992	7,452	-7,540
Wat-hong	8,942	9,910	+968
Chakkrawat	47,275	23,852	-23,423
Sarapatumwan	20,110	10,773	-9,337
Bubpharam	22,853	23,520	+ 667
Ban Tawai	32,989	16,376	-16,613
Bangrak	21,999	12,962	-9,037
Samranraj	16,133	14,918	-1,215
Pahurad	28,651	15,050	-13,601
Bangplad	8,474	8,147	-327
Floating Houses which were unidentified	104,961	104,961	-
Total	540,679	365,492	-175,187

Source : [N.A. R.6 M. of the Capital 27/3 (1909-1914)]

After this revision had reduced the original census figure by around a third, the authorities considered the population of the built-up area of metropolitan Bangkok in 1910 was 365,492.¹⁷

Broadly, it presumes that Bangkok's population in the city proper areas [Bangkok Metropolitan area] in the early 1900s would not have exceeded more than 320,000 people. If estimated Bangkok's population included Bangkok city proper and suburbs, the figures would possibly reach 360,000 in the early 1900s. The figures were quite far from the figure of 400,000-600,000 often quoted.

¹⁷ Graham was concerned about the revised census of 1909/10 for the population in Bangkok:

The Census [1909/10] began with a leisurely enumeration, which by dint of repeated checking and revision, was at length brought within measurable distance of a fairly accurate representation of the number of the people. This was followed by an annual revision of the registers, and it is claimed by the authorities that the figures now given are substantially correct. There is, however, evidence to show that here and there, especially in outlying districts where the intelligence of enumerating officer is not of the first order, errors of more or less importance exist. Moreover, it is known that the first enumeration of Bangkok city gave numbers about 14 percent in excess of truth (Graham, *Siam Vol I*, London : 1924, p.113).

suburbs, the figures would possibly reach 360,000 in the early 1900s. The figures were quite far from the figure of 400,000-600,000 often quoted.

Discussion

As we know, there was no national census in Thailand until 1909/1910, and even then the figures, for Bangkok especially, were incomplete and unreliable. However, various official revisions leave us with a fairly reliable estimate for 1909/10, and this may be compared with the later censuses estimate for 1929/30 and 1937 (the municipality of Krungthep was created in 1937) which are generally considered reliable. Earlier, we have to rely on very impressionistic estimates which vary widely, with the exception of the year 1883 for which we have the first postal census. It is possible to use the Postal Census to get a reasonable figure for Bangkok's development in 1883.¹⁸

Of course, as time went by, the area of Bangkok expanded. In so far as new populated areas were brought within "Bangkok", Bangkok's population growth increased from this source, as well as from immigration and natural increase. However, it is evident that outside Bangkok proper, population was sparse; it was Bangkok's growing population spilling into new areas rather than the absorption by Bangkok of populated areas which was the dynamic factor. Thus, figures for Bangkok's growth

18) In the absence of an actual count, the best estimate for Bangkok's population may be obtained from the Bangkok postal census in 1883. The Bangkok postal census [*Sarabanchi*] was published to facilitate the postal service by the Post and Telegraph Department in 1883. The population census recorded the name of the residents and their addresses. The register is into four volumes, with varying titles. The First volume under the title " *Sarabanchi Suan Ti 1 Kue Tamnang Ratchakarn Samrap Chao Phanakngan Krom Praisani Krungthep Mahanakorn Tangtae Chumnuan Pi Mamae Benchasok Chulasakarat 1245*" (Register, Classified Directory of the Royal Family and government officials Since a year of sheep, The Department of Post and Telegraph, Bangkok, 1883). The remaining three volume was under the title " *Sarabanchi Suan Ti 2-3-4 Kue Ratsadorn nai Changwat Thanon lae Trok Samrap Chao Phanakngan Krom Praisani Krungthep Mahanakorn Tangtae Chumnuan Pi Mamae Benchasok Chulasakarat 1245*" (Register, Parts 2-3-4 of the population of Changwat [Krungthep] following a road and a lane since a year of sheep, by the Department of Post and Telegraph, Bangkok 1883). The first volume lists all governments, their personels, consulates, monks. The second volume was also the subtitled *Tanon lae Trok (Streets and Lines)*, the third lists *Ban Mu lae Lamnam* (Villages and Waterways) and the fourth contains *Khu Lae Khlong Lam Patong* (Ditches and Irrigation Canals).

I have tried to collect all volumes (in form of a microfilm) from Bangkok National Library, unfortunately, some parts of the postal roll are missing. The quality of the microfilm is poor. It is difficult to work with [especially the copy of volumes 2-4] because there is considerable inconsistency in the ways in which the data are collected such as no surnames in uses. However, the postal rolls are invaluable sources for the historical studies of Bangkok at the latter half of the 19th century in various aspects; population, ethnicity, occupation, economic activities, social relations and types of buildings and houses (Interesting works are based on the 1883 postal census, see Constance M. Wilson, Bangkok in 1883 : An Economic and Social Profile" JS', Vol 77. Part II).

give a reasonable idea of urban growth and the additions from already settled populations in newly -absorbed areas were not great.

We have, then, a figure for 1909/10. We have also a reasonable estimate for 1883 (169,300).¹⁹ Can we go back further ? We know that in 1782, there was already some settlement on both banks of the river. Rama I chose for his new capital ,and by the end of the first reign it would be unreasonable to suppose the capital had more than 50,000 or so. Terwiel's work suggests that at the Bowring Treaty (1855) Bangkok 's population may have reached around 50,000- 100,000. These are, of course, only very rough estimates, and it is well known that the river dwelling population makes it impossible to seek much more. That said, we may suppose the following (Table 4.7):

Table 4.7 The Population of Bangkok, 1855-1937

Year	Population	Average Annual Growth Rate (%) ²⁰	Sources
1855	100,000	-	Terwiel, <u>Through Travellers'eyes</u> , p. 233
1883	169,300 ²¹	1.90	Sternstein, <u>Portrait</u> , p 78
1913	365,492	2.60	N.A. R.6.M. of the Capital 27/3 (1909-14)
(1929/30)	(687,966)	(3.79)	N.A. M. of Finance [between 1913-1929/30] 0301.1.1/13 (1931)
1929/30	702,544	3.92	Wilson, <u>Thailand : A Handbook</u> , p.32
1937	890,453	3.44	<u>Ibid.</u> , p.32

Are the growth rates reasonable and internally consistent ? In 1929/1930, the Department of Revenue collected population information as the basis for assessment of various taxes (on paddy land, orchards, gardens, houses and shops, and the capitation

¹⁹ Sternstein, Portrait ,pp. 78-79].

²⁰ Calculation is based on compound growth rate ($P_n = P_0 (1+r)^t$).

²¹ Sternstein did not show the process of the estimation of population that how the figure of 1883 (169,000) was obtained. After I carefully investigated by the existing original copy, no records of 169,000 exist [or even 119,700 that he believed that lived in the city proper (Sternstein, Portrait, p.80) as a part of the census. Perhaps, he estimated the population by simple head count from the postal census and then multiplied by average family members. The interpretation of Bangkok's population 1883 by Sternstein should be done with caution because the postal census did not count the whole population in Bangkok but rather recorded the name of the residents, mostly, heads of households engaged in various types of employment in Bangkok such as Royal palace, Krom (government department), marketing, commerce, manufacturing, agriculture and animal husbandry and so on. However, under the circumstances that some parts of the postal rolls are missing and unreadable, we will accept Sternstein's estimate as a pioneer of work .

tax).²² Assessments were made by Headmen, Village Elders, assessors and checked by District Collector [Smuh Banchi].²³ This survey estimated the population of Bangkok as 687,966 of which 511,315 lived in Changwat Pranakorn and 176,651 in Thonburi (Table 4.8). This survey also gave similar result to the 1929/30 Census (702,544) (Table 4.7). Comparing this to estimate of 1913 (365,482) for Bangkok city proper and surrounding areas would give an annual increase of 3.79-3.92 percent and 3.44 percent annually in the period of 1913-1929/30 and 1929/30-1937 respectively. This high growth rate compared to the earlier periods is possible given Chinese immigration and the expansion of urban administrative boundary.

Table 4.8 The Distribution of Bangkok's Population in 1930

Amphur (Changwat Pranakorn)	Population	Amphur (Changwat Thonburi)	Population
Phra Nakorn	80, 834	Pasrichareon	31, 968
Sampuntawong	67, 669	Bang Khuntien	26, 496
Bangrak	59, 712	Glong Sarn	24, 221
Pom Prab	58, 454	Bangkok Noi	20, 647
Pratumwan	46, 206	Talingchan	18, 602
Ban Tawai	44, 698	Bang Yirua	15, 779
Bangsue	35, 838	Bangblad	15, 123
Dusit	33,004	Bangkok Yai	13, 542
Nanglerng	28, 692	Buggalo	10, 270
Bhra Kanong	27, 846		
Bangkapi	17, 978		
Bangkhen	10, 384		
Total	511, 315	Total	176, 651

Source: N.A. M. of Finance 0301.1.1/13 (1931)

Note: Spelling is from the original.

What do these figures tell us about growth rates in Table 4.8? The high population growth rates indicate an enormous growth in the physical size and economic diversification of Bangkok and in the nature of Bangkok's primacy. The period is that of the 1880s to the 1920s. Briefly, in those years saw a change from a city based on water (river and canals) to one based on streets and roads [especially from the 1890s]. The investment by the Privy Purse Bureau played an important role in changing the physical shape of the capital (Chapter III). This was the era of the railway, the tram and other innovations. It was also the era of a large influx of Chinese migrants. (We will discuss in the next section). We may note that in emphasizing change from the 1880s and 1890s.

²²In addition to the above assesses taxes, the Amphur Revenue Officers collected and accounted for all other taxes and fees payable at the Amphur office (N.A.M. of Finance 0301.1.1/13 (1931)).

²³ The total amount of taxes and fees collected and accounted for in 1930 was as follows. Pranakorn; the total collection was 2,742,568 Baht reaching an average collection per Amphur of 228,547 Baht. Thonburi; the total collection was 526,417 Baht reaching average collection per Amphur of 58,491 Baht (N.A. M. of Finance 0301.1.1/13 (1931)).

II The Ministry of the Capital and the Administration of Bangkok (1892-1922)

With the growth of Bangkok came pressure for greater administrative regulation and new sources of revenue raising. The 1890s was a critical decade in the evolution of Bangkok as a true metropolitan centre and political capital, and among the many important changes of that era was the formation of a new Ministry overseeing Bangkok in 1892. The Ministry of the Capital controlled a great deal of the revenue and expenditure concerned with Bangkok's development between 1892 and 1922, and worked closely with the Crown Property Bureau which was an active in developing new areas of Bangkok, erecting houses and in other ways promoting change in the capital (Chapter III). In this way, Bangkok's growth remained closely tied to its royal status.

Only gradually was an effective local administration established in Bangkok. Prior to 1892, there was no formal administrative body outside the area of the grand palace itself, and little is known about the Bangkok administration in this era. As far as we know administration was a dual structure - one for the traditional court areas, and another for the newly growing (predominantly Chinese) areas including the port. As a 1909 document makes clear, the latter fell to the Harbour Department:

For a long time before the early 1890s, the local government administration in Bangkok was ruled by the traditional Nakornbarn (Capital proclamation). There were hundreds of districts which depended on such Bangkok administration. The Chinese Amphurs were under the administration on the left Harbour Department (Krom Ta Sai), while the Thai Amphurs were under the administration of the Department of City. Bangkok was also administered by a court of justice. ²⁴

By 1892, the city had grown to sufficient size and complexity to warrant change. In that year the Ministry of the Capital (Krasuang Nakornbarn) was established as part of Prince Damrong's great reform. The first Minister of the Capital was Prince Naresworarit, an ineffective official of a family which later played a not insignificant role in Thai politics (Kridakorn).

The power, budget, and jurisdiction evolved only slowly. In the 1890s, with the flourishing of trade, the influx of the Chinese immigrants, and the increase of

²⁴N.A. R.6/1. M. of the Capital 9.1/66(1909).

Bangkok's population, the built-up area of Bangkok expanded and congestion increased. Between 1897/1898 and 1922, Bangkok and its surrounding areas were put under the administration of the Ministry of the Capital.²⁵ The districts in Bangkok were divided into two parts: the inner Amphurs (districts) and outer Amphurs (Table 4.9).

Table 4.9 Amphurs under the Bangkok's Administration 1897-1915

8 Inner Amphurs	8 Outer Amphurs
Pranakorn	Bangkapi
Sampeng	Bangsue
Bangrak	Bangkhen
Sarapratum	Bangkhuntien
Dusit	Rajaburana
Bangkok Noi	Talingchan
Bangkok Yai	Pasrichareon
Banglumpoo Lang	Nongkham

Sources: N.A.R 6/1 M. of the Capital 9.1/66(1909) ; and N.A. R.5 M.of the Capital 4.1 (1906-1910).

In the early 1900s, five major departments under the aegis of the Ministry of the Capital looked after the public administration in Bangkok. They were the Port Health Department, Bangkok Revenue Department, Department of Bangkok Police, the Sanitary Department²⁶ and the Department of the Capital²⁷(Table 4.10).The Ministry

²⁵N.A. R. 6/1. M. of the Capital 9.1/66(1909).

²⁶Carter, *The Kingdom of Siam*, pp.119-126. The Port Health Department had its main duties as follows. The department was directed by the Medical Officer of Health, assisted by two medical boarding officers, orderlies, boatmen, coolies, and a large staff of police told of specially for this duty. The sanitary stations were two in number; one at the Island of Koh Phai, some thirty miles beyond the bar; and the other at the customs station at Faknam, within the mouth of the Chaophaya river. At Koh Phai, where alone sick or inspected persons are landed, there are, besides medical officers' quarters, hospital quarters for Europeans and several large barracks capable of accommodating fifteen hundred Chinese coolies. Police barracks, coolie's quarters, store rooms, and water-condensing apparatus make up the complement of equipment. During the past year [1902/03], 262 ships were inspected, and 35,028 passengers were medically examined" (*ibid.*, pp. 112-113). The Bangkok Revenue Department was responsible for the various tax collection in Bangkok. It had also charge of the Chinese poll- tax, which was collected every three years (*ibid.*, p.119). The Department of Bangkok police, and by the commissioner of police , the Bangkok Police in 1903 had a force of 3,580 officers and men of the following ranks:

Commissioner.....	1
Divisional Superintendents.....	4
Assistant Divisional Superintendents...	8
Chief Inspectors.....	16
Inspectors.....	23
Head Constables.....	45
Sergeants.....	232
Constable.....	3,078
Office staffs.....	73

The commissionership extended over the province of Bangkok and also included the policing of all the state railways. It was divided into four districts; Bangkok town ; northern suburbs; southern suburbs; and the railway district. The duties of the police were the same as elsewhere, being the investigation and detection and suppression of crime. The police also undertook the prosecution of all cases reported to them in the courts of first hearing. They also supervised the pawnshops and enforced the canal regulations, etc., were issued by the police, and they were responsible for the maintenance of

also administered the following Muangs: Thonburi, Nonthaburi, Samutprakarn, Prapradang (Nakornkhun), Pathum Thani (1892-1915), Thunyaburi, and Minburi (1915-1922) (Map 4.1). In 1922/23 the Ministry of the Capital was cancelled and the administration of Bangkok was transferred to the Ministry of Interior.

Table 4.10 Major Departments under the administration of the Ministry of the Capital ,1892-1922

The Port Health	Shipping registration, inspecting persons landed, hospital quarters for immigrants, lighthouses, etc.
Bangkok Revenue	Collection of Chinese poll tax, capitation tax, house rent licence fees from rickshaws, trams, police fines.
Bangkok Police	Maintenance of good order, investigation and detection and the suppression of crime, supervising pawn shops, etc. Maintenance of hospitals and control of slaughter houses, the removal of rubbish and its destruction, lighting of streets and public places, etc.
Sanitation	Construction and repair of streets and canals, supply of water, maintenance and control public places.
The Capital	Government and administration in Bangkok population censuses, vital statistics, vehicle registration, etc.
Muang	Administered the following provinces: Nontaburi, Pratumtani, Thonburi, Prapadaeng, Minburi, Thunyaburi.

Sources: **Royal Gazette**, no 23,12 August., R.S.125,pp 495-500; N.A. R.5 M. of the Capital 5.4 (1908); and A.C. Carter, **The Kingdom of Siam 1904**, Bangkok: the Siam Society,1988, pp. 103-126.

The effects of the administration under the Ministry of the Capital on the growth of Bangkok between 1892 and 1922 were several. When the Ministry of the Capital was established, it was necessary to decide which districts should be included within the new jurisdiction especially the sanitary areas which covered the thickly populated parts of the city. In 1897/98, the first sanitary law was made to apply only to the area of the walled city. In 1922, the law was extended to Klong Padungkrungkasem.²⁸ Within

good order at such performances. The force also supplied watchmen to private employers. These men belonged to the force but were paid for by the employer. The number of men so supplied was 205. The Sanitary Department. The Department was instituted in the year 1897 for the city of Bangkok. The department was under charge of the Vice- Minister, who was assisted by directors of the various departments, a municipal engineer, a medical officer of health, and numerous assistant inspectors, clerks, etc. The main duties of this department were: (1) the construction and maintenance of the roads and bridges, (2) the collection and disposal of all refuse and (3) the enacting and enforcing of regulations against infectious diseases both of men and cattle (*ibid.*, pp. 119-121).

²⁷N.A. R. 6/1. M. of the Capital 9.1/66 (1906). The main duties under the Department of the Capital were for example, government and administration of Bangkok, undertaking population census, undertaking vehicle registration, undertaking vital statistics, undertaking military service.

²⁸N.A. R.6. M. of the Capital 7.1/23 (1917-1922).

this territory the Ministry of the Capital assumed responsibility for all arrangements affecting public health, urban construction, problems caused by the construction of roads, and other matters. The chief tasks were the removal of rubbish and its destruction at an appropriate place, proper drainage, construction and cleaning of klongs, construction and repair of public streets, supply of water consumption, lighting of streets and public places, maintenance and control of public markets, maintenance of hospitals, maintenance and control of slaughterhouses, enforcement of rules for the sanitary condition of private residences, in general, the execution of all laws for the benefit of the public health, and finally investigating and detection and suppression of crime. The Ministry controlled the police, which besides other duties supervised the pawnshops, enforced the canal regulations, issued permits for theatrical performances and similar matters, and prosecuted civil cases.²⁹ It is interesting to note that the administration had wide and increasing responsibilities, and the table of activity clearly demonstrates a city in a phase of growth and increasing complexity. The writ of the Ministry of the Capital was wide as shown below.

²⁹ Carter, *The Kingdom of Siam*, p. 123.

(a) Employment agreements		
Year	Number	Value (Baht)
1908	6, 786	1,007, 601
1909	5, 312	689, 701
1910	6,047	620, 653
(b) Loan agreements		
Year		
1908	1, 287	238, 473
1909	1,028	253, 702
1910	1, 402	211, 831
(c) Pawn agreements		
Year		
1908	136	704, 142
1909	130	1, 729, 302
1910	157	4, 482, 114
(d) Other agreements		
Year		
1908	2, 775	812, 302
1909	2, 190	1, 902, 557
1910	2, 108	581, 352

Source : N.A. R.5 M. of the Capital 1.4/1 (1906-1910).

There are many complaints against the administration of Bangkok affairs under the Ministry of the Capital in which the management failed to complete the chief duties and other duties. For example, the aspects of law enforcement. An article entitled "Insanitary Bangkok" in one newspaper, 25 th January 1922 indicated the existence of ineffective sanitary law :

The point is one of practical importance. In 1898, when the existing law was promulgated, it was by the way of the beginning, made to apply only to the area of the walled city. Then in the present reign [Rama VI] the area to which the law applied was extended to the Klong Padung within that area the officials of the local Sanitary Department as well as the police area responsible for the enforcement of law. Under the law "It is forbidden to throw the rubbish in streets in path ways, etc. and how the sanitary authority comes to tolerate the dumping of rubbish in a lane in Sampeng ,we fail to understand but that is by the way, the point to grasp is that outside the area bounded by klong, which runs from the Hongkong Bank to the palace of Prince Rapi-that is to say throughout the great part of Bangkok-the law does not apply and the sanitary inspector had no authority...the law does not leave the rest of Bangkok entirely defenseless, though presumably there is no remedy at law against a duck farm. There is ,however another, dating back to 1900, with respect to vegetable gardens using manure, and it applies from Klong Samsen to Bangkolam point within 30 sen from the river bank. In that area the owners or occupiers of vegetable gardens or plantations are prohibited from using the nightsoil, dung, decaying fish, decaying rice or the filth as manure;and the police have the power to enter and inspect any garden where they suspect the use of prohibited manure. But it would seem the sanitary inspector has no authority outside his special area. Bangkok has to depend on the police alone to enforce this law; and the police do not enforce it. There is a rough irony about the word" suspect" .³⁰

Next, the Ministry of the Capital had the authority to increase public revenues through taxation for expenditure on public works such as construction and maintenance

³⁰ N.A.R.6 M. of the Capital 7.1/23 (1917-1922).

of roads, canals, and water supply. In 1906 Westengard, the General Advisor, to the Ministry of the Capital noted the need for increased revenues:

I have been struck by the anomalous system of taxation of land in Bangkok. I find that there are (a) the paddy field and garden tax, and (b) the rented house tax (rong ran). The result of this is as follows. So long as land is used for paddy fields or garden, it has no particular need of roads, drains, and drinking water; during that time it pays a tax which (certainly as far as the paddy lands is concerned) is quite heavy enough and can not now be increased. So soon, however, as the use of land changes; and by the growth of the city the fruit trees are cut down and the paddy fields leveled and so soon as rice mills and dwelling houses are erected upon the land, it ceases to pay any land taxes. And yet it is just at this time that the occupations of the land begin to cause a heavy drain on the revenue, for it is just at time that its occupations begin to demand roads, lights, drainage, and water. Now, this is wrong. The system of taxation of land in Bangkok should certainly be reformed, and the many inequalities and injustices of the present system should be done away with. At present, I will only say I think a reform should be made as soon as possible. Under a proper system of land taxation, I think that in due course of time a much larger revenue should be derived from this source, and every att [unit of currency..] of this revenue should be devoted to the improvement of the city itself. But even with a new system of land taxation in Bangkok, and a resulting increased revenue, there are certain large expenditures which must be met, and for which the sums raised by annual taxation will be insufficient. Such are, for instance, the great works for permanent value required for the supply of water. Special arrangements must be made to meet such expenses, either by way of a loan or otherwise.³¹

Bangkok's tax administration was gradually reformed. A new Sanitary Law of 1909 (revised again in 1915) laid down:

It is a recognised principle of municipal administration that local expenditure shall be covered by local revenue and the Sanitary Administration Law of R.S. 127 (1909) appears to embody that principle. Money grants are usually authorised on the ground of semi national services rendered by the local body. For example, if a local body were required to maintain a main road which transverses the locality and is largely used for general through traffic, a grant might be made from national funds to assist the local body in maintaining the road in a state suitable for such through traffic. Or again, if owing to certain requirements of the central government, the standard of the sanitary, lighting and other similar services has to be kept up on a scale higher than purely local circumstances necessitate, a contribution might be made towards the cost of such improved services.... It is considered desirable or necessary for the local body to maintain an expensive municipal service.³²

Unfortunately, statistics of tax collection under of the Ministry of the Capital are scant, and the tax system remains something of a mystery. Records suggest the Ministry had the power to collect the Chinese poll tax, house and rent shop rent tax [Phasri Rongran], capitation tax, slaughterhouse fees, and license fees derived from rickshaws, motor cars and trams. In 1903, the Sanitary Department collected 10,000 Baht in revenue from the tax on bullocks slaughtered in the government abattoirs.³³ In 1904, the Bangkok Revenue Department collected 1,800,000 Baht in 1904.

³¹N.A. R.S. M. of the Capital 5.4/10 (1907).

³²N.A. M. of Finance 0301.1.19/1 (1918-1929).

³³Carter, *The Kingdom of Siam*, p. 120.

The number of Chinese who paid poll taxes were around 100,000 in 1903³⁴ and rose to 101,336, 126,028 and 121,278 in 1904, 1907 and 1908 respectively.³⁵ In 1913, the returns of "Ngeon Kharajchakarn " from the capitation tax³⁶ were 1,676,523 Baht, and the tax-payers included 74,786 Chinese, 52,708 Thai, 4,985 Indians, 56 westerners and 506 others.³⁷ The Department of Bangkok Revenue also collected house and shop rent taxes.³⁸ From 1922, the Ministry of the Interior took over responsibilities for Bangkok until the Bangkok Metropolitan Administration was formed in 1937. Tax revenues steadily increased in the 1920s³⁹ (Table 4.11).

Table 4.11 The Collection of House and Shop Taxes in Bangkok and Thonburi ,1921- 1929

Year	Amount of Taxes Collected (Baht)
1921	594,442
1922	630,357
1923	685,470
1924	707,729
1925	735,683
1926	755,002
1927	865,435
1928	795,645
1929	873,415

Source: N.A M.of Finance 0301.1.1/13 (1931).

As the collection of tax increased, the Ministry of the Capital could increase the expenditure to facilitate the urban growth. The Ministry of the Capital spent a large and rising proportion of the total government budget⁴⁰ (Table 4.12).

³⁴Ibid., p.119.

³⁵N.A. R. 5. M. of Interior 28.2/48 no 62 s/1109 (1910).

³⁶The capitation tax was a tax used as a substitute of Chinese poll tax in 1910. The tax levied as a capitation tax at the rate of 6 Baht per man per annum.

³⁷N.A. R.6 M. of the Capital 1/25 (1913)

³⁸House and shop taxes were collected on "property" such as buildings and lands appurtenants thereto. Tax- payers were the following; (1) tax to be paid by owner of building, (2) in case of change of ownership when tax was in arrears, new and original owner jointly and severally liable, and (3) in case of joint ownership, joint owners jointly and severally liable.

³⁹By the late 1920s, although the administration under the Ministry of the Capital was ceased, a main source of Bangkok revenue derived from (1) the house and shop taxes, (2) slaughter house fees, (3) license fees such as those derived from rickshaws, motor cars and trams, (3) license fees for pawn brokers, (4) monies paid by the Siam Electric for its concession, (5) annual payment made by the tramways companies for the use of roads and (6) police fines for municipal offences, and animal poundage fees (N.A. M. of Finance 0301.1 19/4 (1927-28)).

⁴⁰In the Thai government budget between 1890 until 1930, the annual expenditure was focused on the army and the administrative bureaucracy- as well as maintain the old ruling institution of the Monarchy such as the Privy Purse Bureau and royal expense. The government budgets for military affairs, the expansion of centralized government, and his Majesty's civil list were the top three expenditure. For example, in 1892, the proportion of military expenditure to the whole annual budget was 22.52 percent, while that of the provincial administration was 5.26 percent, and his majesty's civil list 25.41 percent. In 1899, the military expenditure was about 14 percent of the annual budget, while the budget for the Ministry of Interior and the Ministry of the Capital increased to 17.4 percent. As for His

Table 4.12 The Government Expenditure Budget under Ministry of the Capital, 1900-1922/23

Years	Expenditure Budget (Baht)	% of Total Government Expenditure
1900/01	2,253,977	7.0
1901/02	2,601,350	7.0
1902/03	2,814,195	7.1
1903/04	2,872,837	6.5
1904/05	3,160,502	6.9
1905//06	3,445,380	7.0
1906/07	3,493,460	6.3
1907/08	3,957,342	7.2
1908/09	4,024,382	7.1
1909/10	4,320,950	7.6
1910/11	4,215,260	7.4
1911/12	4,877,580	7.8
1912/13	5,302,812	8.6
1913/14	4,986,392	8.1
1914/15	7,415,612	11.9
1915/16	8,020,021	11.9
1916/17	9,123,742	13.5
1917/18	9,418,572	13.4
1918/19	9,479,134	11.2
1919/20	11,257,303	14.5
1920/21	12,060,026	15.0
1921/22	10,959,606	13.7
1922/23	10,306,524	12.8

Source: Calculated from Seksan Prasertki, "The Formation of the Thai State and Economic Change (1855-1940)", Ph.D. thesis, Cornell University, 1989, pp. 431-438, based on *Statistical Yearbook of the Kingdom of Siam, 1929-30*, no. 15, pp. 248-49.

The records classifying this expenditure by various departments are incomplete. The expenditure on sanitation in 1902-3 was 1,111,064 Baht.⁴¹ By the early 1900s, a large component went to roads. In 1903, some 312,000 Baht were allocated to the maintenance of roads, while 159,336 Baht went to the administration of sanitary affairs.⁴² In 1906, three major items of expenditure on road construction were classified: 28,560 Baht for salaries and wages; 110,256 Baht for capital goods and other expenditures; 417,009 Baht for maintenance of roads.⁴³

Between 1902 and 1904, expenditures on some roads were as follows. In 1902/03, road; Larn Luang (21,150 Baht), Lookluang (6,640 Baht), Damrongrak (16,911 Baht), Panieng (16,178 Baht), Bua (9,130 Baht), road at the end of Sanghee (5,403 Baht), Krungasem (8,000 Baht), Visuthkrasat (74,360 Baht), road

Majesty's civil list, it was 23 percent. The military budget increased from about 12.6 percent of total expenditure in 1902-03 to 16.6 percent in 1903-04 and 29 percent in 1904- several years, the money allotment for his Majesty's civil list and other royal expenses constituted the largest proportion of the Siamese state's annual budget. It reached 35.05 percent of the total in 1893 and stayed well over 20 percent for another three years. Between 1900 and 1930, it generally ranked third on the budgetary scale, or next to war and interior (Seksan, "The Transformation", pp. 429-443).

⁴¹Carter, *The Kingdom of Siam*, p. 120.

⁴²N.A. R.5 M. of the Capital 5.4/5 (1902-03).

⁴³N.A. R. 5. M. of the Capital 5.4/10 (1907).

construction from the end of Lookluang (7,611 Baht), and Snam Krabua (27,342 Baht)⁴⁴.

In 1906, the expenditure budget allocated to the Sanitary Department had increased considerably to roughly one and a half million Baht a year which was nearly half of the Ministry of the Capital's expenditure in that year.

The Sanitary Department had several duties especially the construction and maintenance public utilities such as roads, drains, canals, hospitals, and street-lighting. The Department spent a very high proportion of its budget on road maintenance:

Of the sum of one and half million Baht was spent in 1906 nearly 657,000 on roads;⁴⁵ about 40,000 Baht of this went for the construction of new roads that; that is to say, about 635,000 [sic] were expended on the repairs of roads. This would mean an average of 15,000 Baht per mile for repair of roads alone.⁴⁶

The high maintenance figure was due largely to the frequent flooding and destruction of the low quality gravel roads.

In 1914-15 the coverage of the Ministry of the Capital was extended to reflect the changing demographics of the city:

Chaophraya Yommaraj, the Minister of the Capital received the king's order.... At present, Bangkok's population has become increasingly congested. The administrative areas should be redefined. This task will help to increase public peace and the happiness of the people in Bangkok. The king ordered the abolition the 8 inner amphur administrations and changed to 25 amphur administrations.⁴⁷

The boundaries of the districts in Bangkok were redefined, and the distinction between inner and outer districts was abolished. The areas under the new administration included 25 Amphurs.⁴⁸ In addition, in 1914-15, the area defined as sanitary district was enlarged:

⁴⁴ N.A. R.5 M. of the Capital 5.4/5 (1902-03).

⁴⁵ N.A. R. 5. M. of the Capital 5.4/10 (1907).

⁴⁶ N.A. R.5. M. of the Capital 5.4/10 (1907).

⁴⁷ N.A. R.6.M. of the Capital 1/12 (1920).

⁴⁸ N.A. M. of the Capital 20.2/32 (1915). The 25 Amphurs were: Prarajawang, Chanasongkram, Sumranraj, Pahurad, Chakkrawat, Sumpantawong, Samyaek, Pomprabsatroopai, Samyawd, Nanglerng, Bangkhunprom, Samsen, Dusit, Phayathai, Prachairchin, Patumwan, Bangrak, Sathorn, Bantawai, Bangplad, Amarin, Hongsaram, Pathkeha, Boobpharam and Bookalo (N.A. M. of the Capital 20.2/32 (1915)).

Chaophraya Yommaraj, the Minister of the Capital, declared that according to clause 1 of the proclamation concerning the responsibility for sanitary affairs in Bangkok dated, 22nd May 1898, the sanitary programme included the following areas: The areas along the eastern part of the Chaophraya river running from the mouth of lower Banglumpoo canal downward to the mouth of a canal at Saphan Hun; afterwards, the areas turn along the canal beside the city wall. The area also extended to the mouth of the upper Banglumpoo canal to the Bank of the Chaophraya river. At present, the responsibilities for sanitation are successful carried out, but it is necessary to extend the administrative areas..... The new areas that the programme would cover are as follows: Along the eastern bank of the Chaophraya river, the areas stretching from the mouth of the northern part of Padungkrungkasem canal downwards to the mouth of its southern part; and the corner of Krungkasem road to the mouth of the northern part of Padungkrungkasem canal to connect at the bank of the Chaophraya river.⁴⁹

The sanitary areas were gradually enlarged, and in 1923 covered Sampeng and Pranakorn, the old districts inside the city wall, the new business districts of Bangrak, Siphraya and Sathorn to the south; and the new residential areas of Suan Dusit, Samsen, Phayathai and Patumwan to the north and east.⁵⁰

As the city became larger and more congested, the Ministry of the Capital came under pressure to increase its attention to sanitation. In 1915, for instance, it was claimed that Bangkok spent only 106,838 Baht on street sweeping and refuse collection, compared to 186,000 Baht in Singapore; Bangkok had only 348 staff compared to Singapore's 1,040.⁵¹ An article in the Bangkok Times of 21 January 1922 described the Bangkok sanitary conditions as follows:

Some years ago - it must have been sometime before the war - a klong, running across Sampeng, passed under new road just by Trok Dao on one side and the drug shops that subsist on the fame of Moh Phlai [name of physician doctor] on the other side. It had once a klong; it was then a festering mass of filth, lying naked and unashamed before the eyes of all who passed along Bangkok's main business thoroughfare. For a year or two this paper kept hammering away at the disgrace of the capital of the country constituted by this ugly cesspool by the side of a street like New Road... Now we have Sampeng and the dirty old Klong on which the Bangkok Times has expended so much effort in the past. That klong ran straight Sampeng from New Road to the river. From New road to Yaowaraj road it is now on ordinary lane; from Yaowaraj road to the river the klong was practically filled in some years ago. It may or may not require more filling. The position today is that between Yaowaraj road and the river the heaps of rotting rubbish dumped in that lane rise several feet above the road way and those heaps of filth are covered with flies.⁵²

⁴⁹N.A.R.6 M. of the Capital 2/43(1915).

⁵⁰ **Collected Law**, no 36(1923),pp. 100-101.

⁵¹N.A. R 6 M. of the Capital 7.1/23 (1957-1922).

⁵²N.A. M. of the Capital 7.1/23 (1917-1922).

III Chinese Immigration to Bangkok

Many historians have studied Chinese immigration into Thailand.⁵³ This chapter aims to supplement such work with material from the Bangkok National Archives.

From the early 19th century, the Chinese dominated non-agricultural occupations.⁵⁴ While rice cultivation remained the predominant activity of Thai peasant farmers after the Bowring Treaty of 1855, commercial and craft activities were undertaken by Chinese immigrants, including rice-millers, traders, shopkeepers, financiers, tax gatherers, industrialists, skilled craftsmen and coolie labourers. The Chinese provided the link between village and city.⁵⁵ According to Skinner, the first Chinese settlement dates back several centuries, but the Chinese population increased significantly only after 1855, when Thailand opened its door to international trade. Ethnic Chinese formed the core of business labouring classes in Thailand and by 1917 made up about 10 percent of the total Thailand's population.⁵⁶ The numbers of Chinese in-migrants were around 16,000 a year in the 1880s, 25,000 in the 1890s, 60,000 between 1900 and 1920, and over 100,000 a year in the 1920s. In the 1930s and afterwards, with the depression, the war, and quota restriction, arrivals decreased to 45,000 a year in the 1930s and 31,000 a year in the 1940s.⁵⁷ Until the early 20th century, virtually all migrants were male and most planned to return home with some savings. However after 1920, more females came and more stayed on. The proportion of females in the immigration surplus rose from 15 percent to 34 percent.⁵⁸ Throughout, arrivals exceeded departures. Between 1918 and 1931, the surplus of arrivals over departures averaged 35,700 a year.⁵⁹

⁵³For example, Skinner, Chinese Society, Cushman, "Fields From the Sea", Sarasin, Tribute and Profit, Coughlin, Double Identity : The Chinese in Modern Thailand, Hongkong : Hong Kong University Press, 1960 and Purcell, The Chinese.

⁵⁴ Chapter II.

⁵⁵A full discussion of the aspects of the role of the Chinese in the Thai economic history is contained in Skinner, Chinese Society.

⁵⁶Ibid., p. 183.

⁵⁷Ibid., p. 173.

⁵⁸Skinner, "Chinese Assimilation and Thai Politics", The Journal of Asian Studies, 16 (February 1957), p. 238.

⁵⁹Skinner, Chinese Society, pp. 61 and 173

The Chinese in Bangkok

Between the early 19th century and the Second World War, the Chinese comprised about half the entire population in Bangkok (Table 4.13).

Table 4.13 The Chinese Population in Bangkok, 1822-1952

Year	Chinese Population	Total Population (%)	Sources
1822	31,000	50,000 (62)	Crawford (1828)
1826	60,700	134,000 (45)	in Skinner (1957), P 81 Malloch (1852)
1839	60,000	100,000 (60)	in Skinner (1957), p.81 H, Malcom (1839)
1849	81,000	160,154 (51)	in Skinner (1957), p.81 1957 p.81 Malloch (1852)
1854	200,000	404,000 (49)	in Skinner 1957 p 81 Pallegoix 1854
1919/20	116,431	359,864 (32)	in Skinner (1957) p 81 N.A.R.6.M.of the Capital 30/9 (1922/23)
1952	540,000	1,050,000 (51)	Skinner (1954) p 363.

These figures were no more than rough estimates. To begin with, how were 'the Chinese' to be defined? Were the Chinese born in Thailand Chinese or Thai? Next, the enumeration was faulty due to inadequate registration, a high degree of cultural assimilation, and the inclusion of those born in the country as Thai nationals censuses after the early 1910s. Finally, the whole picture was obscured by state policy. A memorandum on the registration of aliens by the Ministry of Foreign Affairs on 12th January, 1933 claimed:

The old Siamese policy has been as a fact to consider Chinese immigrants in the same way as Siamese. They were not taken as aliens. They had all the rights of Siamese subjects. They were even admitted to acquire land when the non-Treaty powers' subjects had no such right under the Decree of the Fourth Reign. No use to justify that policy, which did favour the Chinese immigration at a time when Chinese labour was necessary. It is well known that the government's hope was that those immigrants would become assimilated to Siamese; and this indeed did happen for many years. When Chinese did marry Siamese women, had children educated in local schools and becoming more Siamese than Chinese as soon as from the generation borne in this country. Under this policy, there was no question to treat Chinese immigrants as aliens, and the interest of government was not to do it.⁶⁰

⁶⁰N.A.(3) Office of the Prime Minister 0201.76/1(1929-1953).

In 1914, the Ministry of Finance noted the contribution of the Chinese to the economy:

They supply a much-needed augmentation of the rather sparse population of the country; without them, the advancement of Siam would have been much retarded; they help to provide a large portion of the revenue from Lottery, Gambling, Spirits, Opium and other sources; they are indispensable in certain trades such as brick-laying, and almost so as carpenters... it is estimated that in the gambling houses, about 75 percent of the punters (except during times of Siamese festivals) are Chinese... large part of their income earned increased spending thus creating a demand for goods and other labour. The Siamese were compelled to export an increased quantity of produce or goods to pay for the remittances (around 30 million Ticals a year). Consequently, the exports of goods largely exceed imports.⁶¹

A great deal of public construction in Bangkok was financed (and carried out) by the Chinese. The construction of Charoenkrung road 1861 was paid with two years' revenue from the poll tax on the Chinese residents.⁶² The prostitution tax which largely was contributed by the Chinese in the period of Mongkut's reign was set aside for the purpose of construction and maintaining roads. Often such taxes and fines were collected in kind as materials for road construction, such as sand. To avoid embarrassment, the prostitution tax was renamed as Phasri Bumrung Tanon or the road improvement tax. Pallegoix estimated that in the Fourth Reign this tax delivered 50,000 Baht a year, several times the yield of other taxes.⁶³ In the Fifth reign, the tax was extended to provinces outside the capital, but the proceeds were still entirely remitted to the capital, though no longer spent exclusively on roads.⁶⁴ The increase in poll tax revenue due to the influx of Chinese immigrants from the mid 19th century onwards helped to finance public works in Bangkok such as canals, roads, and temples.

⁶¹N.A.M. of Finance 0301.1.30/15(1914). Although the number of the Chinese in Thailand are small compared to the entire Thailand's population, for example around 10 % in the early 1910s, their role had long been recognized not only as a working classes in the urban communities but also as a main factor generating a substantial portion of state revenue. Regarding to tax levied on the Chinese, the taxes levied on the Chinese were mostly indirect, and the opium monopoly sale of opium became the single most important method to attract revenues from them between the 1870s to the 1930s. As noted by Skinner:

As the Chinese population and the proportion of labourers in it increased, the value of opium farm mounted steadily. By 1874, the price of the farm was equivalent to about 100,000 pounds, and it rose to 136,000 in 1891.... By 1903/04 the annual revenue from the farm was over seven million Baht and by 1905/06 over ten million, amounting to between 15 percent and 20 percent of total government income. The government finally took over control of the opium traffic and abolished the farm in 1907/08 and 1908/09. Revenue from opium *regie* remained high for many decades thereafter (Skinner, *Chinese Society*, p. 121).

The share of its revenue in total government revenue reached over 20 percent by the second decade of the 20th century.

⁶²Proclamation of Rama IV, Vol 4.

⁶³Dararat Mettarikanon, "the First Registered Prostitution Law in Thailand" in *Silapawatthanatham*, Vol. 5, no. 5 March, 1984, pp. 8-9.

⁶⁴*Ibid.*, p.11.

Poll tax returns show that the Chinese in Bangkok as a percentage of the total Chinese population in Bangkok was 54.6 percent in 1904, 62.6 in 1907, and 56.3 in 1908 (Table 4.14).⁶⁵ Outside the capital, settlements of the Chinese tended to concentrate at junctions on the network of rivers and canals such as Prachin Buri, Ratchaburi, Nakornchaisri and Krungkao. The development of water transport was an important factor in expanding exchange economy. Inter-regional commerce was controlled by the Chinese and the Chinese capital. Chinese merchants carried Chinese and western goods into areas accessible by canals and rivers and penetrated into the interior of the country spreading money as a medium of exchange. The advance of Chinese merchants in Thai countryside provided a rural base for the accumulation of Chinese commercial capital and helped bring commercialisation to the Thai village.

Table 4.14 The Number of Chinese, based on Poll Tax Collection, 1904-1908

Monthon	1904	1907	1908
Bangkok	101,336	126,028	121,278
Prachin Buri	21,299	16,840	20,946
Ratchaburi	21,091	19,858	21,613
Nakornchaisri	17,226	14,334	15,834
Krungkao	12,722	9,832	13,811
Nakhon Swan	6,149	6,582	7,093
Phitsanulok	3,395	4,391	4,816
Chanthaburi	2,207	821	5,590
Total	185,425	201,244	215,188
Bangkok as % of Total	(54.6)	(56.3)	(62.6)

Source: N.A. R.5 M. of Interior 28.2/43 no. 525/11091 (1910).

Chinese immigrants in Bangkok, 1851-1932

Chinese emigrating to Siam was nothing new. In the Ayutthaya period, there was a Chinese quarter, and in early-Rattanakosin Bangkok, Chinese formed a significant proportion of the population. The immigration of Chinese to Siam was a continuous

⁶⁵ The Chinese population in Bangkok, by the returns of the poll-tax in 1900 was 65,345 male adults, and the entire estimated Chinese population allowing for old men, women, and children, who paid no tax, 85,000. In 1903, owing to exceptional circumstances, the number rose to 100,000 (Carter, The Kingdom of Siam, p. 111).

process, but the rate of immigration increased considerably in the late 19th and early 20th century. The chief sources of migrants were poor rural areas of southern China such as Fukien, Kwangtung and Shantung.⁶⁶

Generally speaking, the decision to emigrate may obviously have resulted from a number of motives, which may differ in each particular case. But among these motives and of prominent economic consideration is the desire to become better off. In a human capital framework, an individual is more likely to move if he expects a positive return from moving, counting both income gains and moving costs.⁶⁷ An increase in the present value of their expected income stream may come from having a more remunerative market for skills or upgrading their skills through a change in occupation from rural agricultural work (in China) to urban non-agricultural work (in Thailand). Empirical studies have shown that emigration is consistent with the human capital theory. In 1934/35, Chen Ta conducted a survey on the reasons for Chinese emigration. The size of the samples was 905 families in Southern China. It is indicated that economic pressure was the most important reason for the movement of the Chinese from their ancestral homes.⁶⁸ Though this survey was undertaken in 1934/35, the result would probably have been very similar to the study had been made in the mid 19th century. We could apply this to the case of Thailand, that Chinese emigrants came to Thailand for purely economic reasons, in order to improve their standard of living. In economics, real income is a good representation of the standard of living and is an important factor in decision-making. Firstly, a comparison was made to weigh the income differential between the country of destination and their home land. The second was to select the country where the wage earnings were the highest. The term "real income" of an individual is determined by two factors; their net income at the

⁶⁶There were a number of factors determining the volume of Chinese immigration into Thailand. In economics, the Chinese immigration was induced by push factors in China and pull factors from Thailand. The push factors included poverty, rural unemployment, famine, and internal disorder in China. The pull factors included employment opportunities created by the exploitation and the development of the market-commercial economy of Thailand and by the shortage of manual labourers in the urban areas, such as Bangkok. These factors standing compelled many young Chinese, mainly from the provinces of Kwangtung and Fukien in South China, to emigrate out of China in order to seek a new way to earn a livelihood. Many of these Southerners immigrated into Southeast Asian countries, including Indonesia, the Philippines, Malaysia and Thailand. In the case of Thailand, over 95 percent came from the provinces of Kwangtung and Fukien. The Chinese who immigrated into Thailand consisted mainly of five linguistic groups: (1) Teachiew from Swatow Kwangtung province (2) Hokkien from the Fukien province (3) Hakka from the North of the Kwangtung province, (4) Cantonese from Kwangtung province and finally (5) Hainanese, or the northeast of Kairan Island, Kwangtung province.

⁶⁷ for example, see G. Becker, **Human Capital**, New York : National Bureau of Economic Research, 1964.

⁶⁸ Chen Ta, **Emigrant Communities in South China**, New York : Institute of Pacific Relations, 1940, pp.259-260 cited in Joseph, P.L. Jiang, "The Chinese in Thailand: Past and Present", **Journal of Southeast Asian History**, vol 7, no.1, March 1966, p. 43.

place where it is spent or the nominal income earned and adjusted by the cost of living index. Some literature advocated that until at least the 1930s⁶⁹, Thailand had long had the highest average income in the whole of Asia⁷⁰

The occupations of the Chinese migrants in Bangkok were largely determined by the demand for labour, which considerably increased after the 1850s. Liberalization of trade under the Bowring Treaty stimulated international trade, while there were extensive public construction projects such as canal and roads, which began well before 1850 and accelerated from the 1890s. In the 1880s, on the eve of the large-scale inflow of Chinese, the Bangkok Postal directory analyzed employment by ethnic origin (Table 4.15):

Table 4.15 Employment by Ethnic Group; in 1883

Employment	Thai	Chinese	Others
Royal Palace	191	1	3
Front Palace	136	1	4
Other	4		
Krom	598	10	23
Officials	366	47	17
Subtotal	1,295	59	47
Professionals	193	97	27
Manufacturing	692	585	57
Employees	89	252	41
Agriculture			
Animal Husbandry	591	345	13
Marketing	852	2,675	205
Commerce	64	341	18
Miscellaneous	96	74	16
Total	3,872	4,428	424

Source: Constance M. Wilson, "Bangkok in 1883: An Economic and Social Profile", JSS, vol.77, Part 2, 1989, p. 56.

⁶⁹In 1822, the wage rate was twice the rate that people were being paid for labour in Calcutta in the 1820s (*The Crawford Papers*, p. 139). Labourers in Bangkok could save about two-thirds of their wages. Hence, the inducement to coolies to immigrate to Siam was great. They could earn double their wages, while the cost of living in Bangkok was cheaper than in their own countries, and the only direct imposition to which they were subject was a triennial poll tax of 4.37 Baht (Skinner, *Chinese Society*, p.116 and British Consular Report, 1883).

⁷⁰Carle C Zimmerman, *Siam, Rural Economic Survey, 1930-31*, Bangkok: Bangkok Times Press, 1931.

The Chinese played an important role in marketing, commerce, employees, and manufacturing, while the indigenous Thais played a more moderate role in business development. The division of labour in Bangkok around the 1880s was also noticed by Leckie:

The division of labour in Bangkok is interesting. The Chinese do all the heavy coolie work and cargo boat work. The Siamese do the boating work, rafting and light manual work. The tradesmen, carpenters, sawyers, tin smiths, and blacksmiths are Chinese; the Malays work the machinery in steam mills and take a share in paddy cultivation and cattle-dealing, and do a good deal of fishing; the Javanese are the gardeners. The market gardening is a large Chinese industry. The Annamites are fishermen and boat builders; the Bombay men are merchants; the Tamils are cattlemen and shopkeepers; the Burmese are the sapphire and ruby dealers and country peddlers; the Singalese are the goldsmiths and jewellers; and the Bangalis are the tailors. Over a course of years, the most marked progress lies with the Chinese or Chinese-Siamese, who gradually and surely strengthen their hold in Bangkok.⁷¹

The really substantial influx of Chinese migrants came to Bangkok from around the 1890s, followed the international rice trade which developed rapidly from the 1880s. Skinner estimates a peak of 60,000 a year in the 1900s and 1910s.⁷² Figures on total passenger traffic at Bangkok port show 65,000 a year in the 1910s (Table 4.16), and although these figures give no ethnic breakdown we can assume that the major element was Chinese.

Table 4.16 Number of Passengers at Bangkok's Port, 1909-1918

Year	Immigrants	Emigrants	Surplus of Immigrants
1909	65,013	58,147	6,866
1910	79,546	73,841	5,705
1911	75,529	64,453	10,986
1912	71,799	60,138	10,661
1913	72,260	57,861	14,399
1914	59,520	57,516	2,008
1915	68,309	47,263	20,636
1916	53,058	40,735	12,323
1917	39,418	37,268	2,150
1918	68,065	47,976	20,089
total	10	652,651	446,698
years			105,823

Source: N.A.M. of Foreign Affairs 96.1.8.4/21(1920-21).

Already by 1910, Teachiew comprised over half of the Chinese population of Bangkok, with Cantonese and Hokkien being the next largest linguistic groups. Teachiew dominated many important occupations in Bangkok such as rice millers, rice merchants and exporters, rice mill labourers, bankers.⁷³ Only one tenth of the Chinese population was female.

⁷¹Charles Stuart Leckie, "The Commerce of Siam in Relation to the Trade of the British Empire", cited in Chatthip, *The Political Economy of Siam 1851-1910*, p. 144.

⁷²Skinner, *Chinese Society*, p. 173.

⁷³*Ibid.*, p. 317.

Linguistic Group	Male	Female	Total	%
Teachiew	78,091	8,207	86,298	53.1
Cantonese	25,976	4,151	30,129	18.5
Hokkien	19,823	2,367	22,190	13.6
Hinanese	12,165	903	13,063	8.0
Hakka	9,411	1,409	10,823	6.6
Total	145,466	17,037	162,503	100.0

Source: N.A. R.5 M. of the Capital 30/9 (1910).

Up to this point, families seldom followed immigrants overseas. Young Chinese immigrants had every intention of returning to China once they had made a fortune abroad. Prince Damrong noted that "The Chinese who left their homeland to earn their livelihood abroad were chiefly male and from the southern provinces. Their family background came from the condition of privation. However, there appeared to be no Chinese emigration from rich families. Of those Chinese from different linguistic groups, they emigrated to various countries. Teachiew speakers preferred to emigrate to Thailand."⁷⁴

The influx of Chinese immigrants from the late 19th century was aided by the expansion of shipping. There was a much competition between navigation companies for the transportation of emigrants before 1914 and passage from Swatow to Bangkok cost 1.50 \$[straits dollars] only. The expansion of shipping navigation resulted in a higher frequency of visits to Bangkok. Thousands of Chinese migrated to Bangkok every year to work. After accumulating enough wealth they went back from Bangkok to Swatow. Chaophraya Yommaraj, reported to Rama V on the administration of the Chinese in 1905 as follows:

It appears that there was a marked difference among the Chinese migrants. The earlier Chinese migrants did not think of their mother land. Possibly, the main causes might be owing to the difficulties in transportation and communications, or the lack of education, for example. Also, the emigrants tended to permanently settle here, for example, in Bangkok and Songkhla. The opposite is true for those of the current Chinese migrants [after the 1880s]. When they accumulated enough wealth and income, they would return to China. Partly, money would be remitted to their relatives and wives in China. Indeed, there was no intention to permanently settle here [Thailand]... In addition, when they entered the kingdom, the Chinese exclusively worked in and controlled a large part of the retail and wholesale commerce of the country.⁷⁵

⁷⁴ DamrongRajanuparb, *The Ancient Stories of Secret Society*, Bangkok: 1944, p. 235.

⁷⁵N.A. R.6.M. of the Capital 20/6 (1905).

By 1900 many Chinese immigrants were employed in rice mills as unskilled and skilled labourers. Each mill employed about 100-200 labourers.⁷⁶ The situation around 1920 was noted as follows:

The rice mills are mainly worked by Chinese. The workmen in a rice-mill may be divided into three classes; (1) clerks (cashiers, accountants, secretaries) who are Chinese, (2) engineers and mechanics who are Siamese and Chinese and (3) 'coolies' who are Chinese. The first two categories of men are engaged singly and given a monthly salary, whereas the 'coolies' or workmen proper are engaged collectively through foreman and are paid weekly. As to the latter, the conditions of the engagement are settled between the mill-owner and the foreman. These conditions are generally the following: the men are to be lodged and to receive five meals a day (the quantity and nature of each meal being fixed at the time of agreement); they are to be divided into three shifts and to work at the mill in three watches of 8 hours each or four watches of 6 hours each (in the former case, each shift works 8 hours a day; in the latter case each shift works 12 hours one day and 6 hours the next day); the meal time (about 45 minutes) is included in the watch (half the shift on duty working whilst the other half is eating); in addition to working at the mill, the men are called upon to work at unloading the boats bringing paddy from the provinces or loading the sea-going steamers with husked rice, when those boats or steamers come to the mill's wharf at tide time; this work is usually done by the men of the shifts not on duty and is paid for extra. The men are given rest on the last day of each lunar week and on Chinese holidays. The mill-owner undertakes to pay to the foreman in cash (in most cases at the end of the week); the men's ordinary wages are calculated per man and per day at a rate agreed upon in the contract, and any extra pay calculated per bag or measure loaded or unloaded at a rate similarly agreed upon. The foreman, for his part, undertakes to supply such number of men as the working of the mill requires and to hand over to the men their wages. Both the mill-owner and the foreman shall be entitled to break off the contract at one month's and sometimes one week's notice; in fact, the contract is seldom broken off by the mill-owner, and when it is the foreman who breaks it off, the mill-owner has often to pay more than what was agreed upon in order to prevent 'sabotage' of the engines or 'boycottage'. It must be added that the foreman and workmen almost always belong to the same guild; the foreman is thus able easily to find other men to replace these who, as often happens, would give up work without notice after they have got some money, and would only take it up again when they have spent the money. On the other hand, the foreman is held responsible for the conclusion and execution of the contract by the men who will replace him through the influence of their guilds, if it cannot get them satisfactory terms, or if he attempts to defraud them out of their due.⁷⁷

As the rice trade increased, capital investment in rice mills increased. Although, there is no way of estimating the size of this capital investments, there are some qualitative indications of its importance. By the end of the 19th century, the Chinese rice milling industry in Bangkok had already passed through the mechanized stage, and by the 1920s took up electrification. Small factories began to appear far into the country's interior as the railway network was extended further inland,⁷⁸ though the rice trade was still, of course, channeled through the capital.

⁷⁶N.A.R.6.M of the Capital 31.3/48(1929).

⁷⁷N.A.M.of Foreign Affairs 96.1.8.4/10(1:3)(1919-1922).

⁷⁸Skinner, *Chinese Society*, p. 214.

The role of the Chinese was also significant for western enterprise. The Chinese provided complementary services for western firms, linking import houses in Bangkok with overseas markets and source of supply in the interior. All major Western firms established in Bangkok employed Siamese-speaking Chinese compradores who were vital to western firms in developing links with the native economy and with Chinese enterprises.⁷⁹ By 1920, there were at least 39 importing firms, of which 18 were registered as British and British Indian, 9 Siamese, 3 Danish, 2 French, and one each as Norwegian, Swiss, Italian, American, Indian, Belgian, and Japanese.⁸⁰ Imports of manufactured goods from European countries also went through Chinese retail networks, before they reached the consumers in the provinces.⁸¹ Government noted the importance of these upcountry networks:

They carried on most of the market gardening, the marketing of products of the fisheries and so on. Typically, Chinese merchants were also the buyers of rice produced in certain districts and were in touch with Chinese buyers and millers in some provincial areas. The rice travelled from one to the other on Chinese-owned barges, and on the return trips, the barges would bring a variety of goods that merchants offered in their stores. Thus, the wholesale trade was to a large measure, in Chinese hands. The merchant was often the money lender who advanced the Thai peasant enough cash to keep him going between harvests.⁸²

The Chinese were also brokers and buyers on sugar or pepper plantations along the coast, east of Bangkok; exporters, importers, and ship owners in Bangkok; owners of rice mills, saw mills, and pawn shops; clerks in the roughly 400 gambling places which operated in Bangkok in the early 1900s.⁸³

The Chinese exerted growing financial dominance of Bangkok business. Pawn shops in Bangkok were exclusively controlled by the Chinese. The number increased from 39 pawn shops in 1902, to 93 by 1909.⁸⁴ Mostly, they catered for the Chinese community. By 1910, Chinese entrepreneurs controlled most of the emerging banking industry, including Bangkok City Bank, (1907), Chin Siam Bank Co. Ltd. (1907), Monthon Bank Co.Ltd (1907), Chin Siam Capital, (1910). Other banks were founded

⁷⁹Falkus, "Early British Business", p. 119.

⁸⁰**Importers and Exporters Directory for Siam**, Bangkok: Ministry of Finance, first volume, 1920, pp. 10-17.

⁸¹Skinner, *Chinese Society*, pp. 88-89.

⁸²N.A. (3) Office of the Prime Minister 0201.76/1 (1929-1953).

⁸³**The Collection of Dynasty**, (Prachumpongsoawadarn) Vol.12 (Part 15-18), Bangkok: Kurusapa Publishing Company, 1964, p. 102.

⁸⁴N.A. R.5 M. of the Capital 8.9 k/19 (1908).

later including Ieaw Yong Heng (1933), Hai Chua, (1933), Kwang Koa Long (1933), Wang Lee Chun, (1936) and Sun Lee (1936).⁸⁵

The Chinese played a major role in the development of urban capitalist enterprise.⁸⁶ Suehiro for example, found that the dominant capitalists groups which emerged between 1855 and 1932⁸⁷ were (1) European capitalists including trading houses, mining companies and colonial bank (2) Chinese capitalists including tax farmers, compradores, and port merchants and (3) the Thai or Sakdina group. He concluded:

Since Chinese capitalists generally had no advantage in technology and no linkage to the core centre (London) of worldwide capitalism, three elements became more crucial to them: political patronage, or dependence on the king's power, connections with foreign capital, and high educational achievement. The most significant of these elements was political patronage, as seen in the case of Chinese tax farmers.... One more conclusion is that dominant groups during this period were essentially represented in 'merchant capital' rather than 'industrial capital'. It is true that their economic base included some manufacturing industries such as rice milling and saw milling, but these activities never did constitute a core base for their business activities. The Europeans and the Chinese frequently promoted a vertical integration system of production and circulation of exportable commodities, as was typically demonstrated in the rice and teak industries. This move primarily aimed at developing their international trade rather than a manufacturing industry.⁸⁸

Suehiro's conclusion confirms Sirilak's analysis of Chinese capitalists as bureaucratic and compradores. Sirilak investigated the personal and business history of some of the major Chinese compradores, tax-farmers, governors, and joint-ventures with the Privy Purse Bureau. She concluded that after 1855, a new bourgeoisie emerged. Their backgrounds were often as coolies who later established themselves as traders and merchants. They usually depended for their economic advance upon the monarchy or European traders, and advanced by becoming tax-farmers, by entering into joint investments with the nobility, or by gaining appointments under the charter

⁸⁵ Poonket Chandhakanond, "The History and The Expansion of Chinese Trade in Bangkok", M.A. thesis, Chulalongkorn University, 1984, p.73.

⁸⁶ For some interesting works on capital accumulation in Thailand are for example, Sirilak, The Origins of Capitalist Class; Suehiro, Capital Accumulation in Thailand; Ian Brown, The Elite and the Economy in Siam c.1890-1920, Singapore : Oxford University Press, 1988; and Kevin Hewison, Bankers and Bureaucrats Capital and the Role of the State in Thailand, New Haven : Yale University Southeast Asia Studies, 1989.

⁸⁷ Based on Suehiro, he divides the period under study into three sub-periods; 1855-1932, when Thailand was being integrated into the world's economy; 1932-1957, the period of state-led industrialisation; and 1957-1985 the period of private capital-led industrialisation. He employs a concept of "dominant capital" and divides domestic capitalists into three main groups, financial, commercial and industrial. He sets out to identify the leading capitalist enterprises in each sub-period and analyses their backgrounds, business strategies and interaction with the state and society in order to portray the evolving nature of capitalism in Thailand (Suehiro, Capital Accumulation in Thailand).

⁸⁸ Ibid, p. 104.

provincial administration (mao muang) system. Some also advanced by operating as compradores for European trading houses. Although the Chinese played an important role as "bureaucratic capitalists" and "compradore capitalists", their role lacked the independence necessary to form the basis of a true bourgeoisie powerful enough to advance the Thai economy towards capitalist development as occurred in Japan.⁸⁹

According to Suehiro, the Chinese who became tax-farmers during the reign of King Rama IV came from a group of merchants who had originally engaged in the junk trade with China and Singapore, and who took up appointment after the Bowring Treaty when the collection of import and export taxes was farmed to leading Chinese merchants. Among this group were the Sombatsiri Family (Bunsi Sombatsiri, founder), the Chotikasawat family (Phak Chotikasawat), the Chotikaphuk-kana family (Phuk Chotikaphuk-kana), the Chotikasathian family (Thain Chotikasathian), the Phisonbut family (Yim Phisonbut; Sae Low), and the Phisanbut family (Sue Phisanbut; Sae kho).⁹⁰ A second group rose through rice-milling. Suehiro noted the difference between these two groups:

Unlike the tax farmers, they had neither political patronage nor government appointments within Thailand. Rather they expanded their businesses by establishing their own marketing networks and financial channels in the intra-Asian trade, mainly through the three major entrepôts of Swatow, Hong Kong and Singapore. They usually had overseas branches or head offices outside Bangkok and engaged in importing manufacturing goods from and exporting rice and other local products to Europe and China through these entrepôts.⁹¹

Suehiro also noted the connections between these rice-millers, the early growth of banking, and the Privy Purse Bureau:

⁸⁹Sirilak, The Origins of Capital Classes.

⁹⁰Suehiro, Capital Accumulation in Thailand, p. 73.

⁹¹Ibid., p.83 Between 1932 and 1947, Chinese capitalists dominated business sector in Bangkok and Thailand. As Bangkok became the centre of international trade, trading companies and Banks and other supporting businesses located their quarters there. All major Western, Japanese, and Chinese trading companies have been based in Bangkok. A number of Chinese entrepreneurs were settled in Bangkok. Between 1932 and 1947, rice millers business extended their business lines to other related sectors such as banking, insurance, and shipping. They also enlarged in the direct export of milled rice through their own overseas branches located in China, Singapore, Indonesia, and Europe. The Chinese family names who played an active role in business undertaking in this period were for example, Wang Lee, Lo Joo Long, Lamsam, Bulakun, Iamsuri, and Saethapakdi, etc (ibid., p. 119).

In 1908, Lee Teck Oh incorporated Chino-Siamese Bank Ltd, with a registered capital of 3 million Baht in cooperation with Seow Joo Seng (Chalong Naiyanat), the owner of Joo Seng Heng Bank, Luang Sophonphecharat of Kim Seng Lee Company, and Tan Siang Kee Chan, the owner of rice mills and a tax farmer. This Chinese commercial bank was set up mainly to help finance Chinese rice millers/exporters as well as the rice mills of Lee Teck Oh. Three years later (March 1911), Lee Teck Oh and the same members of Chino-Siamese Bank promoted a new firm to undertake on a large-scale rice milling and exporting. This firm, Siam Rice Mill Co., Ltd., was capitalized at 2 million Baht, one half of which was borrowed from the Privy Purse Bureau, while the rest was mobilized from Seow Joo Seng, Kim Seng Lee, and Tan Siang Kee Chan.⁹²

Between 1921 and 1932, the immigration surplus averaged 31,156 per annum (Table 4.17), with peaks of 47,645 in 1923, and 78,821 in 1927. The upsurge was stimulated by the deepening agrarian and political crisis in China,⁹³ and facilitated by the reduction of passenger fares through keen competition. Chinese enterprise in Bangkok expanded in parallel, often at the expense of western business. The number of rice mills in Bangkok grew from 63 in 1919 to 84 in 1925, and then lapsed to 71 in 1930. After 1924, there were no rice mills belonging to westerners operating in Bangkok.

Table 4.17 Chinese Migration at Bangkok's Port, 1921-1930

Year	Immigrants	Emigrants	Surplus
1921	73,976	44,967	29,009
1922	89,329	60,162	29,167
1923	107,987	60,342	47,645
1924	84,667	56,256	28,409
1925	86,434	53,112	33,322
1926	100,410	68,744	31,666
1927	139,612	60,791	78,821
1928	88,045	25,907	62,138
1929	70,552	52,170	18,375
1930	76,369	54,219	22,150

Sources: N.A (2) Office of the Prime Minister 0201.76/2 (1932-1938); and N.A (3) Office of the Prime Minister 0201.76/1 (1929-1953).

⁹²*Ibid.*, pp. 85-86.

⁹³In South China, crop yields were low. The rice crop in Hainan was completely destroyed in 1924-25 by typhoons and droughts. Skinner described the situation in China that forced the increased emigration: "The proportion of cultivable farm land planted to rice in Ch'ao-chou was said to have decreased during the 1920s from 75 to 40 percent largely because of instability: political unrest, banditry, and military strife. Ch'ao-chou between 1925 and 1927 was the scene of continual fighting in connection with the active phase of the nationalist revolution, and the insecure living conditions in the interior caused thousands to emigrate from the country districts. Communist activity, said to be a factor leading to increased emigration as early as 1925, took a new turn in 1927 when the Kuomintang-Communist working alliance was violently broken. Thousands of leftists fled the country, and the foraging activities of the Communist groups which formed in the mountainous interior of south China induced other to emigrate" (Skinner, *Chinese Society*, p. 174).

After 1910, the pattern of immigration changed. There were large numbers of female immigrant wives who followed their husbands and then permanently settled in Thailand. The influx of Chinese coincided with the appearance of anti-Chinese feeling. In 1929, a government memo noted:

While Siamese people produce yearly, the great crops of rice, on which its wealth chiefly depends, the control of buying, selling and milling of that rice is in the hands of the Chinese. The Chinese likewise control the handling and marketing of fish. These are merely striking examples of the great economic power of the Chinese. It must be the desire and purpose of the government to create eventually among the Siamese, an enterprising class sufficiently numerous and capable to carry on the essential business and commerce of the country. It is not, of course, assumed that a restriction or even total exclusion of Chinese immigrants, will create that class. There are ways in which the government can aid in creating such a Siamese business class... It is however, clear that it can not be created in the face of unlimited Chinese competition... In fact, few nations can compete successfully with the Chinese.

The only safe conclusions to be drawn from the facts are as follows: First. A marked increase in the Chinese population through unlimited immigration will menace the complete control and direction of the policies of the Siamese Government and might prevent it from carrying out such policies essential for the protection of its own national interests. Second. If the interests and demands of the Chinese within Siam are ever in fact backed up by an active centralised government in China, the combination would be exceedingly dangerous. While the Siamese race might retain indefinitely the actual control of the government, the policy of the government might, in fact, be dominated by Chinese interests.⁹⁴

In 1929, there was a proposal by Phra Bejara Indra, Ministry of the Interior, for the establishment of a labour bureau which would increase the participation of Siamese Nationals in all activities in Bangkok, among proposals was that :

No concession for planting, forestry, industrial or commercial undertakings, transportation etc. should be granted to Siamese or to Aliens without having a clause specifying that employees must be naturally born Siamese..... or no contracts for public works, buildings, roads, canals, etc. should be granted by any government department without having a minimum percentage of Siamese labourers.⁹⁵

The proposal was rejected on the ground that:

- (1) There was no serious question of unemployment in Siam by aliens. The purpose of Phra Indra's plan was not to find positions for those who were out of work, but to bring about gradually the replacement of Chinese labour with Siamese labour.
- (2) The sub-committee was convinced that the only effective way to gradually increase the proportion of national control in labour and in other fields also, was strict control of immigration. As long as the Chinese were permitted to enter the country in unlimited numbers, it would be extremely difficult and probably impossible to protect the Siamese by artificial discriminations within the country from their competition.⁹⁶

⁹⁴N.A. (3) Office of the Prime Minister 020 .76/1 (1929-1953).

⁹⁵N.A.R.7. M. of Commerce 18/4 (1930).

⁹⁶N.A.R.7. M. of Commerce 13/4 (1930).

Such proposals and a spate of newspapers criticisms of Chinese influence in Bangkok attest not only to considerable Chinese influence in the capital but to growing Siamese economic aspirations. This was before the world-wide depression increased such sentiments further.

Chinese immigrants in Bangkok, 1932-1950

During the world depression, the value of exports and imports fell, leading to reductions in the demand for labour and in wages. The impact was felt on internal and external trade, wholesale and retail, from late 1930.⁹⁷ Khun Phromaksorn, who was in charge of the Department of Left Harbour which oversaw Chinese immigration, wrote in November 1930:

I am responsible for the public administration in the area at the southern part of Padungkrungkasem canal at Bangkok. For the first six months, during April to September, 1930, the conditions of Chinese livelihoods can be concluded as follows. The Chinese have hardships according to the trade recession. For example, some rice mills scaled down their business operations, therefore there was an adverse effect on unemployment. About 100 Chinese labourers stayed unemployed. Based on statistics of persons who avoided paying the poll taxes, it is found that about 2,000 persons were arrested. The figures of arrested persons are up more than 1,500 person, when compared to previous years.

A major reason is poverty, which causes financial difficulty when considering paying poll taxes. Finally, these unemployed people must be arrested and to put to work on public projects. Of 2,000 arrested persons, about 15 to 20 percent were Thais, the majority are Chinese.⁹⁸

Deteriorating economic conditions were shown in the falling numbers of Chinese migrants (Table 4.18). The surplus of Chinese immigrants declined down to 1937, with net outflow in some years.

Table 4.18 Chinese Migration at Bangkok's Port, 1930-1937

Year	Immigrants	Emigrants	Surplus of Immigrants
1930	76,369	54,219	22,150
1931	65,549	53,058	16,419
1932	52,854	39,769	13,085
1933	15,648	30,176	-14,528
1934	16,324	29,673	-13,349
1935	29,927	22,029	7,898
1936	36,357	25,390	10,967
1937	43,068	20,522	22,546

Sources: N.A. (3) Office of the Prime Minister 0201.76/1 (1929-1953) ; and N.A. (2) Office of the Prime Minister 0201.76/2 (1932-1938).

⁹⁷N.A. R.7. M. of Interior 12/3 no.28/126 (1930).

⁹⁸N.A. R.7 M. of Interior 12/3 no.28/126 (1930).

Between 1938/39 and 1940, Chinese immigration to Siam dropped because the South China ports were disrupted by the Japanese under the Sino Japanese war. Fewer migrants left China for fear they might not be able to return, while there was an upsurge in departures from Siam. During the war years, migration virtually ceased. In 1946-7, there was a sharp revival, which was then rescinded by immigration restrictions.⁹⁹ In 1947, the Ministry of Interior imposed a maximum quota of 10,000 immigrants per year, and in 1950 reduced this figure to 200. Then in 1951 government raised the immigration fee from 30 Baht to the prohibitively high figures of 1,000 Baht. When the Chinese ambassador voiced concerns over these restrictions in 1949, government made its position clear:

A draft letter in 1949 to the Chinese ambassador indicates that there were some adverse effects of Chinese migration on the Thai economy, it claimed:

Prior to the establishment of the quota in 1947, there was a tremendous influx of immigrants, largely Chinese, into Siam, and since 1945, this flood of aliens was vastly in excess of the economic resources of the kingdom, the inevitable consequence of which is the exorbitant cost of living and the acute housing shortage which is causing great distress to the population. These are the factors which have had to govern the determination of a quota responding to the needs of the country. Your Excellency must realise that Chinese aliens have been the greatest beneficiaries of Siamese hospitality. In recent years, this has become such a heavy drain upon the resources essential to the rehabilitation of the country that it is only reasonable that large numbers of your compatriots who have already been admitted to Siam should serve as a basis for the limitation of immigration.¹⁰⁰

In the 1940s and 1950s, there was little increase in the numbers of Thai labourers involved in production and trade in the non-agricultural sectors. The role of the Chinese remained unchanged in the development of the non-agricultural sector. A breakdown of the labour market in 1952 showed that Thais dominated government, professions, and agriculture, while the Chinese dominated commerce, finance, industrial and artisan occupations.¹⁰¹

⁹⁹Skinner, *Chinese Society*, p. 176.

¹⁰⁰N.A. (3) Office of the Prime Minister 0201.71/1 (1929-1953).

¹⁰¹Skinner, *Chinese Society*, p. 302.

IV
The Effect of Chinese Immigration on
Labour Supply and Wage Rates, 1851-1950

Labour supply and trends in unskilled labour wage rates

The large numbers of Chinese immigrants affected labour supply and wage rates both for skilled and unskilled labour in Bangkok. Chinese immigrants were mostly single males of an economically active age. They came to Thailand with an intention of working in the urban commercial sector, mostly in Bangkok, and then returning to China after accumulating enough wealth. They constituted of a large component of the entire labour supply in Bangkok.

The long-term trend in unskilled labour wages (nominal) in Bangkok before 1940 was strikingly stable (Table 4.15). Between 1900 and 1930/31, the average wage was 1 Baht a day (except in the years 1915-1916, and 1924). Between 1931 and 1939 unskilled labour wage rates declined to 0.80 Baht a day, and then increased again in the beginning of the 1940s until 1950.

Table 4.19 Nominal Wage Rates for Unskilled Labourers in Bangkok (Baht/day)

Year	(1) From SYB and Ingram and Bank of Thailand.	(2) From Bangkok National Archives
1864	0.75	
1889	0.75	
1890	n.a	0.50-0.75
1912	0.75	
1916	0.75	
1917	1.00	
1918	1.00	
1919	1.00	
1920	1.00	
1921	1.00	
1922	1.00	
1923	1.00	
1924	1.12	
1925	1.00	
1926	1.00	
1927	1.00	
1928	1.00	0.75
1929	1.00	1.00
1930	1.00	1.00
1931	0.80	
1932	0.80	0.50
1933	0.80	
1934	0.80	
1935	0.80	
1936	0.80	
1937	0.80	0.50-0.60
1938	0.80	0.80
1939	0.80	0.64-1.00
1940	n.a	
1941	n.a	
1942	1.26	1.25
1943	2.27	1-1.50
1945	4.46	4.00
1946	5.22	4.00
1947	8.80	
1948	n.a	10-15
1949	n.a	12.00

Sources: According to column (1), the data were obtained from the following sources
 Central Service of Statistics, **Statistical Yearbook of Thailand**, Various Issues.; Bank of Thailand, **An Economic Survey of Thailand**, 1946/47.; and J.C.Ingram, "Thailand's Rice Trade and Allocation of Resources" in C.D. Cowan (ed), **The Economic Development of Southeast Asia, Studies in Economic History and Political Economy** New York: Frederic A.Praeger, Table III, 1964, p.115.
 According to column (2), the data obtained from the following sources:
 N.A.R.5 M. of the Capital 46.1/50 (1898); N.A. R.5 M. of the Capital 5.8/25 (1910);
 N.A. R.7 M. of Interior 26.5/79 (1928); N.A. M. of Education 0701.7.1/13 (1929);
 N.A. M. of Education 0701.7.3.1/15 (1929-30); N.A. Office of the Prime Minister 0201.75/11 (1933-36);
 N.A. M of Education 0701.28.3/2 (1937-38); N.A. (2) Office of the Prime Minister 0201.75/38 (1947-49);
 N.A. (2) Office of the Prime Minister 0201.75,13 (1943-51); N.A. M. of Education 0701.26.3/2 (1947);
 N.A. Office of the Prime Minister 0201.75/5 (1948-54); and N.A. M. of Education 0701.23.3 (1949).

As prices dropped in the 1930s, the real value of wages increased, but then fell back again under the impact of inflation during the Second World War and its aftermath (Table 4.20).

Table 4.20 Nominal and Real Wage Rates of Unskilled Labourers in Bangkok, 1920-1950

Year	Nominal Wage Rates in Bangkok (Baht/day)	Cost of Living Index	Real Wage Rates (Baht/day)
1920\21	1.00	100.00	1.00
1922\23	1.00	82.07	1.21
1923\24	1.00	96.14	1.04
1924\25	1.12	118.45	0.94
1925\26	1.00	111.50	0.89
1926\27	1.00	111.50	0.89
1927\28	1.00	92.30	1.08
1928\29	1.00	90.76	1.10
1929\30	1.00	101.52	0.98
1930\31	1.00	50.63	1.97
1931\32	0.80	47.68	1.67
1932\33	0.80	50.09	1.59
1933\34	0.80	39.99	2.00
1934\35	0.80	34.76	4.96
1935\36	0.80	49.20	1.62
1936\37	0.80	49.30	1.62
1937\38	0.80	60.60	1.32
1938\39	0.80	53.30	1.87
1940	n.a.	69.80	n.a.
1941	n.a.	90.30	n.a.
1942	1.26	109.39	1.15
1943	1.27	131.39	1.25
1944	1.96	100.00	1.96
1945	4.46	216.21	1.13
1946	5.22	983.30	0.54
1947	8.80	1,147.10	0.76

Sources: Table 4.19; Central Service of Statistics, *Statistical Yearbook of Siam*, various issues ; and Bank of Thailand, *An Economic Survey of Thailand*, 1946-47.

Notes : (1). Wage rates for the years 1918/19 to 1939/40, are the wages for coolies.

(2). Wage rates for the years 1941 to 1947, are wages rates for unskilled labourers in rice mills

The influx of Chinese immigrants played an important role in keeping the nominal wages for unskilled labourers constant from 1900 until the years 1938/39. During the depression, nominal wage rates declined, but less sharply than prices. During the war, wages were driven up by inflation, but less sharply than price rises (Table below).

Year		Cost of Living Indices
1938		100.00
1939		102.60
1940		112.70
1941		132.90
1942		176.99
1943	January-October	236.59
	November	265.47
	December	291.56
1944	January	301.12
	June	531.69
	December	481.25
1945	January	554.28
	June	1,098.83
	December	825.61
1946	January	911.70
	June	1,107.95
	December	1,037.59
1947	January	1,140.37
	June	1,370.15
	December	1,139.58

Source: N.A.M. of Interior 0201.1.11/7(1948), based on Ministry of Agriculture, **Annual Report to the Food and Agricultural Production**, Organisation of the United Nations, 1948, pp.14-15.

We cannot be sure that these figures truly reflect the trends in nominal wage rates. It is possible that fluctuations were actually larger than those recorded. However, if we take the figures at face value they indicate that wage rates were relatively inflexible, despite large fluctuations in price levels.

There is little data available to indicate wage differentials in this period, with the exception of a survey made in 1943 (Table 4.21 and 4.22). In that year, the Thai government was faced with the shortage of labour in various key factories, and suspected that high inflation had made the wage levels unattractive. It undertook a survey of wage rates and income earnings of workers in various state enterprises and governmental departments, in order to estimate the numbers of labourers whose standard of living lay below the threshold minimum income requirement to cover basic expenditure. Government estimated the threshold minimum income requirement based on the minimum budget required for one single labourer for food, clothes, housing, rent, transportation costs and some basic miscellaneous items. In 1942-43, this estimation gave a figure of 29 Baht per month.¹⁰² Although the survey did not cover private business, the industries in the government sector give a good picture of unskilled labour market conditions in Bangkok. The reliability of this data is also supported by the large numbers included in the sample size.

¹⁰²N.A. (3) Office of the Prime Minister 0201/75/13 (1943-1951).

Table 4.21 Wage Rates for Unskilled and Skilled Workers in the Railway Department, 1942- 1943

Type of Workers	Classes	Baht per day
(1)		
Daily Wage Labour	1	0.50
Daily Wage Labour	2	0.55
Daily Wage Labour	3	0.60
Daily Wage Labour	4	0.65
Daily Wage Labour	5	0.70
Daily Wage Labour	6	0.75
(2)		
Head of Daily Wage Labour	1	0.80
Head of Daily Wage Labour	2	0.90
Head of Daily Wage Labour	3	1.00
Head of Daily Wage Labour	4	1.10
Head of Daily Wage Labour	5	1.20
(3) Hourly Wage Labour (general workers)	1	0.36
	2	0.72
	3	0.80
(4) Hourly Wage Labour (training student workers)	1	0.32
	2	0.48
	3	0.64
	4	0.80
	5	0.96
(5) Hourly Wage Labour (Assistant Technician)	1	0.88
	2	0.96
	3	1.04
	4	1.12
	5	1.20
(6) Hourly Wage Labour (Technician Level 3)	1	1.36
	2	1.56
	3	1.68
	4	1.84
	5	2.00
(7) Hourly Wage Labour (Technician Level 2)	1	2.16
	2	2.20
	3	2.64
	4	2.88
(8) Hourly Wage Labour (Technician Level 1)	1	3.12
	2	3.44
	3	3.76
(9) Hourly Wage Labour (Head of Technicians)	1	4.16
	2	4.56
	3	4.98

Source: N.A. (2) Office of the Prime Minister C201.75/35 (1943-51).

Note: Classes mean level of worker status. Higher classes mean higher skills and experience.

Table 4.22 Wage Rates for Skilled and Unskilled Labourers Under the State Enterprise of the Ministry of Defence in 1942-1943

Classes	Wage Rates Per Hour (Satang)	Estimated Monthly Income Earning (Baht)
1	3	5.76
2	4	7.68
3	5	9.60
4	6	11.52
5	7	13.44
6	8	15.36
7	9	17.28
8	10	19.20
9	11	21.12
10	12	23.04
11	13	24.96
12	14	26.88
13	15	28.80
14	17	32.64
15	19	36.48
16	21	40.32
17	23	44.16
18	25	48.00
19	27	51.84
20	29	55.68
21	31	59.52
22	35	67.20
23	40	76.80
24	45	86.40
25	50	96.00
26	55	105.60
27	60	115.20
28	65	124.80
29	70	134.40
30	75	144.00

Source: N.A. (2) Office of the Prime Minister (201.75/38 (1943-1951)).

Several of the largest workforces in the city fell in the government sector. In 1950, the Port of Bangkok employed 2,200, including casual workers employed by the day. The Makasan workshops of the Thai State Railways employed 1,700 workers; the Government distillery at Ban Yee Khan 1,300; Thai Tobacco Monopoly 7,000; and the liquor distilleries 2,500. In addition, an estimated aggregate of 10,000 workers were employed in government owned and operated establishments such as power plants, water works, tanneries, the cargo transportation organisation, a paper mill, and a textile mill. The total would be even larger if it included companies that were private in terms of commercial organisation, but whose stock was largely held by the government, such as the Thai Rice Co, Ltd. ¹⁰³

¹⁰³N.A. (3) Office of the Prime Minister (201.75/1 (1951)).

Wage rates in various Departmental Government agencies varied sharply according to the types of work, educational background, and experience of labour. For example, the ratio was as high as 1:99 between the lowest unskilled (class 1) daily wage labourer and the highest skilled workers (class 3 head of technicians) (Table 4.21). In the 18 factories under the Ministry of Defence, there was a wide variation of wage differentials classified by skills (Table 4.22). Apprenticed workers (classes 1-5) earned from 5.76 to 13.44 Baht per month; ordinary manual labourers (classes 6-16) earned from 15.36 to 40.32 Baht per month; professional or skilled workers (classes 17-30) earned from 44.16 to 144 Baht per month. ¹⁰⁴

Conclusion

This chapter has explored three related themes in Bangkok's development, population, Chinese immigration and the work of the Ministry of the Capital.

First, we reviewed population estimates for Bangkok, and showed that Bangkok's population was much smaller than often suggested in the 19th century.

Around the time of the First World War, Bangkok's population stood at around 360,000, heavily concentrated in districts around the Royal Palace and commercial river areas. Perhaps half of Bangkok's population constituted of Chinese migrants, and they played a crucial role in Bangkok's development.

By contrast, around 1880, Bangkok's population was very different. It was smaller, less Chinese was concentrated on the river areas. Only after the 1890s was land settlement pushed significantly beyond the immediate river boundaries.

Land settlement and population growth, coupled with political change which saw Bangkok develop as a modern capital for Siam with centralized revenue collection and centralized power, encouraged administrative changes for the capital. More important was the establishment of the Ministry of the Capital (1892). This Ministry ensured that Bangkok would be administered as part of state (royal) interests, and may thus be seen as part of a process of centralization initiated by Prince Damrong in the 1890s.

¹⁰⁴N.A. (2)Office of the Prime Minister 0231.75/35 (1936-1951).