This paper deals with wage formation and the transition of Thailand from an "expensive" to a "cheap" labour country which occurred around the 1950s. Significant factors explaining the change include population growth, the rice premium, labour productivity and changing rural conditions. Crucial, though, was the growth of Bangkok and the decline of Chinese immigration which took place after 1950.

I Introduction

From the city's foundation in 1782 until the present, Bangkok has held a remarkable concentration of the nation's wealth. It has been the chief port, the largest centre of non-agricultural employment, the seat of government and administration and the largest urban centre of Thailand. The overwhelming dominance of the Bangkok area has created an unusual distribution of the urban and rural population. In 1947, Bangkok's population was 20 times the size of the second largest city, Chiang Mai. In 1960, the ratio with respect to Chiang Mai's population was 26 to one, in 1970 35 to one, and in 1980 55 to one [Falkus 1993: 144]. Bangkok's proportion of Thailand's total population has risen steadily over the years, from under 5 percent in the 1940s to some 10 percent in the 1980s. Bangkok's population formed around 60 percent of the total urban population in the 1980s. Even today Bangkok is an explosive growing city of some 8 million; Korat, the second largest city, contains around 300,000. By 1980, Bangkok accounted for 75 percent of the nation's telephones and about half its motor vehicles, consumed 61 percent of its electricity, generated 70 percent of its income tax, held 20 percent of all commercial bank deposits, generated 75 percent of the annual value of Thai manufactures, contributed 32 percent of Gross National Product, and handled 95 percent of Thailand's sea-borne foreign trade [ibid.: 142]. Bangkok's urban primacy is among the most striking in the world. Meanwhile, the environmental consequences of such expansion have become increas-
ingly evident. With polluted air, rivers and canals, mounting traffic congestion, multiplying slums, urban Bangkok is facing ever-increasing pressures upon its inadequate infrastructure [Falkus 1991: 69]. Bangkok faces numerous problems, including population congestion, especially from migration into Bangkok and peripheral provinces in search of higher income; inefficient land use, which appears as ribbon development without plans for proper classification; and insufficient Bangkok Metropolitan Administration revenue to meet the costs of developing basic services within its responsibility [Patya 1993].

If economic dominance and "primacy" have been one feature of Bangkok's development, another has been periods of striking growth, in population, industrialization, physical expansion and other aspects. Such periods of growth may be found in earlier times, but especially remarkable has been recent growth since the 1960s. In 1950, the city had around one million inhabitants. It was still then a largely non-industrial place, without high rise buildings, with physical development focused upon numerous canals, and with commercial development still largely confined to the few kilometres of roads in close proximity to the river. By 1970 the city had 3 million inhabitants, today perhaps over 8 million. And now Bangkok is transformed into a sprawling megalopolis of high rise buildings and multiplying commercial, industrial and residential centres.

The purpose of this essay is to develop a theme suggested by Malcolm Falkus to explain the evolution of the labour market in twentieth century Thailand [Falkus 1991]. In developing this theme, ¹ we present new archival evidence to shed light on the relative wage movements in the urban and rural sectors and suggest that the key factors influencing the movements were rural population growth on the one hand, and the growth of job opportunities in Bangkok respectively. From around the 1950s, these two forces combined to encourage a significant flow of Thai rural labour to Bangkok for the first time: hitherto Bangkok had grown rapidly on natural increase and Chinese immigrant labour.

The author's study of Bangkok [Porphant 1994] has shown that prior to the Second World War there was only limited growth of the major city, Bangkok, and during the interwar years Bangkok's population hardly kept pace with the overall growth of Thai population. From around 1950 the position changed, and Bangkok grew markedly faster the overall population growth. The key problem to be explained here is the nature and timing of the change.

¹ It is my pleasure to acknowledge my debts to two key works which introduced me to the subject of this article namely, Falkus [Falkus 1991; 1993]. As for works related to this issue, see for example the following works: Ingram [1964; 1971 in chapter 10] and Sompop [1989 in chapter 6].
II Theoretical Framework

This paper considers the conditions which retarded and promoted a flow of Thai rural labour to urban centres. Most labour market studies in development economics use some variant of the two-sector model which examines labour productivities in two sectors (urban/rural, agriculture/manufacturing, traditional/modern, and so on). Using this approach, let us first consider Thailand before the 1940s in terms of a simple two sector model, urban (Bangkok), and rural. The types of model which have been applied to developing economies from the 1960s [Lewis 1954; Ranis and Fei 1961] rest on a traditional rural sector which has a constant wage below that of the modern sector, however, the evidence suggests that the case in pre-1940s Thailand was different.

What was the case in pre-1950 Thailand?

Before 1950, Thailand’s sparse population and abundant land meant that indigenous labour was “expensive.” The term “expensive labour” refers to relative wages between Bangkok and the countryside.\(^2\) Wages in rural areas were higher than the unskilled coolie wage in Bangkok prior to the Second World War. A major factor affecting the high level of wage rates was the relatively high productivity of Thai agriculture in relation to labour input. The high level of wage rates earned by the rural workers meant that the opportunity cost of changing occupations from that of a rural farmer to an urban worker was also high. Under the circumstances, there was a limited flow of labour from rural to urban areas. Hence, Chinese immigration played an important role in developing the non-farming occupations in Thailand, especially in Bangkok.

After the 1950s, we have a situation similar to that postulated in Lewis-Fei and Ranis’s famous model with unlimited supplies of labour. In this model, the economy consists of two sectors: (a) a traditional, rural subsistence sector characterized by zero or very low productivity, and surplus labour resulting from high population growth, resulting in a low or zero marginal productivity of labour; and (b) a high productivity modern urban industrial sector into which labour from the subsistence sector is gradually transferred [Lewis 1954: 139-192; Ranis and Fei 1961: 533-565]. Under this model, rural-urban migration is a mechanism adjusting the disequilibrium between the urban and rural labour markets. A high wage differential induces rural migrants into the

\(^2\) The concept I have in mind here is that of “opportunity cost.” In terms of a simple two-sector model, if the opportunity cost of a rural worker moving to an urban centre is high (because rural productivity is high, perhaps), the worker will not move. Labour is “expensive.” If the opportunity cost is low (and the urban wage above the opportunity cost for the rural worker), labour is “cheap” and we should perceive a flow of rural labour. My paper shows that a move from expensive to cheap labour in Thailand happened around the period of the 1950s, and explains the change.
modern sector with no loss of output, since there is a surplus of unemployed or underemployed labour in the rural sector [Zarembka 1972]. Wage differentials will continue to attract rural migrants until counterbalanced by uncertainties over finding high-wage employment in the modern sector [Todaro 1969: 139]. As Todaro notes, this process of labour migration is usually modelled as a transfer from a low productivity sector (rural areas) to a high productivity sector (the urban sector):

It is a well-known fact of economic history that material progress usually has been associated with the gradual but continuous transfer of the economic agent from rural based traditional agriculture to urban oriented modern industry. It is not surprising therefore, to find the literature on economic development stressing the importance of similar structural changes in contemporary less developed nations. In particular, with respect to the occupational distribution of the indigenous labour force, economic development is often defined in terms of the transfer of a large proportion of workers from agricultural to industrial activities. However, this process of labour transfer is typically viewed analytically as a one-stage phenomenon, that is, a worker migrates from a low productivity rural job directly to a higher productivity urban industrial job. [loc. cit.]

Capital investment in commerce and the industrial sector raised urban labour productivity, while the pressure of population growth in rural areas produced the decline in rural labour productivity. As Lewis noted, the growth of population outstripped the accumulation of capital and other productive resources, with the result that in large sectors of the economy the marginal product of labour approached zero or even negative values. Not only in agriculture but also in the commerce and service sectors, labour was abundant. With this large pool of labour supply, labour is transferred from rural agricultural areas to the modern sector without affecting real wage rates. As capital investment in the urban sector increases, the marginal product of labour already employed increases, and demand for labour increases. As the outflow of labour from rural areas continues, a point will be reached where there is no longer surplus labour, and wage rates will rise [Lewis 1954].

III Data and Its Reliability

It must be stressed that the data are partial and fragmentary. Anyone who has worked with Thai historical statistics knows of the enormous problems of using and interpreting data, of the enormous gaps in the most historical series, of the frequently changing definitions, and so on. The data we shall present are suggestive rather than conclusive, but they do point in a certain direction which is difficult to ignore. Fundamentally, we shall see that the wages for unskilled labour in Bangkok were either equal to, or below,
<table>
<thead>
<tr>
<th>Year</th>
<th>Bangkok (1)</th>
<th>Bangkok (2)</th>
<th>Rural Areas (3)</th>
<th>Rural Areas (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1904</td>
<td>.50</td>
<td></td>
<td></td>
<td>.66</td>
</tr>
<tr>
<td>1905</td>
<td>.50 - .75</td>
<td></td>
<td></td>
<td>.89</td>
</tr>
<tr>
<td>1906</td>
<td>.75</td>
<td></td>
<td>2 - 3</td>
<td></td>
</tr>
<tr>
<td>1907</td>
<td></td>
<td></td>
<td></td>
<td>1.10</td>
</tr>
<tr>
<td>1908</td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>1909</td>
<td></td>
<td></td>
<td></td>
<td>.93</td>
</tr>
<tr>
<td>1910</td>
<td></td>
<td></td>
<td></td>
<td>.93</td>
</tr>
<tr>
<td>1911</td>
<td></td>
<td></td>
<td></td>
<td>.94 - 1.10</td>
</tr>
<tr>
<td>1912</td>
<td>.87</td>
<td></td>
<td></td>
<td>1.10</td>
</tr>
<tr>
<td>1913</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1914</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1915</td>
<td>.75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1916</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1917</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1918</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1919</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1920</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1921</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1922</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1923</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1924</td>
<td>1.12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1925</td>
<td>1.00</td>
<td></td>
<td></td>
<td>.80</td>
</tr>
<tr>
<td>1926</td>
<td>1.00</td>
<td></td>
<td></td>
<td>.76</td>
</tr>
<tr>
<td>1927</td>
<td>1.00</td>
<td></td>
<td></td>
<td>.80</td>
</tr>
<tr>
<td>1928</td>
<td>.75</td>
<td>1.00</td>
<td></td>
<td>.80</td>
</tr>
<tr>
<td>1929</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td>1.10</td>
</tr>
<tr>
<td>1930</td>
<td>1.00</td>
<td>1.00</td>
<td></td>
<td>.94</td>
</tr>
<tr>
<td>1931</td>
<td>.80</td>
<td></td>
<td></td>
<td>.75 - 1.10</td>
</tr>
<tr>
<td>1932</td>
<td>.50</td>
<td>.80</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>1933</td>
<td>.80</td>
<td></td>
<td>1.00 - 2.00</td>
<td></td>
</tr>
<tr>
<td>1934</td>
<td>.80</td>
<td></td>
<td>1.20 - 1.7</td>
<td></td>
</tr>
<tr>
<td>1935</td>
<td>.80</td>
<td></td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>1936</td>
<td>.80</td>
<td></td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>1937</td>
<td>.50 - .60</td>
<td>.80</td>
<td>1.00 - 1.25</td>
<td></td>
</tr>
<tr>
<td>1938</td>
<td>.80</td>
<td></td>
<td></td>
<td>.80</td>
</tr>
<tr>
<td>1939</td>
<td>.64 - 1.00</td>
<td></td>
<td>1.20 - 2</td>
<td></td>
</tr>
<tr>
<td>1940</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1941</td>
<td></td>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>1942</td>
<td>1.25</td>
<td>1.26</td>
<td>1.50 - 2</td>
<td>1.50 - 2</td>
</tr>
</tbody>
</table>
Bangkok as a Magnet for Rural Labour

<table>
<thead>
<tr>
<th>Year</th>
<th>Bangkok (1)</th>
<th>Bangkok (2)</th>
<th>Rural Areas (3)</th>
<th>Rural Areas (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1943</td>
<td>1 - 1.50</td>
<td>1.27</td>
<td>1.50 - 2</td>
<td>1.50 - 2</td>
</tr>
<tr>
<td>1944</td>
<td></td>
<td>1.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1945</td>
<td>4.00</td>
<td>2.46</td>
<td>2.50</td>
<td></td>
</tr>
<tr>
<td>1946</td>
<td>4.00</td>
<td>5.22</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1947</td>
<td></td>
<td>8.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1948</td>
<td>10 - 15</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1949</td>
<td>12.00</td>
<td>12 - 15</td>
<td>7.54</td>
<td></td>
</tr>
<tr>
<td>1950</td>
<td></td>
<td></td>
<td>7.90</td>
<td></td>
</tr>
<tr>
<td>1951</td>
<td>16.80</td>
<td></td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td>1951</td>
<td>16.80</td>
<td></td>
<td>6.91</td>
<td></td>
</tr>
<tr>
<td>1952</td>
<td>16.80</td>
<td></td>
<td>7.92</td>
<td></td>
</tr>
<tr>
<td>1953</td>
<td>19.80</td>
<td></td>
<td>8.08</td>
<td></td>
</tr>
<tr>
<td>1954</td>
<td>19.10</td>
<td></td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td>1954</td>
<td>25.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1954</td>
<td>30.00</td>
<td></td>
<td>15.00</td>
<td></td>
</tr>
<tr>
<td>1955</td>
<td>20.00</td>
<td></td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>1956</td>
<td>21.00</td>
<td></td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>1957</td>
<td>21.00</td>
<td></td>
<td>11.00</td>
<td></td>
</tr>
<tr>
<td>1958</td>
<td>20.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1964</td>
<td>22.00</td>
<td></td>
<td>10.00 - 12.00</td>
<td></td>
</tr>
<tr>
<td>1965</td>
<td>20.60</td>
<td></td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td>1965 - 67</td>
<td>21.00 - 22.10</td>
<td></td>
<td>8.00 - 10.00</td>
<td></td>
</tr>
<tr>
<td>1970</td>
<td>23.30</td>
<td></td>
<td>10.00</td>
<td></td>
</tr>
</tbody>
</table>

Sources: According to column Bangkok (1), wages for construction workers in public projects in Bangkok which are obtained from the following sources:


According to column Bangkok (2), wages for unskilled labourers which are obtained from Department of the Secretary-General of the Council of Ministers [various years] Thailand, Bank of Thailand [n. d.] and Ingram [1964: 115].

According to column Rural Areas (3), wages for construction workers in public projects in the provincial areas which are obtained from the Appendix Table and [N. A. M. of Education 0701.26.1/24 (1954); N. A. M. of Education 0701.26.1/25 (1954); U. S. A., Bureau of Labour Statistics 1959: 14].

According to column Rural Areas (4), wages meant farm wages for hired farm labourers in the Central Plain which are calculated form the Appendix and [Thailand, Central Statistical Office 1954; Usher 1966: 441; World Bank 1980: 55; Thailand, Ministry of Agriculture 1964; Nipon 1981: 75].

Note: The conversion of farm wage rates is done by this formula; The nominal wage rate per person is divided by 4.7 (months) \times 30 and then added to, this is the 33% of for food and shelter.
wages for unskilled labour in provincial Thailand for virtually the entire period between 1900 and the 1940s. From 1950, however, the pattern changes. A growing gap appears between the urban and rural sectors.

In view of the crucial importance of this finding to the model of labour supply we are presenting, we should make some comments on the sources and reliability of the data. For example, wage data from the *Statistical Yearbook of Thailand*, were only based on wages of labourers engaged in Bangkok Dock Company. Clearly this large government undertaking can not be accepted as representative further evidence. There are many points from such sources which need explanation. Why, for example, were nominal wages (see Table 1) constant for so long between the 1916 and the 1930s? Are these daily rates that which were actually paid to workers? Since much labour was casual, we cannot readily have month or annual earnings. While we have no means of knowing, we can at least conclude that there were no significant force increasing nominal wages until the Second World War, and there was a fall in the great depression. Perhaps, it might be reasonable to conclude that the large influx of Chinese (especially when it is remembered that the influx was in part the result of exogenous forces) in the 1920s must have held wages in check, despite the growth of economic activities in Bangkok.

Rural wage data from the national archives were also not systematically collected. The figures which do exist need to be interpreted with caution because the forms of wage payment on rice farms varied from region to region and often included both cash and kind elements. Six common forms of payment on rice farms were as follows. (1) Payment per growing season of about 6–9 months. The employee was given food and lodging and a lump sum in cash or in paddy at harvest time. (2) Payment per volume of grain harvested such as by tang. (3) Daily wage payment. The work day was from sunrise to sunset with time off for lunch. Sometimes lunch was provided by the employer and sometime not. (4) Payment per acre planted or harvested. This form of piece work was common especially in the central plain where farms were relatively large and labour was scarce at harvest time. (5) Exchange of labour. There was no cash payment but farmers helped each other at planting or harvesting time [N. A. M. of Agriculture 15.2/25 (1931)]. (6) The collection of rural wages was based on seasonal (spot rates) which does not represent the annual average wages.

In conclusion, comparisons of real wage rates between the city and the provincial areas are not easy, for several reasons: (1) the skill differentials, non-pecuniary advantages to employment in agriculture, and irrationality or other imperfections in the labour market; (2) the small sample sizes of the rural and urban wage surveys; (3) the variety in forms of wage payment, including by the day, by area planted or harvested, by volume of grain harvested, by year, or by growing season; and (4) the difficulties in measuring the standard of living of farm workers in different parts of the country.

3) An ancient capacity-measure of 20 litres.
Although far from conclusive, if we rely on statistical data alone, the shift in relative earnings between the rural and urban sectors may be supported by some theoretical considerations.

**IV Results**

Before we look at the models underlying change in labour supply and demand, and the growth of Bangkok is considered, let us first examine the evidence on the relative wages in the rural and urban sectors.

Table 1 distills existing wage data over the period 1904-70. Fuller details of the sources are contained in the appendix. Between 1904-31, except for a few years (unfortunately we have no data for 1913-24) there was no clear trend in real wages, upwards or downwards.

In some years, wages for hired farm labourers were very high. In 1906, wage rates for hired labourers were about 2 to 3 baht a day and in 1908 jumped to 6 baht plus a share of the crop from the cultivation on some farms in Rangsit. The high level of rural wage rates compared to those of unskilled coolies in Bangkok suggests that demand for labour in the central plain exceeded supply. According to Johnston:

> Agricultural wages increased rapidly during this period (the 1890s), from a pre-boom rate of one to two baht per day, up to as high as three baht a day in 1907 and a seemingly incredible rate of six baht per day, plus a share of the crop on some Rangsit farms in 1908. Even at these rates, the demand for agricultural labour exceeded the available local supply. [Johnston 1981 : 113]

High demand for rural labourers impacted on other sectors. Public projects such as railway construction and road construction faced labour shortages because of the high opportunity cost for rural labourers. Prince Damrong wrote in 1913:

> The Department of Railways needed many labourers for railway line construction, for which the pay was .75 baht a day. The shortage of labourers remained widespread, this was caused by ordinary people having other options for earning their livelihood which were more satisfactorily than railway construction, such as cutting wood etc. [Damrong Rajanuparb 1913 : 121]

According to Table 1 which is based on the Appendix, in 1932 general labourers in Songkhla earned 0.75 baht per day [Damrong Rajanuparb 1990 : 17]. In 1933, unskilled workers in construction on public projects in Chiang Rai earned 1.00-2.00 baht per day [N. A. M. of Interior 2.3.9/2 (1933-34)]. In 1934, the daily wage stood at 1.2 baht for unskilled labourers in public construction in Songkhla, and 1.20-1.50 baht in Samut Prakarn [N. A. M. of Interior 2.3.9 (1933-34)]. Between 1935 and 1936, unskilled labourers
in Ranong earned 3 baht a day [N. A. M. of Interior 2.3.9/9 (1933–36)]. In 1937, daily wages on public projects in Sukhothai were 2 baht a day [N. A. M. of Interior 5.12/298 (1938)]. In 1939, unskilled labourers in road construction at Betong Songkhla earned 1.20 baht per day [N. A. (3) Office of the Prime Minister 0201.22/14 (1943)], while unskilled labourers in public construction projects at Sukhothai earned 2 baht per day [N. A. M. of Interior 5.12/298 (1939)]. In 1940–41, daily wages for general workers in public construction in Saraburi were recorded at 0.60 baht [N. A. M. of Education 0701.26.1/15 (1940–41)], while daily wages for unskilled labourers in a public construction project in Trang in the same period were 2 baht [N. A. M. of Interior 5.12/2.86 (1941)]. In 1942, wages for unskilled labourers were 1.5–2 baht in Saraburi [N. A. M. of Education 0701.26.1/15 (1940–41)], 1.5–2.0 baht in Kanchanaburi and 1.00–1.50 baht in Nakhon Pathom [N. A. (3) Office the Prime Minister 0201.75/13 (1943–51)]. In 1944, the daily wage for unskilled labourers in railway construction in Ratchaburi was 1.5 baht per day [N. A. (2) Office of the Prime Minister 2.4.1.7/30 (1944)].

Between 1904 and around 1950, then, money wages for unskilled workers in Bangkok seem to have been no higher, and generally were lower, than money wages earned by unskilled workers in the provinces. By the 1950s circumstances had changed. As we have seen, rural unskilled wages now lagged behind urban unskilled wages.

From 1950 onwards, wages of unskilled labourers in Bangkok were significantly greater than those earned by rural hired farm labourers and employees engaged on private and government projects in the provinces (Table 1). Wages for unskilled labourers in the department of railways in Bangkok in the early 1950s were 16.80 baht a day [Thailand, Railways Authority of Thailand, (1951–1957) various issues] while farm labourers in Bangchan village in 1951–53 were paid 7–8 Baht a day [Kamoll 1955: 195]. In 1951, the wage for unskilled labourers for cleaning the temple in Nakhon Sawan province was 10 baht a day [N. A. M. of Education 0701.26.1/21 (1951)]. In 1954, the wage for unskilled labour in the department of railways in Bangkok was 19.10 baht per day, while wage offered for repairing a temple in Phitsansulok province were 10 baht a day [N. A. M. of Education 0701.26.1/24 (1954)]. In the same year, the wage for unskilled construction workers in the project for repairing National Museum in Bangkok was 30 baht a day [N. A. M. of Education 0701.23.3/13 (1954)], while construction workers repairing the temple in Nakhon Si Thammarat earned 15 baht a day [N. A. M. of Education 0701.26.1/25 (1954)]. Throughout the whole period 1951–70, Bangkok wage rates for unskilled workers remained above those in rural areas. For example, wage rates for highway construction labourers in Bangkok ranged between 20.60 and 23.30 baht a day during the period of 1964–70, while wages for hired farm labourers in the central plain were reported to be 8.00–12.00 baht a day in the same period (Table 1).

A survey conducted by the International Labour Organisation (ILO) in 1954 indicated that in the early 1950s wage rates and earnings for workers in rural Thailand were relatively low and only a small minority of workers was relatively well paid when
compared to workers in Bangkok. The ILO survey mentioned remuneration and work conditions in the provinces in the early 1950s and found that wages in provinces varied. 4)

V Analysis: Before 1950

Why should rural unskilled wages have been above those of unskilled urban wages

4) The teakwood and tobacco industries employ unskilled and semi-skilled workers at the lowest wages found in Thailand. In the teakwood camps, footmen used with elephants receive between 70 and 100 baht per month. Drivers of elephants (mahouts), experienced men doing a perilous job, receive from 90 to 130 baht; at one camp, Sob Prob Amphur [district, a subdivision of province (changwat)] in the changwat of Lampang, a driver was reported to be employed at a rate as high as 180 baht. In Camp Me Pe in the jungle of Chomtong Amphur, some 50 kilometres south of Chiang Mai, a cook and an assistant cook each received 50 baht per month, the lowest single wage for adult workers the expert noted anywhere in Thailand. In the tobacco industry in the north and northeast wages vary somewhat between outside growers and Thai Tobacco Monopoly stations. Some outside growers employ men of the Kamouk tribes from Laos. The expert visited a station in Pharn Amphur in the changwat of Chiang Rai. Thai paid Kamouk workers between 650 and 800 baht per year, that is 54-66 baht per month. The same station also employs local women at the rate of 2.50 baht per day with the head girl receiving 4 baht; male workers at 4 baht per day; and strokers at 5 baht for two shifts of six hours each. A neighbouring station paid women 3 baht and male workers 4 baht per day. A station in Tah Utain Amphur in the Changwat Nakhon Phanom paid women and coolies 90 to 100 baht per month. A station of Phon Pisai Amphur in the changwat of Nong Khai, paid 4 baht per day to women after two years of service, that is, 120 baht per month for 30 days' attendance; and men at a rate of 5 to 6 baht per day, equal to 150 to 180 baht per month. The Thai Tobacco Monopoly pays better. A station in That Panom Amphur in the Changwat Nakhon Phanom paid women at a daily rate of 1.10 baht, together with a monthly premium of 90 baht for a minimum of 26 days attended, a total of 118.6 baht for 26 days on the job or 123 baht for 30 days. A station in Muang Amphur in Nong Khai paid women at a daily rate of 2 baht, with an attendance premium of 70 baht, making total of 124 baht for 26 days worked or 130 baht for 30 days. After a year or two of service the station pays 3 baht per day, that is including the premium of 70 baht, a total of 148 baht for 26 days worked, and 160 baht for 30 days. Except for the general case of apprentices, the tobacco industry pays the lowest wage to children noted anywhere in Thailand. Two outside growers in the changwat of Chiang Rai were found to pay children eight years old and above as little as 2 baht per day, equal to 60 baht per month. The records show that many of these children work the full 30 days per month. Another outside grower in the changwat of Nong Khai paid a boy and a girl aged 14 and a girl aged 15 at the rate of 3 baht per day, or 90 per month for 30 days' attendance. Here again somewhat higher rates are paid by the Thai Tobacco Monopoly. Machine fitting also pays relatively well, the best rates for top fitters are in the order of 50 baht per day and 1,200 baht per month in Lampang (and Bangkok) and 30-50 baht per day in the dredge mines in the south. The approximate daily rate for turners, boiler makes and welders is 30 baht [N. A. (3) Office of the Prime Minister 0201.75/1 (1951)].
before 1950? The basic answer lies in the relatively high returns to rural labour in agriculture, and the undeveloped urban sector with few job opportunities.

High wages in the provincial areas were caused by the relatively high productivity of Thai agriculture in relation to labour input. According to Falkus:

The relatively favoured situation of the Thai peasant should be seen in international perspective. In 1883 wages in Thailand were apparently three times higher than wages in Japan. The underlying factor was the relatively high productivity of Thai agriculture in relation to labour input..... Around 1900 a farmer in Japan had to work twice as long to gain a similar amount of rice as his counterpart in Central Thailand. Thai yields were also well ahead of those in Java before the Second World War. [Falkus 1991: 61]

The high labour productivity in Thai agriculture was made possible through the abundance of land. Although rice yields per rai were very low, output per worker per hour worked was very high. Lower labour productivity in rice farming in Japan and Indonesia was attributed to the excessive supply of farm labourers in relation to land, which outweighed the effect of using more advanced biotechnology than Thailand [Sompop 1989 : 170].

Prior to the 1950s, the country was always very sparsely populated, and relatively little urbanised. Thailand’s population in 1855 was probably around 4.5–5.0 million as guessed by Bowring, while the revised census figure for 1911 was 8.3 million. These figures yield a growth rate over the period 1855–1911 of around 1 percent per annum. Although neither the 1855 or 1910–11 estimates can be considered reliable, such a gentle rate of growth seems credible in view of the fact that there were no invasions and wars, and some improvements in medical care introduced by western missionaries. From 1911 to 1947, the population doubled to 17.4 million, growing at an average rate of 2.1 percent per annum.

It can be said that before the outbreak of the Second World War the Thai kingdom had a slow growth rate in population and the kingdom was “underpopulated” in the sense that large areas were almost empty, even in the more heavily populated central districts. In 1904, Prince Dilok estimated the total population was about 7 million living in a total area of 634,000 square kilometres with a population density of 11 persons per square kilometre; by comparison, the densities in India, the Philippines, Indonesia, and Burma were 73, 25, 21 and 16 persons per square kilometers respectively [Chatthip 1990]. Similarly in 1947, Thailand’s population density was 34 persons per square, compared to 105, 66 and 36 for India, the Philippines and Indonesia [United Nations 1948].

The abundant land encouraged agriculture with existing traditional techniques, and the number of hectares of cultivated land per worker increased. Feeny’s estimates show that the paddy area per person (land man ratio) which in 1905/06 was. 164 hectare/person grew at an average annual rate of 1.19 percent during the period of 1905/06–1941 [Feeny
Labour pressure was not severe, and the average peasant family could sustain a reasonable livelihood while still enjoying significant leisure time. The preferences for rice farming and village living can be explained by the fact that Thailand was underpopulated with an abundant supply of land. Labour in rural Thailand before 1950 was relatively fortunate in terms of income earning and high opportunity cost of moving [Falkus 1991: 59]. Sompop found that throughout the period 1905 to 1925, a broadcast rice farmer with 8 hectares of land (roughly the average size of a paddy farm in the central plain in the interwar years) usually had an annual income well in excess of coolie labourers in Bangkok [Sompop 1989: 168]. In addition, the peasant still had access to food sources such as fish, crabs, frogs, fruit and vegetables found in the rivers, rice fields and forests. The general picture must be one of relatively high rural incomes. High opportunity cost of moving was a crucial factor in keeping Thai labour engaged in rural agriculture. Rice remained the single most important product, the largest source of employment, and the largest source of foreign exchange earning. Under these circumstances, Chinese immigration played an important role in developing the non-farming occupations in Thailand, especially in Bangkok (see next section). The influx of Chinese immigration helped keep down unskilled urban wages.

Underpopulation meant that there was no significant unemployment in rural Thailand prior to 1950. Life was relatively easy, land was abundant, and opportunities for earning one's living were ample. One document from International Labour Office in 1919

5) From 1905/6 to 1924-25 the paddy area per person grew at 2.45 percent per year and then declined at .21 percent from 1924/25 to 1941. He also found that land/man ratio using the area in major crop grew at a similar rate as it was in the case of paddy areas [Feeny 1982: 44-45].

6) Falkus noted "Zimmerman's survey undertaken in the early 1930s, for example, found relatively large landholdings in Thailand compared with other Asian countries, a very high rate of owner-occupancy, correspondingly low levels of tenancy, and low levels of peasant indebtedness. In most provinces throughout the country land was available for new settlement and as late as 1938 it was estimated that 78 percent of the total area was still under forests. Given the natural fertility of rain-fed tropical monsoon land it followed that by comparison with his other counterparts the Thai peasant could maintain a relatively high standard of living. Many accounts mention the absence of extreme poverty and starvation in Thailand and the comparatively low work intensity of agricultural life. Zimmerman spoke of the Thai peasants' high average income compared with the rest of Asia" [Falkus 1991: 59].

7) Bangkok Chronicle in 1941 reported: "We are reminded of this situation by an article in a recent issue of the Osaka mainichi (English edition). The writer of that article says that casual observations in Japan are generally under the impression that the paddy fields of Thailand and French Indochina yield two or three rice harvests a year. Theoretically, there is no reason why they should not be able to yield two or more crop per year, he says, but in practice, they do not. The reason he gives for it is that Thai and Indochina farmers do not work half as hard as Japanese farmers and are not half as progressive" [Bangkok Chronicle, 22 March 1941].
reported the situation of Thai labourers:

The cost of living being very cheap in Siam and the country not being overcrowded, the inhabitants, both nationals and foreigners, are always able to secure a comfortable living in some way or other (especially by cultivation or retail trade); in consequence they are not anxious to find employment in an industry and even feel so independent of their employers that they do not mind giving up the employment they have got for the mere sake of change, or living for some time without doing anything, on the money they have saved out of their earnings. [N. A. M. of Foreign Affairs 96.1.8.4/3 (1919)]

This was a major reason why the law of the eight hours day suggested by the ILO was deemed unnecessary, for it was said that the workmen were in a most favourable position to impose upon their employers satisfactory terms regarding both wages and working times, and they had never complained of being compelled to overwork. The government therefore thought it unnecessary to interfere in the matter [ibid.].

Although the focus of this paper is upon changing supply conditions for rural labour in Thailand, a word or two may be said about demand for labour. The nature of the Thai economy, both in Bangkok and the provinces, meant that the market for labour was little developed before the 1950s. In the rural sector, wage labour was characteristic only of the central region, while in Bangkok much of the paid labour force (in factories, in transports, in port activities, in shops) came from the Chinese community. The limited formal labour market is one reason why satisfactory wage data are so hard to find.

We may be confident that in the post Second World War years, a growing demand for labour in Bangkok, associated with various factors such as government policy and declining Chinese immigration, took place. Before the war, though, labour demand was limited by the slow pace of Bangkok growth and by the impact of the world depression. We should, of course, emphasize the extent to which Bangkok's commercial sector depended upon unskilled Chinese labour. 8

The interplay of supply and demand factors resulted in the characteristic of the labour market discussed here: a limited flow of rural labour to Bangkok before the Second World War, but an enhanced flow thereafter.

Bangkok's Growth prior to 1950
Under these circumstances of high opportunity costs of moving, the limited flow of labour from rural to urban is hardly surprising. No large influx of rural migrants to Bangkok occurred prior to 1950. China, with its enormous population and unsettled

---

8) Thai and Chinese labour were by no means substitutable, Chinese entrepreneurs continuing to show a marked preference for Chinese employees (a preference which continues long after the end of heavy in-migration in 1949).
economic and political conditions, provided a large flow of cheap labour to Thailand and other Southeast Asian countries. Skinner found that unskilled wages in Bangkok had long been higher than any other ports in East Asia [Skinner 1957: 116]. Skinner noted “Chinese laborers [in the 1880s] in Siam could earn wages double those prevailing in South China ports and live both better and cheaper than in his own country” [ibid.: 117]. Hence, the inducement to Chinese coolies to migrate to Bangkok was great. The Chinese played an important role in Bangkok’s population growth. The numbers of Chinese immigrants at the Bangkok Port 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 [ibid.: 173]. Bangkok’s population was around 365,000 in the early 1910s [N. A. R. 6. M. of the Capital 27/3 (1909–1914)] and 780,000 in 1947. The limited internal flow of rural labour to Bangkok was reflected in the relatively low, and near-constant, ratio of Bangkok’s population to the total. Bangkok’s share of the total Thai population was only 4–5 per cent between 1910 and 1947 and the growth of Bangkok was relatively slow prior to 1950 compared to the post 1950 periods. Bangkok’s proportion of the total population did not significantly increase after the First World War, and may even have fallen a little by 1947, when it stood at 4.4 percent.

Also, there was little industrial development in Bangkok prior to the late 1940s. Industry in Bangkok, even in the early 1940s, was practically limited to the preparation of agricultural produce, the building trade, utilities, and a few factories making consumer goods for local use. Compounding the situation was the isolation of much of rural Thailand from Bangkok. There were no roads linking Bangkok and the provincial areas until the late 1940s.

The ILO reported the labour condition in Siam in the 1919:

The consequence is that industry is still in a state of ‘imperfect development’. Siam is far from being overcrowded and there is competition among employers for workmen. Hence, workmen can invariably secure good conditions of work adapted to their habits and customs. There is very little specialization among workmen in Siam, such as exists in industrial countries. Workmen can change easily from one type of employment to another. They can change from such small industrial employment as there is to agriculture or to retail trade, whenever they desire and without inconvenience.... Tropical conditions, also, determine a different division of the work day from that in use in Europe and America. Many businesses close from 12 to 1 or 2 P.M. on account of the heat. Commercial life in the markets or in the streets is commonly active by the beginning of night, after having been practically stopped during the hot hours of the day. A tourist might think that the hours of work were very long unless he investigated and ascertained the fact that those whom he sees actively doing business at night have rested during the warmest part of the day and find that it is much pleasanter to take up their affairs in the cool of the evening after sunset. Then again much of the business in Siam, including such
little manufacture as there is, is carried on generally by families and not by business organiza-
ations. [N. A. M. of Foreign Affairs 96.1.8.4/10 (1919-22)]

The other side to the coin of an “inflexible” supply of Thai labour for Bangkok was the
great and continued significance of the Chinese. The most important industries in
Bangkok were rice mills, shipping, and saw mills, mostly in the hands of Chinese. The
Chinese provided most of the heavy industrial labour force, particularly in rice mills, on
the quays and in construction, and also provided most of the craftsmen (carpenters,
masons, fitters and other skilled occupations). They were also the chief trading class and
were responsible for much of the secondary industry such as small foundries, ice factories
and so on. They were also, as everywhere, the market gardeners. The influx of Chinese
immigrants helped keep down wages for unskilled labourers. Wilson found that in the
early 1880s, the Chinese played an important role in marketing, commerce, employees,
and manufacturing, while the indigenous Thais played a more moderate role in business
development [Wilson 1989: 56]. 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, tinsmiths, 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. [Chatthip and Suthy
1981: 144]

Bangkok before the Second World War was very much a Chinese city in appearance and
character. As one official lamented in 1913:

(1) The labour market is in the hands of foreigners
(2) The trade is in the hands of foreigners
(3) Practically the whole of the capital of the country is foreign. [N. A. M. of Finance 0301.1. 30/
13 (1913)]

As Chaophraya Yommaraj, the Minister of the Capital, memorialised to Rama VI in 1913,
the Chinese migrants were necessary to relieve this labour shortage:
The benefits which Chao Phraya Yommaraj recognises from the presence of the Chinese are:
that they supply a much-needed augmentation of the rather sparse population of the country;
that, without them, the advancement of Siam would have been much retarded; that they are
indispensable in certain trades such as brick laying, and almost so as carpenters. [N. A. M. of
Finance 0301.1.30/15 (1913)]

We rarely read of unemployment in Bangkok, except for a few years at the beginning of
the great depression in the 1930s. Government noted in the 1920s:

There is no unemployment problem in Siam. The Chinese unemployed, on the other hand, can
always turn to "Jinrikisha," become hawkers or take up some such work. Secondly, industries
on a great scale being in course of development, more workers are required than can be found.
Thirdly, the Chinese workers are generally affiliated to guilds which provide support for them
when unemployed (such unemployment being often of their own choice). Finally in the rare
cases in which a person would actually be exposed to suffer from unemployment, the Buddhist
traditions prevailing in the country would protect him from such a fate (just in the same way
as they prevent pauperism in Siam). Such a state of things is likely to last for yet a long time
to come and so for the moment and for the near future, there is no fear of unemployment in Siam.
[N. A. M. of Foreign Affairs 96.1.8.4/3(70) (1919–1922)]

Phra Bejra Indra also touched on the issue in 1930:

Since it is admitted that there is no considerable body of unemployed Siamese, it does not

9 ) Whereas Siamese played an active role in rice cultivation for the exports, there was no
doubt that parts of the gains from trade was captured by the Chinese middlemen. A letter
in the early 1910s from H. E. Chao Phraya Yommaraj to the King indicated: "I have no
information that the Siamese are being ousted by the Chinese from any trade or business
in which the two are able to compete which other, but I fear it is only too true that the
Siamese cultivation classes are being bled by the Chinese middlemen who lend their
money, sell them goods (on credit), and finally take over the greater part of their crops at
rates which leave the unfortunate cultivators no choice but to take further loans for the
purpose of carrying on until the next harvest. This is a really serious state of affairs, for
the peasants are the backbone of Siam, and on their contentment and prosperity depends,
to a large extents, the future well-being of this country. Any action, therefore, which
the government could take to protect the peasantry from the ruinous consequences of rela­
tions with Chinese money lenders would be very great gain to the cultivators and the
state, and the question deserves the most careful consideration. One of the means of
meeting the requirements of the case is to provide an agency whereby the cultivators
could obtain advances, on easy terms, without having recourse to the Chinese money
lenders. This is proposed to do by means of cooperative credit societies working in
conjunction with the national bank when started. The Ministry of Finance has this
matter now under active consideration, and it ought not to be long before a beginning has
been made with a scheme on these lines" [N. A. M. of Finance 0301.1.30/15 (1913)].
appear where the labour to replace the Chinese will come from. So far, the Chinese have come to Siam not to replace Siamese labour, but because there was work for them which there was no Siamese to do, or which the Siamese were unwilling to do, such, for instance, as work in the tin mines. Obviously, Siamese now employed in other activities will not become labourers unless special inducements are given to them, which must mean higher pay, or unless they are compelled by necessity, which means that there is nothing else open to them by which they can earn a living. Obviously, the standards of pay for skilled or unskilled labour must be uniform and cannot vary according to the nationality of the employee. An increase in the rates of pay sufficient to attract Siamese away from their present pursuits would upset economic conditions. As long as the country is under populated, the compulsion of necessity will not arise. [N. A. R. 7. M. of Commerce 13/4 (1930)]

VI Analysis: After 1950

What factors promoted the change?

One change was rapid population growth. The rate of growth of Thailand's population, which had averaged 1.9 percent per annum in 1937-47, accelerated to 3.2 percent in 1947-60, then eased slightly to 2.8 percent in 1960-70 and 2.7 percent in 1970-80 taking Thailand from a sparsely populated country with an extensive land frontier to a heavily settled country. In 1929 the Thai population was just 11 million, in 1947 it was around 18 million, in 1970, 34 million in 1980, 44 million, and today some 60 million. Thailand's population density was 34 persons per square kilometres in 1947 and increased to 51, 67, 92 in 1960, 1970 and 1970 respectively (Table 2). These high growth rates put pressure on rural incomes and wage rates, and led to increases in poverty, tenancy, indebtedness, and a decline in rice output per person in some region.

An estimate by the World Bank indicated that in 1962/63, 52 percent of the rural population, and 28 percent of the urban population had an income below the poverty line. The largest segment of these poor (48 percent) lived in the northeast. Only 2 percent was found in the Bangkok region. Between 1962/63 and 1968/69, the proportion of families under the poverty line declined from 52 percent to 34 percent, but the pattern of regional poverty remained unchanged. In 1968/69 the northeast still had the largest share of the incidence of poverty. About 58 percent of the households in that region had income levels below the poverty line. The northern region came second with 30 percent of the population living in poverty [World Bank 1980a: 62-63]. Although, there has been a reduction in the numbers of poor households since 1962/63, the disparity in income distribution between regions had increased considerably, particularly Bangkok and rural

10) For a fuller discussion see Ammar [1979], Udis [1958].
Table 2  Population of Thailand, 1911-1980

<table>
<thead>
<tr>
<th>Year</th>
<th>Population of Thailand (millions)</th>
<th>Annual Growth Rates (%)</th>
<th>Density (persons per sq. km.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1911</td>
<td>8.3</td>
<td>—</td>
<td>16</td>
</tr>
<tr>
<td>1919</td>
<td>9.4</td>
<td>1.4</td>
<td>18</td>
</tr>
<tr>
<td>1929</td>
<td>11.5</td>
<td>2.2</td>
<td>22</td>
</tr>
<tr>
<td>1937</td>
<td>14.7</td>
<td>2.9</td>
<td>28</td>
</tr>
<tr>
<td>1947</td>
<td>17.5</td>
<td>1.9</td>
<td>34</td>
</tr>
<tr>
<td>1960</td>
<td>26.3</td>
<td>3.2</td>
<td>51</td>
</tr>
<tr>
<td>1970</td>
<td>34.4</td>
<td>2.8</td>
<td>67</td>
</tr>
<tr>
<td>1980</td>
<td>44.8</td>
<td>2.7</td>
<td>92</td>
</tr>
</tbody>
</table>

Sources: [Thailand, NSO various years; N. A. R. M. of the Capital 27/3 (1909–1914); Thailand, Ministry of Interior, various issues]

Table 3  Income Share by Household Group for the Whole Kingdom

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lowest 40%</td>
<td>16.6</td>
<td>15.2</td>
<td>15.0</td>
<td>13.8</td>
<td>13.0</td>
</tr>
<tr>
<td>Top 10%</td>
<td>34.3</td>
<td>34.8</td>
<td>32.2</td>
<td>34.1</td>
<td>38.4</td>
</tr>
</tbody>
</table>

Sources: [Ikemoto 1991: 17; Falkus 1997: 17–19]

Low productivity in rice production constrained rural wages and incomes. Between 1959 and 1966, the area under rice cultivation expanded. The north had the highest growth rate of 4.1 percent per annum, followed by 3.5 percent in the northeast as compared with less than 2 percent for the central region and 2.8 in the south [Pasuk 1980: 197]. The high growth rate of rice land for cultivation in the north and northeast was caused by the increase of population and the expansion of national highways linking the countryside. In the central plain, the area under paddy increased partly because of an extension of irrigated land in the region. Rice yields (based on area planted) were among the lowest of the major rice-producing nations in the world. The average for the northeastern areas was just 140 kilograms per rai in both 1957/58 and 1958/59, meanwhile the average for the entire country were 175 and 198 [N. A. M. of Finance (1) 1.3.3.2/4 (1960)].

11) There are a number studies on income distribution in Thailand [see Oey 1979; Somluckrat 1978: 259–289; World Bank 1980b; Somchai 1987; Ikemoto 1991].
In some areas rice yields were very low. As to Korat, one of the populous northeastern provinces, her yield in 1957 based on area harvested was only 109 kilograms per rai [ibid.]. One survey entitled “Economic Survey of the Korat-Nongkai Highway Area” in the late 1950s noted that

As a result of this very low productivity Korat has been a net rice importing changwat for the past three years [by 1957–60 -author]. The Rice Division of Korat reports that total rice demand in the changwat in 1959 was about 230,000 tons or about 115,000 tons more than production. [ibid.]

In 1958 one survey showed that in the populous northeastern provinces of Roiet, Sisaket, and Nakhon Phanom, the average output of rice was well below that necessary to sustain an acceptable level of subsistence [Falkus 1993: 161].

The international comparisons in Agricultural Statistics of Thailand, 1958 published by the Ministry of Agriculture and based on FAO figures, show average yields for 13 rice producing countries (based on area harvested) in the period 1955–57. Thailand had an average yield of 204 kg per rai, ranking 6th among the 8 Asian producers and 11th among the 13 world producers. The highest yields in Asia were achieved in Japan (709 kg) and Taiwan (467 kg) [N. A. M. of Finance (1) 1.3.3.2/4 (1960)]. After the late 1950s, there was a moderate increase of rice yields. It was estimated that yield per rai harvested increased 1.41 percent between 1957 and 1963, and 1.57 percent between 1954 and 1970 [Welsch and Sopin 1972: 9–10]. When compared to other Asian countries the improvement in rice yields in Thailand was moderate (Table 4).

Low productivity in agriculture resulted in little growth of rural income and rural wage rates in the 1950s and 1960s. In addition, the rice premium or tax on rice exports not only caused low productivity in agricultural production but also an income transfer from the rural to the urban sector, making the urban-rural gap wider.12 Virabongsa (1972) employed the simulation model and concluded that the abolition of rice premium would have increased the paddy output 2.1 percent and the paddy cultivated area by 1.4 percent between 1953–69 [cited in Rungsan 1987: 209]. Similar to Sarun (1978) he showed that if the rice premium was eliminated, paddy output, paddy cultivated area would have increased 0.9 percent and 0.8 percent respectively [cited in ibid.: 210]. Chesada (1978) simulated the abolition of the premium in a dynamic crop-choice model and estimated that the domestic price of rice would rise by 38 percent and paddy output would increase and overall farm income would increase by 30 percent [cited in Feeny 1982: 113]. The rice premium obstructed the modernisation of the agricultural rice sector since it distorted the rate of return on production of rice relative to land and/or other agricultural

12) A comprehensive survey of the recent literature on aspects of the economic impacts of the rice premium on the Thai Economy is contained in Rungsan [1987].
products (and stimulated the diversification of crops), resulting in lower rice productivity, because the rice premium greatly reduced the attractiveness of the use of fertilizers, pesticides, chemical inputs, and various mechanized production factors.\(^{13}\) This resulted in the slow growth of rice and the rapid growth of the diversification of exported upland crops such as maize, kenaf, cassava. The share of paddy land in total cultivated areas declined throughout the post war period. The share of paddy land in total cultivated area declined from 88 percent in 1950 to 79 percent in 1960, to 68 percent in 1965 [Bertrand 1980: 21].\(^{14}\)

Although many writers have emphasised the extent of the discriminatory policies due to the rice premium, it should be noted that the more favoured commercial crops were usually less labour intensive than rice, and another was the shift in the balance between demand/supply conditions for urban and rural labour.\(^{15}\)

Many surveys in the 1960s indicated that there had increasing tenancy especially in the central plain. A survey for example in 1967/68 found that 40 percent of all central plain households were tenants [NSO cited in Nipon 1974: 396]. Another survey in 1967/68 by the Ministry of National Development in 26 provinces of the central region shows that 60 percent of all households were tenants or part-tenants, and rented land amounts

---

\(^{13}\) Per capita for fertiliser use in Thailand was very low for example in 1962-63 (1.8 lbs per capita) which was only 4.8, 5.8 and 6.9 percent of the comparable levels for Japan (37.4 lbs per capita), Taiwan (30.8 lbs per capita), and Korea (25.9 lbs per capita) respectively [Bertrand 1969: 181].

\(^{14}\) Bertrand also estimated that the rice premium resulted in a substantial disincentive measured by market returns in land that undervalued rice by some 50–70 percent. The rice premium led to market returns to land that were generally around 100–300 baht per rai, substantially below return that could be obtained from biannual upland crops [Bertrand 1980: 71–79].

\(^{15}\) See for example Bertrand [1969; 1980], Feeny [1982], Rungsan [1987], Ammar and Suthad [1989].
to nearly 50 percent of the total area [Tanabe 1994: 68-69]. The 1969 survey of Ministry of Agriculture and Cooperatives found that one-fifth of all central plains had lost their land and fore closure [through khai jak, the usufructuary] over the past generation [Pasuk and Chris 1995: 38]. Villages studies also showed that similar rates of the declined resulting in 30-50 percent of all land were held under tenancy [ibid.: 38].

World Bank reported the situation of tenancy in Thailand between 1963 and 1971:

[T] he share of the area under rental contracts has increased substantially in each and every region of the country. The area rented has reached significant proportions 15 % and above throughout the broadly defined central plain and the increase in the lower central plain has resulted in a third of the land not being owned by the farmers cultivating it. For the total country, tenancy was minor in 1963 (3.6 %) by this share tripled by 1971 (11.9 %). [Bertrand 1980: 24]

In addition to population growth and rural productivity declined, wage differentials between the city and the provincial areas were also increased by the reduction of supplies of Chinese immigrants. After the Second World War, the number of Chinese began to decrease significantly, with the imposition of quotas on Chinese immigration. This went into effect on May 1st, 1947. Ten thousand persons of Chinese nationality had been permitted to enter Thailand annually. Thereafter, only 200 were allowed to enter. One result of a reduction in Chinese labour supply was to raise unskilled wages in Bangkok.

Regional wage differentials were also caused by rapid urban expansion. Following the Second World War, Bangkok experienced rapid growth in light manufacturing and, more particularly, in service industries, including construction, public utilities, retail and wholesale trade, and entertainment.

Especially from around the 1960s there was a distinct urban bias in the nature of Thailand's capitalist development. Government policies enshrined in the development plan of 1961 supported import-led growth and laid emphasis on investment in manufacturing industry. These policies promoted Bangkok at the expense of the countryside, often drawing the best human resources away from the villages. Also in the 1960s, the expansion of tourism together with the presence of U. S. military personnel boosted the service sector of Bangkok. The Vietnam War had a major stimulating effect on the Thai economy through a growing inflow of foreign capital. The construction of American bases and related infrastructure such as highways, spent by American servicemen on leave reached around 31-40 percent of total Thai exports in the late 1960s [Boonkong 1974 : 215]. Jobs were by no means solely or even mainly in the industrial sector, but were spread across a wide range especially in services. The 1960s in particular was a time of immense physical change in Bangkok under the rebuilding enthusiasm of Field Marshal Sarit.

Demand for labour increased considerably. Manual jobs in the service sector
P. OUYYANONT: Bangkok as a Magnet for Rural Labour

constituted most of the non-professional urban jobs especially in the 1960s [Thailand, CSO 1962; Thiland, NSO 1973]. Over the 1960s, the share of construction in Bangkok’s labour force increased from 2.10 to 5.21 percent, transport from 5.36 to 6.26 percent, and other services from 22.64 to 28.34 percent (Table 5).

**Bangkok’s Growth after 1950**

After the Second World War, with the rapid overall population growth, a pool of “cheap” rural labour developed which could supply the industrial and service sectors in Bangkok, on which further growth depended. Wages in Bangkok rose compared to the provincial areas. Bangkok’s population has increased at a rate at least double the national average since 1950 (Table 6).

Low urban wages raised the profit rate in the modern sector in Bangkok, and encouraged the expansion of an industrial sector which relied heavily on cheap labour.

<table>
<thead>
<tr>
<th>Industries</th>
<th>1960</th>
<th>1970</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agriculture</td>
<td>288,975</td>
<td>219,549</td>
</tr>
<tr>
<td>Mining and quarrying</td>
<td>1,785</td>
<td>5,075</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>145,553</td>
<td>257,402</td>
</tr>
<tr>
<td>Construction, repair and demolition</td>
<td>21,245</td>
<td>72,007</td>
</tr>
<tr>
<td>Electricity, gas, water and sanitary service</td>
<td>8,798</td>
<td>13,605</td>
</tr>
<tr>
<td>Commerce</td>
<td>216,345</td>
<td>272,993</td>
</tr>
<tr>
<td>Transport, storage and communication</td>
<td>54,290</td>
<td>86,588</td>
</tr>
<tr>
<td>Services</td>
<td>229,440</td>
<td>391,890</td>
</tr>
<tr>
<td>Others</td>
<td>46,840</td>
<td>63,510</td>
</tr>
</tbody>
</table>

Sources: [Thailand, NSO 1962: Table 18; 1970: Table 22]
Note: Bangkok Metropolitan Area included Bangkok, Thonburi, Nonthaburi and Samut Prakarn.

<table>
<thead>
<tr>
<th>Year</th>
<th>Population of Thailand (millions)</th>
<th>Annual Growth Rates</th>
<th>Population of Bangkok-Thonburi (millions)</th>
<th>Annual Growth Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>1911</td>
<td>8.3</td>
<td>—</td>
<td>0.34</td>
<td>—</td>
</tr>
<tr>
<td>1919</td>
<td>9.4</td>
<td>1.4</td>
<td>0.43</td>
<td>3.3</td>
</tr>
<tr>
<td>1929</td>
<td>11.5</td>
<td>2.2</td>
<td>0.68</td>
<td>5.8</td>
</tr>
<tr>
<td>1937</td>
<td>14.7</td>
<td>2.9</td>
<td>0.53</td>
<td>—</td>
</tr>
<tr>
<td></td>
<td>(excluding Thonburi)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1947</td>
<td>17.5</td>
<td>1.9</td>
<td>0.78</td>
<td>4.7</td>
</tr>
<tr>
<td>1960</td>
<td>26.3</td>
<td>3.2</td>
<td>1.80</td>
<td>9.3</td>
</tr>
<tr>
<td>1970</td>
<td>34.4</td>
<td>2.8</td>
<td>2.61</td>
<td>4.4</td>
</tr>
<tr>
<td>1980</td>
<td>44.8</td>
<td>2.7</td>
<td>5.15</td>
<td>8.8</td>
</tr>
</tbody>
</table>

Sources: [Thailand, NSO various years; N. A. R. S. M. of the Capital 27/3 (1909-1914); Thailand, Ministry of Interior, various issues]
Falkus noted that:

Yet one only has to consider the structure of Thailand’s growing manufacturing sector, concentrating on labour-intensive commodities such as textiles, clothing, or leather goods as well as the highly labour-intensive character of much of Bangkok’s fast-developing building and construction and service sectors (including port facilities and tourist-related occupations), to realize the crucial importance of labour supplies. Certainly much of the growth of Thai manufacturing exports from the 1960s was based on abundant supplies of cheap labour. [Falkus 1991: 65]

Labour productivity in the modern sector such as in Bangkok was higher than the agricultural rural areas. As growth took place, the non-agricultural sector grew faster than the agricultural, and agriculture declined strikingly both in terms of its share in total employment and its contribution to GDP. During the period of 1960–70, agricultural production grew around 4–5 percent annually, while industrial growth was very much higher, at 11–12 percent annually. Agriculture’s share of GDP continued to drop. Agriculture, which had contributed 50.1 percent of GDP in 1951, contributed only 29.9 percent in 1970, while manufacturing’s share had continued to rise over these years moving from 10 percent in 1951, 17.1 percent in 1970. Yet rural employment remained high with 87.4 and 80 percent of total employment in 1960 and 1970. Industrial growth was heavily concentrated in Bangkok metropolitan areas. In 1970, around 80 percent of total industrial output was concentrated in Bangkok region.

After 1950, rural migrants replaced the Chinese immigration. From 40 to 50 percent of the increase in Bangkok’s population resulted from rural in-migration. The net number of in-migrants to Bangkok doubled from 1955–60 to 1965–70. The level of migration between Bangkok and provincial upcountry areas increased by two-thirds [Sternstein 1979: 30]. Bangkok’s share of the total population increased from not more than 5 percent prior to 1947 to about 7 percent by 1960, 9 percent in 1970, 11 percent in 1980, and 14 percent in 1990 [Thailand, Ministry of Interior, various issues; Skinner 1957: 81; N. A. R. 6. M. of the Capital 27/3 (1909–1914)].

In addition to permanent migration to Bangkok, there was also a considerable seasonal migration, dictated in part by the seasonal nature of agricultural activity. There is no overall survey of seasonal migration for this period, but data are available from individual monographs. Marian R. Meinkoth’s 1957 survey of “Migration in Thailand with Particular Reference to the Northeast” showed the importance of seasonal movement between the northeast and Bangkok. Of the total sample of 537 migrants interviewed at Hualumpong Railway Station, 412 reported that they would like to return home eventually [Meinkoth 1971: 112], about 334 intended to live in Bangkok for about 1 week or more, 93 planned to stay 1 to 6 months, and 6 (2 percent) wanted to stay permanently [ibid.: 19].
Many females and young people entered the non-agricultural labour force in the dry season (January–April). Those in the north and northeast, where cultivation is more seasonally biased than other regions, increasingly moved to Bangkok and other regions to look for seasonal work. A further factor encouraging labour mobility was the post-Second World War expansion of the provincial road network and concomitant rise of truck and bus services. Even as late as 1940 there was not a single trunk road linking Bangkok to other provinces. The furthest distance a motor vehicle could travel comfortably from the centre of Bangkok was no more than 20 miles. The Nonthaburi road built in 1931 stretched from Rama V road through Bangsue to Nonthaburi province with a total length of 6.4 kilometres. The Samutprakarn road built in 1933 ran from Ploenchit road in Bangkok to Bangduan district [Anonymous 1977: 320–324]. Around 1940, Virginia Thompson commented on Bangkok’s road conditions:

Unlike most great cities, which are usually the centre of a network of roads, Bangkok has vehicular isolation. Its few hundred taxis circulate within the capital’s confines, and even today one can leave Bangkok only by boat or by rail. Such roads as exist are limited to the frontier regions or to areas totally lacking in other transportation facilities. [Thompson 1967: 507]

In 1950, the total length of national highways was nearly 4,000 miles, of which 500 miles, all within a 150 mile radius of Bangkok, were paved. Thereafter the pace quickened and in 1966 over half the state highway network of 7,000 miles was paved, and a substantial network of provincial “feeder” roads had come into existence [Falkus 1991: 66].

By the 1960s, major road routes radiated from Bangkok to all parts of the country. The Petchkasem highway and its feeder lines connected the capital city to the south. The Paholyothin highway and its tributaries linked the major northern provinces with Bangkok. The Friendship highway branched out from the northern route into the northeast. The Sukhumvit highway connected the Eastern provinces with Bangkok. Another important route was the Bangkok-Aranya Pradhes road to the Cambodian border. Again roads encouraged a stream of rural migrants to Bangkok. Roads made

16) Irrigation was concentrated in the central districts, while in the south, rainfall is both greater and more evenly distributed over the year, but with a relatively dry period during February and March.

17) By the mid 1960s, a network of eight highways was completed which is as follows: (1) Bangkok to Chiang Rai and Chiang Mai to Chiang Rai, (2) Bangkok to Nakhon Ratchasima, Nong Khai near the Laos border, (3) Bangkok to Ranong down to Malaysian border, (4) Bangkok to Chum Phon leading to Phukhet on west coast, (5) Bangkok down the southeast to Trat, (6) West to East across North Central plain from Maesod-Lomsak-Khon Kaen to Nakhon Phanom, (7) Nakhon Ratchasima to Ubôn Ratchathani, (8) Bangkok-Aranya Pradhes to the Cambodian border.
the real cost of migration lower in terms of expenditure per trip, and also made it easier for migrants to enter Bangkok's labour market on a seasonal basis.

Last but not least, the development of capitalism was conditioned by the expanding world economic system which swelled the city at the expense of the countryside. This was reflected in a growing gap between urban and rural areas in terms of income and employment opportunities, which in turn encouraged rural migrants to leave their villages and move to the city. Bangkok became a magnet of aspiration for rural folk. Its image was built up through radio, television, cinema and the stories of returning migrants. So different was Bangkok to other places, with its palaces, department stores, modern shops, paved streets that in the words of one writer, “The magic spell of Bangkok is cast” among the rural dwellers [Paritta 1993: 31]. Rural-urban migration was a form of human capital investment, transferring the labour surplus of the low productive rural sector into the more productive urban sector.

**VI Conclusion**

The paper has looked at the changes which took place in the Thai rural labour market in the 20th century. The major point to emerge is the changing relativity between urban and rural wages. The argument rests mainly on demographic change, which transformed the economy from one where indigenous labour was relatively expensive to one where it was relatively cheap. After 1950, Thailand's continued fast population growth put pressure on rural incomes, and led to growing tenancy. Growing disparity between rural and urban incomes pushed people towards Bangkok. With the rapid overall population growth, a pool of “cheap” rural labour developed which could supply the industrial and service sectors in Bangkok, on which growth further depended. Wages in Bangkok grew relative to those in the provinces, and it is a major finding of this article that the relations between rural and Bangkok unskilled earnings, favourable to the former in the pre-war period, became increasingly in Bangkok's favour after around 1950.
### Wage Rates for Labour in Rural Areas (1904–1953)

<table>
<thead>
<tr>
<th>Year</th>
<th>Rural and Agricultural Wages (baht)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1904</td>
<td>40–100 baht for 9 months for wage labour in central Thailand</td>
<td>[N. A. R. 5 /1. M. of the Capital 3.2 Ko/36 (1904)]</td>
</tr>
<tr>
<td>1905</td>
<td>70–120 baht for 9 months for wage labour in central Thailand</td>
<td>[N. A. R. 5 /1. M. of the Capital 41.1/214 (1905)]</td>
</tr>
<tr>
<td>1907</td>
<td>85.75 baht for 9 months in the central plain.</td>
<td>[N. A. R. 5. M. of Agriculture 7/4 (1905)]</td>
</tr>
<tr>
<td></td>
<td>2–3 baht per day for labour in the central plain.</td>
<td>[Johnston 1981 : 113].</td>
</tr>
<tr>
<td>1908</td>
<td>25 baht per month for general coolies in the central plain (cleared land and jungle)</td>
<td>[N. A. R. 5. M. of the Capital 1.1/18 (1909)]</td>
</tr>
<tr>
<td>1919</td>
<td>6 baht per day for labour in the central plain</td>
<td>[Johnston 1981 : 113]</td>
</tr>
<tr>
<td>1928</td>
<td>1.6 baht per day for coolies for the Pasak irrigation system</td>
<td>[N. A. M. of Finance 0301.1.38 L/1C. (1914–24)]</td>
</tr>
<tr>
<td>1929</td>
<td>85 baht for 9 months in the central plain.</td>
<td>as above</td>
</tr>
<tr>
<td>1930</td>
<td>25 baht for month, livestock stations in the central plain</td>
<td>as above</td>
</tr>
<tr>
<td>1931</td>
<td>100 baht for 9 months for wage labour.</td>
<td>[N. A. M. of Agriculture 15.2/25 (1931)]</td>
</tr>
<tr>
<td></td>
<td>1–2 baht per day in central Thailand</td>
<td>as above</td>
</tr>
<tr>
<td>1934</td>
<td>2 baht per day for unskilled workers in construction projects in Songkhla.</td>
<td>[N. A. M. of Interior 2.3.9/9 (1934)]</td>
</tr>
<tr>
<td>1935</td>
<td>1.20 baht per day for unskilled labour in construction of public projects in Samutprakarn.</td>
<td>as above</td>
</tr>
<tr>
<td>1937</td>
<td>3 baht per day for unskilled labour in public projects in Ranong</td>
<td>[N. A. M. of Interior 2.3.9/9 (1933–1936)]</td>
</tr>
<tr>
<td>1938</td>
<td>2 baht per day for unskilled labour in Sukhothai</td>
<td>[N. A. M. of Interior 5.12/298 (1938)]</td>
</tr>
<tr>
<td>1939</td>
<td>1.20 baht per day for unskilled labour in road construction Batong, Yala.</td>
<td>[N. A. (3) Office of the Prime Minister 0201.22/14 (1943)]</td>
</tr>
<tr>
<td></td>
<td>2 baht per day for unskilled workers in public construction, Sukhothai.</td>
<td>[N. A. M. of Interior 5.12/298 (1939)]</td>
</tr>
</tbody>
</table>
Table Appendix—continued

<table>
<thead>
<tr>
<th>Year</th>
<th>Rural and Agricultural Wages (baht)</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1940-41</td>
<td>.60 baht per day for general workers in public construction in Saraburi.</td>
<td>[N. A. M. of Education 0701.26.1/15 (1940-41)]</td>
</tr>
<tr>
<td>1942</td>
<td>2 baht per day for unskilled labour in public construction, Trang. 1.50-2 baht a day for general workers in public construction Saraburi.</td>
<td>[N. A. M. of Interior 5.12/2.86 (1941)] [N. A. M. of Education 0701.26.1/15 (1940-41)]</td>
</tr>
<tr>
<td>1942</td>
<td>1.50-2 baht per day for unskilled labour in public construction in Kanchanaburi 1-1.50 baht per day for unskilled labour in public construction in Nakhon Pathom</td>
<td>[N. A. (3) Office of the Prime Minister 0201.75/13 (1943-51)] as above</td>
</tr>
<tr>
<td>1949</td>
<td>800 baht per season for wage labour in Bangchan.</td>
<td>[Komoll 1955: 195]</td>
</tr>
<tr>
<td>1950</td>
<td>838 baht per season for wage labour in Bangchan.</td>
<td>as above</td>
</tr>
<tr>
<td>1951</td>
<td>733 baht per season for wage labour in Bangchan.</td>
<td>as above</td>
</tr>
<tr>
<td>1952</td>
<td>840 baht per season for wage labour in Bangchan.</td>
<td>as above</td>
</tr>
<tr>
<td>1953</td>
<td>857 baht per season for wage labour in Bangchan.</td>
<td>as above</td>
</tr>
</tbody>
</table>

Acknowledgement

I am very grateful to Professor Malcolm Falkus of the Department of Economic History, the University of New England, N. S. W. for his kindly reading through the manuscript of this paper and commenting on many points. Also, I would like to express my gratitude to Dr. Chris Baker for the editorial work and three anonymous referees for their helpful comments on the manuscript.

Bibliography

(1) Archival Sources From Bangkok National Archives
Citations to the archives begin with "N. A." The citation " N. A. R. 5. M. of Agriculture 9.4/13 (1902)" refers to the Fifth Reign and the Ministry of Agriculture involved and the accompanying number classified to a specific series and file. The citation “N. A. M. of Education 0701.23.3/13 (1954)” refers to the date and file number for the archive of the Ministry of Education.

Ministry of Agriculture
N. A. R. 5. M. of Agriculture 14.3.2/36 (1904)
N. A. R. 5. M. of Agriculture 7/4 (1905)
N. A. R. 5. M. of Agriculture 41.1/214 (1910)
N. A. R. 6. M. of Agriculture 1/6 (1911)
N. A. M. of Agriculture 15.2/25 (1931)

Ministry of the Capital
N. A. R. 5. M. of the Capital 23.5/1 (1906)
N. A. R. 5. M. of the Capital 22.3/2 (1907)
N. A. R. 5. M. of the Capital 3.2 Ko/63 (1907)
N. A. R. 5. M. of the Capital 5.8/25 (1910)
P. Ouyyanont: Bangkok as a Magnet for Rural Labour

N. A. R. 5/1. M. of the Capital 3.2 Ko/36 (1904)
N. A. R. 5/1. M. of the Capital 41.1/214 (1905)

Ministry of Commerce

Ministry of Education
N. A. M. of Education 0701.7.1/13 (1929)
N. A. M. of Education 0701.7.3.1/15 (1929–30)
N. A. M. of Education 0701.28.3/2 (1937–38)
N. A. M. of Education 0701.26.1/15 (1940–41)
N. A. M. of Education 0701.26.3/2 (1947)
N. A. M. of Education 0701.23.3 (1949)
N. A. M. of Education 0701.26.1/21 (1951)
N. A. M. of Education 0701.26.3/12 (1953)
N. A. M. of Education 0701.23.3/13 (1954)
N. A. M. of Education 0701.26.3/16 (1954)

Ministry of Finance
N. A. M. of Finance 0301.1.38 L/1C. (1914–24)
N. A. M. of Finance 0301.1.30/13 (1913)
N. A. M. of Finance 0301.1.30/15 (1913)
N. A. M. of Finance (1) 1.3.3.2/4 (1960)

Ministry of Foreign Affairs
N. A. M. of Foreign Affairs 96.1.8.4/3 (1919)
N. A. M. of Foreign Affairs 96.1.8.4/10 (1919–22)

Ministry of Interior
N. A. M. of Interior 2.3.9 (1933–34)
N. A. M. of Interior 2.3.9/1 (1933–34)
N. A. M. of Interior 2.3.9/2 (1933–34)
N. A. M. of Interior 2.3.9/9 (1933–36)
N. A. M. of Interior 5.12/298 (1938)
N. A. M. of Interior 5.12/2.86 (1941)
N. A. M. of Interior 5.12/298 (1939)
N. A. M. of Interior 5.12/298 (1941)

Office of the Prime Minister
N. A. Office of the Prime Minister 0201.75/11 (1933–36)
N. A. Office of the Prime Minister 0201.75/5 (1948–54)
N. A. (2) Office of the Prime Minister 0201.75/38 (1947–49)
N. A. (3) Office of the Prime Minister 0201.76/1 (1929–53)
N. A. (3) Office of the Prime Minister 0201.75/13 (1943–51)
N. A. (2) Office of the Prime Minister 2.4.1.7/30 (1944)
N. A. (3) Office of the Prime Minister 0201.22/14 (1943)
N. A. (3) Office of the Prime Minister 0201.75/1 (1951)
Department of Railways
N. A. Department of Railways 2/18 (1919)

(2) Newspapers
Bangkok Chronicle, 22 March 1941

(3) Published Works


Anonymous. 1977. Royal Duties of King Rama VII. Bangkok: Ruang Rueng Silp Publishing Office. (in Thai)


Damrong Rajanuparb. 1913. Thesapiban Vol. 13, 1 August. (in Thai)


Rungsan Thanapornphan and Nipon Poapongskorn, pp.937-974. Bangkok: The Faculty of Economics, Thammasat University. (in Thai)


____. various years. *Thailand Statistical Yearbook*.

Thailand, Railways Authority of Thailand. *Wage and Salary Act (1951-1957)* various issues. (in Thai)


Udis Narkswas. 1958. *Rural Indebtedness of Farmer and the Rice Trade in Central Thailand, 1957-
Usher, Dan. 1966. Income as a Measure Productivity in Thailand: Alternative Comparisons of
_____. n. d. *Wages, Land Rents, Land Prices and Interest Rates*. Available at Thailand Information
Center, Chulalongkorn University.
Welsch, Delane E.; and Sopin Tongpan. 1972. *Background to the Introduction of High Yielding
Varieties of Rice in Thailand*. Department of Applied Economics Kasetsart University, Bangkok.
Bank.

(4) Dissertations
Komoll Janlekha Odd. 1955. *A Study of the Economy of Rice Growing Villages in the Central
A. Thesis, Thammasat University.