
Articles

The Changing Labor Force and Employment Problem in Thailand

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I Introduction

Like most developing countries that have experienced high rates of population growth in the past decades, Thailand is now facing the problem of a rapid increase in population in the young age group. A large proportion of these youths tends to be active in the labor market as soon as, or even before, completing their compulsory primary education. At the same time, there has also been a rapid increase in the number of higher-educated youths seeking jobs for the first time. The rate of this group entering the labor market has been accelerating due to the recent explosion of higher education brought about by increases in social demand.

The present employment problem is not only the result of the high population growth, but is also due to past governmental economic and social development policies. Major changes in the structure of production and employment have taken place in the period between 1960 and 1980.

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The first national economic development plan of Thailand started in 1961, and the country is at present in the middle of the fifth national economic and social development plan. Throughout these two decades, various policies and measures undertaken by the government in implementing the plans have had either direct or indirect effects on the patterns of production and employment in the Thai labor force. This paper will examine the changes in population and labor force structure during the period in question. In addition, the problems of unemployment and under-employment will also be examined. In this paper, I hope to provide a more realistic picture of the employment problem facing the Thai economy at present.

II The Data

Two major sources of data will be utilized: population censuses and labor force surveys from the National Statistical Office. An analysis of the changing labor force and employment will be based on these population censuses. Data from the labor force surveys will be used for the analysis

of the unemployment and underemployment problems. No attempt will be made to compare the two sets of data since they have different bases. The labor force surveys provide more detailed information on labor utilization which is not available in the population censuses. It should be noted here that at the time of this study, the results of the 1980 population census for the whole kingdom were not yet available. The data of the 1980 population census presented in this study are from preliminary and advanced reports which are based on a one percent sample.

III Growth of the Population and Labor Force

The period between 1947 and 1960 marked the period of the highest average growth rate of population in Thailand. The average annual growth rate during that period was 3.4 percent. The rate

declined to 2.8 percent during the following intercensal period, 1960-1970 [Wang-lee 1976: 11]. This high growth rate has resulted in an increase of the population of the younger age group. The distribution of population in Table 1 reveals that one-fourth of the Thai population in 1980 were under 10 years of age, and one-half were under 19 years of age. Such a high proportion of school-age population should imply a high dependency burden; that is, a large portion of the country's limited resources has to be diverted to provide facilities needed for children, and hence a smaller proportion will be available for investment in economic development.

In 1970 the Thai government officially declared a policy of reducing the population growth rate through voluntary family planning. During the Third Five-Year Plan (1972-1976), the average population growth rate was to be reduced to 2.5

Table 1 Distribution of Population by Age Group

Age Group	Number ('000)			Percentage			Cumulative Annual Growth Rate	
	1960 ¹⁾	1970 ²⁾	1980 ³⁾	1960	1970	1980	1960-1970	1970-1980
Total	26,257.9	34,397.4	44,278.4	100.0	100.0	100.0	2.74	2.56
Under 10	8,231.5	10,944.1	11,053.9	31.3	31.8	25.0	0.26	0.10
10-14	3,088.2	4,562.2	5,828.6	11.8	13.3	13.2	3.98	2.48
15-19	2,499.0	3,717.5	5,303.2	9.5	10.8	12.0	4.05	3.62
20-24	2,416.1	2,683.4	4,340.7	9.2	7.8	9.8	1.05	4.93
25-29	2,071.1	2,241.5	3,547.7	7.9	6.5	8.0	0.79	4.70
30-39	3,125.9	4,035.0	5,081.4	11.9	11.7	11.5	2.59	2.33
40-49	2,109.1	2,737.2	4,027.4	8.0	8.0	9.1	2.64	3.94
50-59	1,462.7	1,752.0	2,653.2	5.6	5.1	6.0	1.82	4.24
60+	1,208.2	1,681.0	2,442.1	4.6	4.9	5.5	3.36	3.81
Unknown	46.1	43.5	-	0.2	0.1	-	-0.58	-

Sources: 1) Central Statistical Office, *1960 Population Census*.

2) National Statistical Office, *1970 Population Census*.

3) National Statistical Office, *1980 Population Census*, Preliminary Report.

percent per annum, and it was to be further reduced to 2.1 percent during the Fourth Five-Year Plan (1977-1981). It was claimed that population growth had been successfully controlled during those two plans. However, there is still evidence indicating a wide variation in population growth rates among regions and areas. By the end of the Fifth Five-Year Plan (1982-1986), the average population growth rate is to be reduced to 1.5 percent. Whether this target is feasible depends a great deal on the success of the family planning program in reducing the average birth rates in the northeastern and the southern regions. For the northern and the central regions, which have experienced the demographic transition period, a further reduction in birth rate is thought to be highly unlikely [Honglaradom *et al.* 1980].

Although the population growth rate has started to decline, its effect will only be seen in the next 15 years. However, the result of the high population growth prior to 1960 is now being seen in a rapid increase of population in the working ages. As reported in the 1960 and 1970 population censuses, approximately 87 percent of the Thai population still resided in rural (or nonmunicipal) areas where only primary schools were accessible. Before the 1960s, compulsory education in Thailand was composed of four years of lower primary plus three years of upper primary, according to the 1962 Primary Education Act.¹⁾ However, due to the high cost of

1) In order for attendance of upper primary

implementation, this was revised to a six-year primary education, starting from 1978. Children normally start school at age six and should complete their primary education by age 13. However, the dropout rate has been relatively high. Even in 1982, it was reported that only about 61 percent of those who entered the first grade actually completed the sixth; this means that almost 40 percent dropped out along the way.²⁾

As a consequence, a larger proportion of the Thai labor force is found to be in the very young age group. Table 2 reveals that approximately one-fourth to one-fifth of the economically active population was in the 11-19 age group in the last three censuses.³⁾ The patterns of age distribution of labor force in the three censuses are relatively similar. However, the percentage of the economically active population in the 11-19 age group as reported in the 1980 population census was substantially reduced. This could be due to the efforts of the government during

school to be enforced, a child must live within two kilometres of the upper primary school.

2) Information from the National Education Commission, cited in Chutikul [n. d.].

3) Since the 1960 population census, the economically active population has been defined to cover all persons 11 years of age and over who were employed as of the census date or who had worked on any day during the seven days preceding the census date as well as experienced workers who were looking for work. The 1970 and the 1980 population censuses included those who were waiting for the farm season as economically active population. This group is defined in the labor force survey as out of labor force.

Table 2 Distribution of Economically Active Population by Age Group

Age Group	Number ('000)			Percentage			Cumulative Annual Growth Rate	
	1960	1970	1980	1960	1970	1980	1960-1970	1970-1980
Total	13,837.0	16,850.1	21,088.4	100.0	100.0	100.0	1.99	2.27
11-14	1,079.5	1,688.2	1,200.3	7.8	10.0	5.7	4.57	-3.35
15-19	2,017.1	2,874.3	3,341.7	14.6	17.1	15.9	3.60	1.52
20-24	2,112.4	2,253.7	3,317.8	15.4	13.4	15.7	0.65	3.94
25-29	1,873.2	1,944.6	2,902.6	13.5	11.5	13.8	0.37	4.09
30-39	2,868.9	3,544.8	4,206.5	20.7	21.0	20.0	2.14	1.73
40-49	1,953.5	2,413.5	3,276.8	14.1	14.3	15.5	2.14	3.11
50-59	1,282.2	1,414.8	1,957.2	9.3	8.4	9.3	1.00	3.30
60+	618.6	710.8	885.5	4.5	4.2	4.2	1.40	2.22
Unknown	31.6	5.3	-	0.2	0.0	-	-16.36	-

Source: Same as Table 1.

the past decade to make effective universal compulsory education as well as to expand lower secondary education at the *tambon*⁴⁾ level.

IV Changing Educational Attainment of the Population and Labor Force

Of the factors affecting the quality of human resources, education has always been considered by the Thai government

as the most important. The government's expenditure on education over the past two decades ranked second only to the expenditure on economic development. During the First Plan, it amounted to 2.4 percent of the gross domestic product and rose to 3.5 percent during the Fourth Plan. In terms of total government budget, it accounted for 16.9 percent in the First Plan and jumped to 20.8 percent in the Fourth Plan.

Table 3 Population Age Six and Over by Educational Attainment

Level of Education	Number ('000)			Percentage			Cumulative Annual Growth Rate	
	1960	1970	1980	1960	1970	1980	1960-1970	1970-1980
Total	21,148	27,596	37,819	100.0	100.0	100.0	2.70	3.02
No Education	7,974	7,145	6,345	37.7	25.9	16.8	-1.09	-1.18
Completed School	13,174	20,450	31,151	62.3	74.1	82.4	4.50	4.30
Lower Primary	11,549	17,185	23,461	54.6	62.3	62.0	4.05	3.16
Upper Primary	685	1,190	3,358	3.2	4.3	8.9	5.68	10.93
Secondary	635	1,337	3,452	3.0	4.8	9.1	7.73	9.95
Higher	95	186	881	0.4	0.7	2.3	6.95	16.83
Others & Unknown	210	552	322	1.0	2.0	0.9	10.15	-5.25

Source: Same as Table 1.

4) A *tambon* is a cluster of several villages.

The outcome of the past investment in education can be seen from the distribution of education among the Thai population in Table 3. The reduction in the number of persons without education over the past two decades has been noticeable. The growth of population with upper primary education and above accelerated. The most striking change over the last decade was in the growth rate of population with higher education.

However, the overall structure of educational distribution, as revealed by the three censuses, remained relatively unchanged. The vast majority of the population, ranging from 92 percent in 1960 to 79 percent in 1980, still has at most an upper primary education. Those with secondary and higher education constituted approximately 11 percent, even in 1980.

The situation is, however, considered worse for the distribution of education in the labor force. According to the 1980 Labor Force Survey (Round 2), of the total force in the whole kingdom, approximately 91 percent have at most a primary education. Sixty-seven percent of the urban and 95 percent of the rural workforce completed only primary education. This implies that better educated workers have been concentrated in urban areas, particularly in the Bangkok metropolis, leaving the less educated ones in rural areas.

The existing educational imbalance has been, more or less, the consequence of the pattern of governmental budget allocation in the past. Resources have been distributed in favor of higher education,

in particular for setting up and expanding universities, which are accessible to only a small percentage of the population. For the primary level, emphasis has been on quantitative expansion in order to keep pace with the growth of the school-age population. The inadequacy of budget allocated to the primary level is evident from the report of the National Education Commission that at least 13.3 percent of the primary schools, particularly those of smaller size, still cannot provide classes up to grade six [Thailand, Office of the National Education Commission 1983: 72].

Another main factor that accounts for the large proportion of children leaving school after or even before completing the compulsory education has certainly been family poverty. The direct costs of clothing, transportation, and lunches are no small amount for poor families [Thailand, National Statistical Office, *Report of the Survey of Children and Youth, 1977*: Table 9]. Moreover, when the child is old enough to help earn the family living, the indirect cost in terms of earnings foregone makes poor parents reluctant to send him/her for higher education. A study of education in northeastern Thailand [Holmes 1974] reports that the vast majority of villagers consider that education as it is presently conducted bears no direct relationship to farming. What most parents want schooling above grade four level to do is to bring certificates and jobs which carry prestige and a regular salary. The rewards of prestige, honor, and respect from secular schooling are not realized to any great degree until one

has at least the certificate of lower secondary level, which is the minimum level required for a job in a government office. Therefore, if they are not economically well enough off to send their children up to that level, they will be more likely to have them attend to at most the compulsory level. For those who can afford to continue schooling, the higher the level of education, the larger will be the government subsidy in terms of actual cost of education.⁵⁾ Moreover, the expected returns from additional levels of education, based at least on the Civil Service salary scale, are found to be higher than the expected returns from acquiring working experience for the same number of years. This may provide another explanation for the rapid increase in demand for higher education in Thailand.

V The Changing Structure of Production and Employment

A. Diversification in Agricultural Production

Thailand has, for a long time, been known as a major rice-growing country. During the last two decades, there has been substantial diversification in agricultural production. The rapid expansion of other crops occurred first in areas where rice could not be cultivated profitably due to lack of water. Later, even in areas where rice could be cultivated, there was a shift

5) The higher the education level, the lower will be the ratio of tuition fee to average cost per head in each education level [Nitungkorn 1983: 167-194].

from rice to other crops. Many factors could be said to have contributed to this change. Among them is the higher gross value added per rai of crops other than rice. The rice premium has been criticized as one of the factors responsible for the persistently low income of rice-growing farmers. The rice premium, therefore, has indirectly encouraged diversification to crops with larger value added wherever land, water supply, and climate have permitted. The second factor has been the improvement in transport, both rail and road, that increased the possibility of switching to production for the domestic market as well as for export. Thai farmers have been found to be quite responsive to changing world demands of agricultural products.⁶⁾

Most of the increase in agricultural output before 1960 was attributable to an increase in the area under cultivation rather than higher yields. After 1960, yield increased substantially due to factors such as irrigation, use of fertilizers and pesticides, farm mechanization, etc.

Despite the increase in agricultural production, its importance in terms of share of national output has been declining sharply. In 1947, output of the agricultural sector constituted 60.3 percent of the total gross domestic product (GDP). The share was reduced to 26.2 percent in 1980 (see Table 4). Employment share, on the other hand, has been declining at a much slower pace. In 1947, the share

6) For a review of the literature on the supply response of Thai farmers, see Thanapornphun [1983: 148-188].

Table 4 Percentage Distribution of Production and Employment by Industry

Industry	1947		1960		1970		1980	
	GDP	Employment	GDP	Employment	GDP	Employment	GDP	Employment
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture	60.3	84.8	39.8	82.3	28.3	79.3	26.2	72.5
Mining	0.2	0.1	1.1	0.2	2.0	0.5	2.1	0.2
Manufacturing	10.4	2.2	12.5	3.4	16.0	4.1	18.7	5.6
Construction	-	0.1	4.2	0.5	6.1	1.1	5.8	1.6
Public Utilities	0.2	0.03	0.4	0.1	1.2	0.2	0.9	0.3
Transportation	1.1	0.7	7.5	1.2	6.3	1.6	7.1	1.8
Commerce & Banking	15.4	7.9	17.0	5.7	23.2	5.3	24.3	7.4
Service	12.5	4.3	9.7	4.8	10.2	7.1	9.6	7.9
Ownership of Dwelling & Public Admin.	-	-	7.5	1.8	6.7	0.9	5.4	2.7

Source : Data on GDP are from the National Economic and Social Development Board, Thailand. Data on employment are from the National Statistical Office, The Population Census, 1947-1980.

of economically active workers in the agricultural sector was 84.8 percent of total employment. It decreased to 82.3, 79.3, and 72.5 percent in 1960, 1970, and 1980 respectively. The absolute number of people engaged in the agricultural sector, on the contrary, has been increasing over time. The numbers were 11.3, 13.2, and 16.6 million people in the three consecutive censuses.

With 73 percent of the active population producing only 26 percent of the national output, the average income of workers in the agricultural sector will undoubtedly be lower than in the rest of the economy. Migration from rural areas has been increasing over time. The improvement of transportation between Bangkok and other parts of the country has encouraged migration from further distances. Of the total migrants into the Bangkok

metropolis in 1960, 15 percent were from the northeast, the poorest region. In 1981, the number jumped to 43 percent and even outnumbered migrants from the central region which is adjacent to Bangkok. Poverty has certainly been a dominant factor in pushing people out of agricultural areas.⁷⁾

B. Promotion of the Manufacturing Industry

Before 1960, the development of industry in Thailand was hindered mainly by the lack of cheap power. Other principal bottlenecks to industrial development were the high speculative prices of industrial sites, a shortage of skilled labor and

7) For empirical evidence of the effect of economic variables on the decision to migrate, see the review of literature in Garnjana-Goonchorn [1978].

management, poor communication, and high transportation costs [Ungphakorn 1965: 11].

The substantial reduction in imports during World War II provided an impetus to domestic production of consumer goods. The War and its aftermath brought into sharp focus the need for industrialization and import substitution. This encouraged the Thai government to establish a number of industrial enterprises ranging from sugar to paper, gunny bags, plywood, and glass containers. The policy of direct governmental participation was relaxed from the middle of the 1950s and emphasis was shifted to building the infrastructure and promoting private sector participation. The first Act for industrial promotion was passed in 1954. Under this Act, promoted industries were granted full duty exemption on import of capital goods and low duty for imported raw materials. Many other tax holiday schemes were implemented. The import tariffs were raised many times for protective purposes. The effective rates of protection in manufacturing industries were found to be biased in favor of production for the domestic market and against export [Akrasanee 1975].

The pattern of industrial growth since 1960 has reflected domestic demand rather than factor endowment and comparative advantages. The policy of import substitution under heavy protection aggravated the balance of payments since it encouraged imports of raw materials and capital goods and at the same time discouraged manufacturing exports. The share of light

industries, for which most of the raw materials are available in the country, fell from 75 percent of total manufacturing output in 1960 to 60.9 percent in 1969. On the other hand, the share of heavy manufacturing rose from 25 percent to 39.1 percent [Marzouk 1972: 201].

Despite heavy promotion of manufacturing industries, their contribution to the change in the employment structure was negligible. The share of employment of manufacturing industries increased slightly from 3.4 percent of total employment in 1960 to 4.1 percent in 1970, an increase of 212,000 people over one decade. However, the direct contribution of the promoted industries could not be expected to be high since the majority of the work force in the manufacturing sector were still unpaid family workers. According to the 1964 Industrial Census, 87.6 percent of all establishments in this sector were without paid employees. They engaged over 54 percent of the total manufacturing labor force but accounted for only 4.6 percent of the total value added of the reporting establishments [*ibid.*: 212].

The heavy manufacturing industries had been relying on an internal market where the purchasing power of the majority was low. In the early 1970s industries began to face the problems of a slower growth rate and an increase in idle capacity. With the high level of effective protection, the manufactured products were not competitive in the world market. The system of incentives, and particularly the exemption of imports of machinery and capital goods from import duties, encouraged

capital-intensive techniques and also led to inefficient utilization of scarce capital resources.

Export-oriented industries were actively promoted after 1971. Promotion measures included: full exemption from import tariffs on machinery and raw materials, and from certain business taxes; refund of all taxes incurred in the production process; a rediscount facility at subsidized interest rates from the Bank of Thailand; and technical assistance from the Export Service Center of the Ministry of Commerce. Top priority was given to industries which employed sizeable amounts of labor or local raw materials, and to those promoting energy conservation.

The share of employment of the manufacturing industries rose to 5.6 percent of the total employment in 1980. The growth rate of the economically active population in this sector over the past decade averaged 6.58 percent per annum. In terms of the number of people, the

1980 census revealed that almost twice as many economically active persons were found in this sector as at the time of the 1970 census (see Table 5). Manufacturing establishments tended to be concentrated in the greater Bangkok area (including the surrounding provinces). In 1981, out of a total of 80,201 factories over the whole kingdom, 22 percent were located in the greater Bangkok area. GNP originating from manufacturing industries in the greater Bangkok area accounted for 54 percent of the total GNP from manufacturing industries in 1980 [Wannitukul 1983: Tables 2 and 3].

C. The Tertiary Sector

The tertiary sector comprises transportation, commerce and banking, and service industries. The share of GDP of this sector over the past two decades averaged 45 percent per annum, and its share of total employment, 14 percent per annum.

Like the manufacturing sector, the tertiary sector is also characterized by a dual nature. It comprises a modern subsector which contains large establishments, and a traditional subsector (the so-called "informal sector") which includes a large number of small-scale or family unit type businesses. According to the 1977 Report on Census of Business Trade and Services, Whole Kingdom, 85 percent of 12,196 enumerated establishments had less than 10 employees; 53 percent had less than five employ-

Table 5 Economically Active Population by Industry

Industry	Number ('000)			Cumulative Annual Growth Rate	
	1960	1970	1980	1960-1970	1970-1980
Total	13,772	16,652	22,867	1.92	3.22
Agriculture	11,334	13,202	16,567	1.54	2.30
Mining	30	87	52	11.18	-5.05
Manufacturing	471	683	1,291	3.78	6.58
Construction	69	182	373	10.19	7.47
Public Utilities	16	25	64	5.02	9.70
Transportation	166	268	409	4.93	4.30
Commerce & Banking	780	876	1,693	1.17	6.81
Service	655	1,184	1,811	6.10	4.34
Others	252	146	609	-5.31	15.36

Source: Same as Table 1.

ees. The number of persons engaged in those establishments with less than 10 employees accounted for 47 percent of all persons engaged in establishments under the survey [Thailand, National Statistical Office, *Report of Census of Business Trade and Services, 1977, Whole Kingdom: 4-5*]. This alone indicates that the commerce and service industries are overwhelmed with small-scale business, not to mention the number of hawkers, peddlers, domestic servants, etc.

Since activities in the tertiary sector are market oriented, they are more likely to be located in the urban areas where customers are concentrated. Naturally, the Bangkok metropolis would be the best location since it is inhabited by 5.3 million people, about 52 times the population of Haad Yai, the second largest city. As of 1981, the per capita gross regional product (at constant 1972 prices) of Bangkok was $\text{฿ } 45,824$ compared with $\text{฿ } 31,823$ of the eastern region, which ranked second [Thailand, Office of the National Economic and Social Development Board 1984]. A study of establishments in the commerce and service industries reveals that there has been a noticeable increase in concentration of these industries in the greater Bangkok area. In 1971, 53 percent of these establishments were located in the greater Bangkok area, but in 1978 the proportion rose to 72 percent [Choykiattikul 1983: Table 5].

The traditional sector in the urban area has been considered as a "shelter" for unskilled migrants from rural areas as well as for urban disadvantaged groups.

Employment generated in this sector is of the low-income type. Nevertheless there is still some evidence indicating that some self-employed in this sector have an average income higher than the average income of unskilled workers in small establishments [Teilhert-Waldorf 1978; Tongudai 1982]. Migration flow from rural areas into Bangkok nowadays is relatively more systematic. A case study of migration from the northeast region reveals that migration from Tambon Thahai, Kuang District, in Ubol-Rachathani, has been very well organized. There is cheap transportation provided regularly and low-cost lodging in Bangkok is arranged by former migrants. Almost all male migrants work as taxi or motor-tricycle drivers, and female migrants work in restaurants or as domestic servants. After having earned their target sum, they normally return home. Earnings obtained from working in Bangkok are found to be spent mostly on consumption items rather than invested in improving farm production [Mongkolkiy-Ngam 1982: 161-165].

VI Changes in Employment Status and Occupation Patterns

Transition of the economy into a more industrialized stage generally entails changing the organization of production units. As organizations become larger in size, the proportion of unpaid family workers in the work force is expected to decline, whereas that of the employees should increase.

As discussed earlier, the family unit of production is still predominant in all sec-

Table 6 Economically Active Population by Employment Status

Work Status	Number ('000)			Percentage			Cumulative Annual Growth Rate	
	1960	1970	1980	1960	1970	1980	1960-1970	1970-1980
Total	13,772	16,652	22,867	100.0	100.0	100.0	1.92	3.22
Employer	44	61	281	0.3	0.4	1.2	3.38	16.54
Own-account Worker	4,085	4,935	6,787	30.0	29.6	29.7	1.91	3.24
Government Employee	490	778	1,191	3.6	4.7	5.2	4.74	4.35
Private Employee	1,144	1,820	3,727	8.3	10.9	16.3	4.75	7.43
Unpaid Family Worker	7,983	8,935	10,573	58.0	53.7	46.2	1.13	1.70
Unknown	28	123	309	0.2	0.7	1.4	15.91	9.60

Source: Same as Table 1.

tors, particularly in agriculture. A drastic change in the structure of employment status of the Thai work force is not expected in the near future. It can be seen from Table 6 that even in 1980, almost half of the work force was still in the unpaid worker category. The proportion has been declining slightly over time, but it has been accompanied by an increase in the actual number of persons in this work category. This has been due mainly to an increase in the work force in the agricul-

tural sector. If we disaggregate by sex, a much larger proportion of females is found in this work category: 70 percent as compared with 24 percent of their male counterparts. The fact that a large proportion of females are unpaid family workers makes the labor force participation rate of Thai females one of the highest in the world.

Regarding the employee category, the proportion as well as the total population active in this category has shown an increasing trend over time. In 1960, private

Table 7 Economically Active Population by Occupation

Occupational Group	Number ('000)			Percentage			Cumulative Annual Growth Rate	
	1960	1970	1980	1960	1970	1980	1960-1970	1970-1980
Total	13,772	16,652	22,867	100.0	100.0	100.0	1.92	3.22
Professionals	174	284	718	1.3	1.7	3.1	5.02	9.71
Administrative Workers	26	247	293	0.2	1.5	1.3	25.13	1.75
Clericals	154	190	392	1.1	1.1	1.7	2.11	7.50
Sales Workers	736	834	1,540	5.3	5.0	6.7	1.26	6.33
Agriculturalists	11,333	13,217	16,605	82.3	79.4	72.6	1.37	2.31
Miners	26	43	41	0.2	0.3	0.2	4.94	-0.31
Transport Workers	145	225	377	1.1	1.4	1.7	4.53	5.30
Craftsmen & Laborers	806	1,110	2,198	5.9	6.7	9.6	2.51	7.07
Service Workers	273	472	680	2.0	2.8	3.0	5.61	3.72
Unknown	99	31	24	0.7	0.2	0.1	-11.11	-2.56

Source: Same as Table 1.

employees constituted 8.3 percent of the total labor force, but in 1980 the proportion rose to 16.3 percent. For Bangkok, approximately half the labor force was comprised of private employees in 1980.

A large number of male workers approximately 45 percent belong to the own-account worker category. This proportion has been relatively stable over the past two decades. Any important improvement in the employment condition of this group will indirectly benefit those in the unpaid family worker category.

A classification of labor force by occupation, as shown in Table 7, reveals an overwhelming proportion of farmers in the three censuses. It could be argued, however, that the figures tend to be overstated, taking into consideration the fact that an increasing number of those who called themselves farmers may have earned the larger portion of their income from nonfarm activities. However, the overstatement might not be too large, taking into account the actual population residing in rural areas.

Changes in the occupational structure reflect the condition of supply and demand in the labor market. On the supply side, due to the low quality of the work force in the rural areas in general, no rapid change is likely to take place. The rural work force has never been prepared in any way for changing conditions in production. On the demand side, the development of manufacturing industries in the early stage has been concentrated on using capital-intensive techniques in response to incentives provided by the gov-

ernment. This has implied little chance for workers to develop their skills through on-the-job training. Besides, these industries have almost no linkage to local producers of raw materials. Hence the rural sector has been almost entirely left out in the process of industrial development. It is not surprising that a large part of rural areas has remained stagnant and in many parts deteriorated. Migrants out of rural areas have survived by working as unskilled workers in the traditional sector in urban areas as discussed earlier.

There has been some change, albeit small numerically, in the proportion of those "white collar workers"; namely the professionals, administratives, and clericals.⁸⁾ The increase in numbers as well as proportion of professionals in the past decade is observable. This should reflect the growing number of higher-educated workers as a result of the expansion of higher education in the past decade. However, other than farming, any changes in other occupations are more likely to take place outside the rural areas.

VII The Problem of Unemployment

In an agriculture predominated country, the open unemployment rate is generally low. Nevertheless, its trend and its extent provide some indication of the overall economic condition as well as the func-

8) The unusually low number of persons in the administrative occupational group as reported in the 1960 population census may be due to an error by the enumerators in classification into professional and administrative categories.

Table 8 Percentage Distribution of Unemployment Rate of Persons Age 11 and Over by Region and Area

Year	Bangkok-Thonburi			Central			North			Northeast			South		
	T	M	N	T	M	N	T	M	N	T	M	N	T	M	N
	1971	0.91	1.13	0.32	0.46	0.75	0.42	0.09	0.50	0.06	0.04	0.45	0.03	0.09	1.26
1972	2.05	2.35	1.10	0.46	1.85	0.30	0.25	1.20	0.19	0.44	2.14	0.39	0.32	1.10	0.24
1973	1.28	1.49	0.58	0.52	1.74	0.37	0.24	1.31	0.17	0.31	1.41	0.27	0.42	1.16	0.35
1974	1.35	1.69	0.27	0.44	1.25	0.34	0.11	0.90	0.06	0.38	1.71	0.33	0.42	1.50	0.31
1975	1.23	1.59	-	0.36	1.35	0.24	0.20	1.23	0.13	0.27	1.33	0.24	0.75	1.55	0.67
1976	1.72	2.21	0.16	0.77	1.70	0.66	0.47	1.76	0.38	0.95	2.79	0.89	0.60	1.05	0.55
1977	2.32	2.84	0.75	1.16	2.99	0.95	0.55	1.51	0.48	1.47	2.29	1.44	1.95	1.69	1.16
1978	2.66	3.11	1.25	1.37	2.10	1.29	0.49	1.82	0.41	0.48	2.08	0.47	1.66	1.64	1.66
1979	3.31	3.52	2.60	1.12	2.28	0.98	0.47	2.25	0.35	0.77	3.47	0.68	1.44	2.22	1.37
1980	3.51	3.62	3.12	1.26	2.88	1.07	0.56	2.12	0.46	0.61	2.99	0.51	1.70	2.22	1.65
1981	3.07	3.50	1.69	1.20	2.43	1.08	0.42	2.52	0.28	0.38	2.20	0.32	0.76	2.47	0.55

Note: T = Total, M = Municipal Area, N = Nonmunicipal Area.

Source: National Statistical Office, *The Labor Force Survey, 1971-1981* (Round 2).

tioning of the labor market. The general characteristics of the unemployed should reveal the nature of the employment problem facing policy makers.

The unemployment rate in Thailand over the past decade has shown a relatively steady increasing trend (see Table 8). The data presented in Table 8 are of the peak season of the year.⁹⁾ A disaggregation by region and area (municipal vs. nonmunicipal) reveals that the open unemployment rate in Bangkok has always been the highest and that the unemployment rates of the municipal areas of all regions are many times higher than the corresponding nonmunicipal areas. The unemployment rates in Bangkok and municipal areas of other regions have been relatively low by international standards. The low unemployment rates in urban areas and the small variation in geographical wage differentials lead some studies to conclude that the labor market has been functioning relatively efficiently [Poapongsakorn 1983; World Bank 1977]. In view of the more systematic pattern of rural-urban

9) The labor force survey is carried out by the National Statistical Office, two rounds annually. The first round is held from January to March coinciding with the nonagricultural season, and the second round from July to September coinciding with the agricultural season. The first round is often called slack season, and the second round, the peak season.

Table 9 Percentage of Unemployed Persons Age 11 and Over by Education Attainment

Year	Upper Primary and Below		Secondary		Vocational Teacher Training		Technical Vocational		University Academic		Others	
	% LF	% Unem	% LF	% Unem	% LF	% Unem	% LF	% Unem	% LF	% Unem	% LF	% Unem
1971	80.6	36.0	3.3	35.4	1.0	20.7	0.1	4.1	0.4	3.4	14.4	0.2
1972	78.6	58.7	3.6	27.6	1.5	10.5	0.1	0.9	0.4	2.2	15.3	0.1
1973	78.0	44.7	3.8	20.5	1.6	23.2	0.1	6.8	0.4	4.6	15.6	-
1974	81.2	43.6	4.9	28.7	2.0	21.5	0.2	2.9	0.5	3.0	10.8	0.2
1975	82.0	32.3	3.7	30.3	1.8	32.7	0.2	1.7	0.4	2.6	11.5	0.3
1976	82.4	63.3	3.4	19.0	1.7	13.9	0.2	1.1	0.4	1.7	11.1	-
1977	80.9	55.2	3.9	22.4	2.2	16.7	0.2	1.5	0.6	3.7	10.9	0.1
1978	81.8	46.7	4.2	26.5	2.3	20.4	0.2	1.8	0.6	4.4	9.8	0.1
1979	80.8	50.4	4.3	23.5	2.7	20.8	0.4	2.0	0.7	3.1	9.9	0.2
1980	81.5	65.7	4.5	15.7	2.8	13.8	0.4	1.6	0.7	2.6	9.0	0.6

Note: % LF refers to percentage of total labor force, % Unem refers to percentage of total unemployed.
Source: National Statistical Office, *The Labor Force Survey, 1971-1980* (Round 2).

migration and the prevalence of a relatively uniform wage level of unskilled workers in Bangkok, this conclusion may seem acceptable. The fact that the unemployment rate in Thailand is generally low does not imply that the economy is free from employment problems. It could also be interpreted that people are so poor that they are forced to accept jobs offered at whatever wage level. We shall return to this point later.

Of greater interest are the characteristics of the unemployed. A disaggregation by level of education reveals that the unemployment rate of those who completed at most upper primary education has shown a rising trend during the past decade (see Table 9). This group constituted approximately 80 percent of the total labor force. In 1971, they comprised 36 percent of the total unemployed, but in 1980 the number rose to 65.7 percent. The graduates of secondary school who used to comprise the largest group of the unemployed showed a reverse trend. The proportion of secondary school graduates among the unemployed declined by almost 20 percent over the same period. A similar trend has also been found for vocational and teacher training graduates who also used to make up a big share of the total unemployed. One possible explanation would be that, due to the increasing supply of the latter two groups and the poor prospects of the labor market, employers are able to substitute workers with secondary or vocational education for positions that

used to require only primary school qualification. The unemployed with higher education, the technical and university graduates, comprised less than five percent of the total. However, the severity of the problem is expected to continue to rise due to the increasing number of graduates, particularly those in the fields of the social sciences, law, and education. Out of 41,169 graduates of higher education from government and private institutions in 1980, 68 percent majored in these three fields. In 1981, there were 653,625 undergraduates enrolled in government institutions, of which 87.5 percent were students in the two open universities. Of the total students in the open universities, 77 percent majored in these three fields. The establishment of the first open university, Ramkhamhaeng University, in the early 1970s was due partly to the inability of the government to solve the high unemployment rate of secondary school graduates at that time and partly to the pressure of demand for higher education. The problem was exacerbated by the opening of the second open university, Sukhothai Thammathirat, in 1978. Although the number of graduates with higher education still constitutes a relatively small proportion of the total labor force, this group has exerted strong political pressure. The recent creation of an additional 1,500 positions by the government in order to provide temporary employment for technical and university graduates is evidence of this.

Of the total population actively looking for work, as reported in the 1980 census of population, 73 percent were seeking

jobs for the first time. Out of these, 79 percent were in the 11-24 year-old age group. The labor force survey, which was undertaken 3-6 months behind the population census, also confirmed that the above-mentioned age group accounted for 60.4 percent of the total unemployment for that year.

At this point, we may conclude that the problem of open unemployment in Thailand is more correctly the problem of youth unemployment. Lower-educated youths have been effected to a much greater extent than higher-educated ones. However, more information on the duration of time spent in looking for jobs for each educational group would be necessary in order to judge the severity of the problem.¹⁰⁾

VIII The Problem of Underemployment

Economists have been discontented with the use of the open unemployment rate for measuring the employment problem in developing economies where the majority of the work force consists of self-employed and unpaid family workers. The problem of employment in developing countries, as pointed out in many studies, is rather a problem of inadequate income and insufficient work opportunities. The prevalence of this phenomenon is generally known as the underemployment

10) The information on duration of unemployment shown in the report of the labor force survey is the percentage distribution of duration of unemployment by sex and municipal/nonmunicipal areas.

problem. Various approaches have been suggested for improving the measurement of labor utilization in order to be able to include the existence of underemployment.

Since 1977, the National Statistical Office has incorporated the labor utilization framework developed by Philip M. Hauser as part of their regular labor force survey. Within this framework, persons 11 years of age and over in the labor force are classified in the survey as either adequately or inadequately utilized. Those belonging to the latter are categorized as one of the following: underemployed, underutilized by hours of work, underutilized by income, or underutilized by mismatch of occupation and education. Those categorized as underutilized by hours of work are unpaid family workers working 1-19 hours in the survey week but wanting to work more and all employed persons working less than 35 hours a week and also wanting more work. In order to determine underutilization by income, a cut-off level of income based on the subsistence level of living for each geographical area has been determined. These cut-off levels of income have been adjusted over time in accordance with changes in the cost of living in those areas.¹¹⁾ However, for those living in nonmunicipal areas outside the Bangkok metropolitan area, the cut-off level has been fixed at 250 baht per month. Underutilization by income is thus defined as employed per-

sons who make less than the cut-off level in the location of his work during the survey week. Mismatch, as defined by a panel of judges, occurs when a respondent's occupation does not permit the full use of his education. Education is being used as a proxy for skill or capacity. Persons who are considered underutilized in more than one way will be classified by the following priority scheme. Unemployment will be listed first. If a person is underutilized by hours of work and income and/or mismatch, he will be categorized as underutilized by hours. If he is underutilized by both income and mismatch, he will be categorized as underutilized by income. The last priority is the mismatch category. After all inadequately utilized persons are classified, the residuals are categorized as adequately utilized persons.

Squire divides underemployment into two distinct types. The first, visible underemployment, includes those who are employed but would like to work longer hours. The second, invisible underemployment, is defined in a number of ways, but generally includes those whose earnings lie below a given cut-off level [Squire 1981: 69].

Employing Squire's concept, the extent of visible underemployment can be measured by the percentage of the labor force in the category of underutilized by hours of work. From Table 10, it can be seen that the highest percentage of the labor force in this category was in 1977: 5.8 percent in Round 1 (the slack season); and 3.8 percent in Round 2 (the

11) The cut-off level of income for the broad geographical areas can be found under the section of Concept and Definition in the report of the survey.

Table 10 Underemployments by Area (In Thousands)

Type of Underemployment		Round 1 (Jan.-March)			Round 2 (July-Sept.)		
		Whole Kingdom (% of LF)	Municipal	Non-muni	Whole Kingdom (% of LF)	Municipal	Non-muni
1. By Hours of Work	1977	776.4 (5.79)	37.2	739.2	784.6 (3.83)	39.6	745.0
	1978	652.7 (4.60)	36.2	616.5	676.4 (3.08)	52.5	623.9
	1979	542.7 (3.84)	63.4	479.3	505.6 (2.36)	55.4	450.2
	1980	← No Survey →			510.6 (2.25)	63.0	447.6
	1981	596.8 (3.37)	68.2	528.5	448.0 (1.82)	50.9	397.1
2. By Income	1977	3,976.7 (29.16)	395.9	3,580.8	6,489.7 (31.69)	388.2	6,101.5
	1978	3,830.1 (27.02)	549.4	3,280.7	6,324.0 (28.88)	518.0	5,806.0
	1979	3,381.0 (23.90)	439.9	2,941.1	5,657.2 (26.41)	431.6	5,225.6
	1980	← No Survey →			3,806.6 (16.75)	435.8	3,370.8
	1981	2,799.4 (15.81)	828.0	1,971.4	4,151.5 (16.89)	920.2	3,231.3
3. By Mismatch	1977	6.3 (0.05)	4.0	2.3	9.5 (0.05)	7.6	1.9
	1978	7.4 (0.05)	3.6	3.8	11.5 (0.05)	9.2	2.3
	1979	17.3 (0.12)	12.4	4.9	14.8 (0.07)	10.4	4.4
	1980	← No Survey →			29.1 (0.13)	20.3	8.8
	1981	24.2 (0.14)	18.8	5.4	35.2 (0.14)	23.1	12.1

Source: National Statistical Office, *The Labor Force Survey, 1977-1981*.

peak season). The steadily declining trend of persons belonging to this category could be explained by an increase in opportunities to work outside their own farms. These opportunities include migrating into Bangkok, working in the government's rural job creation project in the dry season,¹²⁾ working in other farm areas, etc. Recently, some agricultural areas (particularly the central region) have developed into more advanced areas by growing dry-season rice, pineapples, sugar cane, and cassava. These areas have been increasingly important in providing off-farm employment opportunities, not only

12) The Rural Job Creation Program was initiated by the government in 1980 in order to assist drought-stricken farmers. Since then, budget has been allocated each year for the purpose of creating jobs in the dry season, primarily to reduce the migration flow into the Bangkok metropolis.

to nearby farmers but also to migrants from the northeast [Pawapoothanon 1982: 155-160].

The sizable number of persons in the category of underutilized by income, invisible underemployment in Squire's concept, is in fact the core of the employment problem in the Thai economy. In 1977, 29 percent of the labor force in Round 1 and 32 percent of the labor force in Round 2 fell into this category. Although the number of persons whose income was below the cut-off level has been declining over time, particularly those living in the nonmunicipal areas, it is not certain whether their real income has actually increased. As mentioned earlier, the cut-off level of income for the nonmunicipal areas has been fixed at a relatively low level for many years. According to the 1980 labor force survey, Round 2, of those underutilized by

income, 98 percent had at most an upper primary level of education, 88 percent lived in nonmunicipal areas, and 44 percent were between 11-24 years of age. Employed persons in manufacturing and commerce industries constituted the largest proportion (54 percent) of total persons underutilized by income in the municipal areas, 95 percent were found in agriculture with the largest group in the own-account worker and unpaid family worker categories.

Mismatch is unmistakably a kind of invisible unemployment in the sense that a person does not have an opportunity to perform to the best of his capacity. His productivity and hence his income is lower than it should be. Although the number of persons in this category is less than one percent of the total labor force, in terms of numbers it has been increasing rapidly. This evidence supports our previous remark on the replacement of higher-educated workers for lower-educated ones practiced by employers. The gloomy prospect of the labor market has forced graduates to lower their job expectations.

IX Concluding Remarks

Rapid population growth in the past has resulted in an influx of youths into the labor market. The pressure of the problem of employment can be expected to increase since a large proportion of the Thai work force will continue to be in this age group for at least another decade.

The more serious employment problem

facing the Thai economy at present is the problem of the working poor. These are people residing mainly in rural areas. After two decades of economic development, about 70 percent of the Thai labor force still depend on agriculture as their main source of income. A transition from a traditional agricultural economy into a more industrialized one could hardly be possible given the fact that approximately 90 percent of the work force still has at most a primary level of education.

Economic development has been concentrated around the primary city, the Bangkok metropolis. The gap between the average income of those living in Bangkok and the rest of the country, particularly those living in rural areas, has been widening. The deterioration of the farming occupation has pushed people out of rural areas and swollen the traditional sector in urban areas, particularly in Bangkok. The largest proportion of the working poor in urban areas is employed in small establishments whose employment conditions have never complied with any labor laws.

It has been increasingly evident at the planning level that economic and social development cannot be continued at an accelerated rate: the situation might even get worse if the rural sector is left far behind as it was in the past. An attempt is now being made by the government to improve farming and living conditions in villages identified as poverty areas. The resulting activities may at least create some changes in those long stagnant areas. However, these efforts could go in vain if

villagers are not capable of carrying out the next stage of development by themselves. A much greater effort will be required to develop the present as well as the future work force of these villages.

It is essential that the development of those poverty areas, as well as the development of rural areas in general be included in the national perspective. Among other things, a concomitant plan to slow the growth of Bangkok and divert public as well as private investment into rural areas should be considered a high priority. Without such an effort, the improved human resources in rural areas will find it easier to migrate into urban areas, and hence perpetuate the problem.

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