

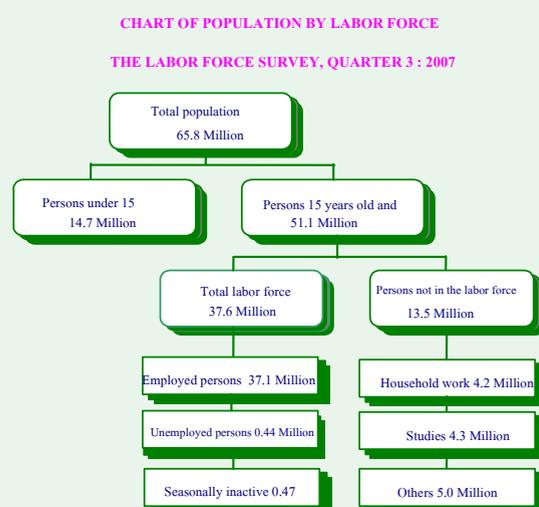
EXECUTIVE SUMMARY

The Labor Force Survey has been conducted by the National Statistical Office since 1963. At that time 2 rounds were conducted each year by the first round representing the non-agricultural season, and the second round representing the agricultural season. In 1984-1997 three rounds of the survey were conducted, the addition survey were in May representing the new labor from the graduate students. Since 1998 The Labor Force Survey has been conducted four round by the additional of the fourth round of the survey in November representing the harvest season.

This report represent the information on the employment and unemployment status of the Thai population of third round Labor Force Survey conducted during 1st-12th of each month during July - September 2007 by interviewing household members of the sampling households. The total sampling households were 79,560, where 50,040 households were in municipal area, and 29,520 households were in non-municipal area.

SUMMARY RESULTS

1. Structure of the labor force

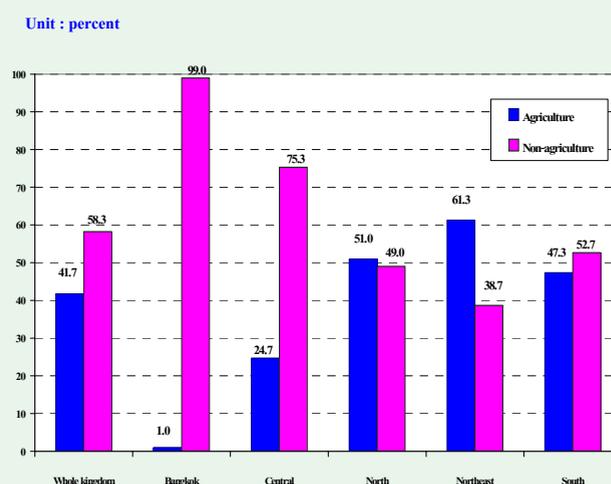


The total population was 65.8 million, out of which 37.6 million were in the total labor force. Of the total labor force 37.1 million were employed, 0.44 million were unemployed and 0.47 million were seasonally inactive labor force. About 13.5 million were not in the labor force and about 14.7 million were persons under 15 years old.

2. Employed labor force

2.1 Industry

FIGURE 1 PERCENTAGE OF EMPLOYED PERSON BY AGRICULTURAL, NON-AGRICULTURAL AND REGION, QUARTER 3 : 2007

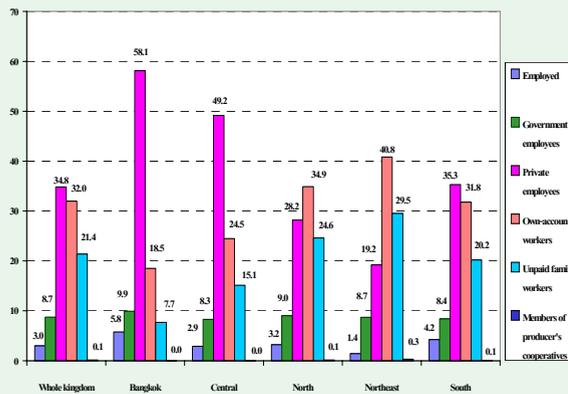


When considering employed person by industry, about 41.1 per cent of the total employed persons worked in agricultural sector and about 58.3 per cent work in non-agricultural sector. The highest proportions of the employed persons was in the manufacturing of 15.1 per cent, the wholesale and retail trade shared nearly the same rate of 14.9 per cent, followed by the hotel and restaurants 6.2 per cent, the construction 5.2 per cent, public administration 3.5 per cent, the transport storage and communication 2.9 per cent and education 2.8 per cent. The rest were shared in the other industries.

2.2 Work status

FIGURE 2 PERCENTAGE OF EMPLOYED PERSONS BY WORK STATUS AND REGION, QUARTER 3 : 2007

Unit : percent

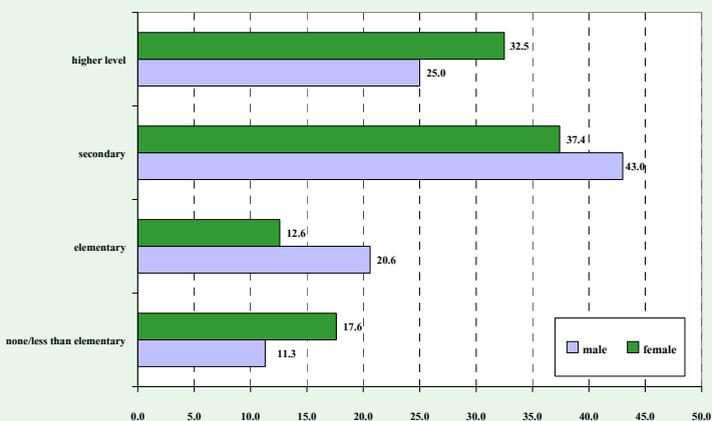


The total employed person 37.1 million. The highest proportion of the total employed person was employees of about 43.5 per cent (34.8 per cent were in private sector and 8.7 per cent were in government sector) followed by own account workers, unpaid family workers and employer which accounted for 32.0, 21.4 and 3.0 per cent respectively, while the percentage of members of producers' cooperatives was very low of about 0.1 per cent.

3. Unemployment

FIGURE 3 NUMBER OF UNEMPLOYED PERSONS BY LEVEL OF EDUCATIONAL AND SEX, QUARTER 3 : 2007

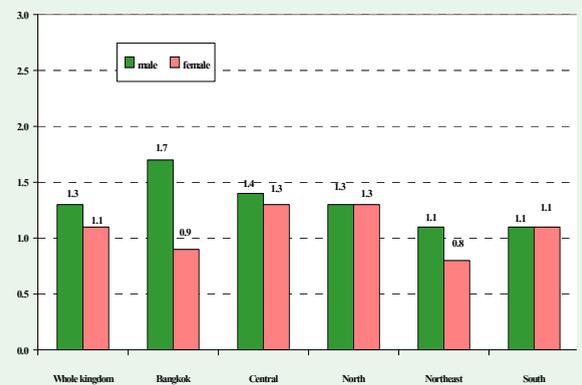
Unit : thousands



The total unemployed persons was estimated at 0.44 million, where 0.26 million unemployed persons were male and 0.18 million were female. Of these unemployed persons, about 0.14 million were elementary and less than elementary level, about 0.18 million were secondary level and about 0.12 million were in the higher level.

FIGURE 4 UNEMPLOYMENT RATE BY SEX AND REGION, QUARTER 3 : 2007

Unit : percent



When considering 1.2 per cent unemployment rate, it was 1.3 per cent was male and 1.1 per cent was female. The Central had the highest percentage of 1.4 per cent, followed by the North and Bangkok nearly the same rate of 1.3 per cent the South of 1.1 per cent and the Northeastern were the lowest of 1.0 per cent.

CHAPTER 1

INTRODUCTION

1. Background and objective

Labor force statistics have been compiled by the National Statistical Office since 1963 when the survey was initiated. The year 1984-1997 three rounds of the survey for the whole kingdom had been conducted each year; the first round enumeration is held in February coinciding with the non-agricultural season, the second round is normally held in May in with new labor force come from students who just finish their schooling and the third round is held in August, during the agricultural season. Commencing from the year 1998, another round of the survey in November has been conducted.

Due to the increasing demand of data for formulating plans and policy at provincial level, the National Statistical Office has expanded sample size to propose statistical data at provincial level commencing from survey in February and August, 1994. For the fourth round in November 1998, data was presented at the first time and presentation data at provincial level.

After the economic crisis in the mid of 1997, the need of labor force data for planning and policy making were more in demand. In the year of 2001, the survey was conducted monthly. The survey data of three months were combined to present the quarterly. Data of February, May and August were presented in order to compare with the previous labor force survey and since September 2001, data were presented monthly. Beginning from the survey in January 2001, 5 items has been revised; age of persons in labor force was adopted from 13 years of age and over to 15 years of age and over in order to agree with the child labor law. The standard classification of occupation, industry and employment status were adopted, and area of local administration which the former sanitary which were included in non-municipal area were presently included in municipal area.

The main objective of this survey is to estimate the number and characteristics of the labor force in the country and in different regions periodically. The statistical data derived from this quarter of the survey include:

1. the number of persons in and out of the working age (15 years and over) by sex
2. the number of working age population by labor force status, age, sex, marital status, educational attainment
3. the number of employed persons by interesting characteristics such as age, sex, educational attainment, occupation, industry, work status, hours work,
4. the number of unemployed persons by interesting characteristics e.g. duration of searching for job, type of previous work.

2. Coverage

Population reside in the private and special household.

3. Reference week

Reference week refer to seven days before the interviewing date for example if the interviewing date was February 9, 2004 “ during 7 days before interviewing date “ was during February 2nd- 8th, 2004.

4. Definition

The National Statistical Office has adapted and changed the concepts and definitions used in the Labor Force Survey (LFS) Project many times since the initial year. The purposes of changes were to improve the completeness of the collected data with respect to the real socio-economic situation of the country and to serve for users requirement. In this report, the concepts and definitions used have been introduced since 1983 and some definitions together with the minimum age limit which have been changed to 15 years is adopted since 2001.

The revised definitions used in the survey are listed in following.

Employed persons

Persons, 15 years of age and over who during the survey week,

1. worked for at least one hour for wages/salary, profits, dividends or any other kind of payment, in kind; or
2. did not work at all or worked less than one hour but
 - 2.1 receives wage/salary, profits from business enterprise or farm during the period of absence; or
 - 2.2 not receive wage/salary, profits from business enterprise or farm during the period of absence but had regular jobs or business that they would be return to work.
3. worked for at least one hour without pay in business enterprises or on farms owned or operated by household heads or members.

Unemployed persons

Persons, 15 years of age and over who during the survey week did not work even for one hour, had no jobs, business enterprise or farms of their own.

Persons in this category include :

1. those who had been looking for work, applying for a job or waiting to be call to work during the last 30 days before interview's date.
2. those who had not been looking for work during the last 30 days before interview's date but available for work during the last 7 days before interview's date.

Current labor force

All persons 15 years of age and over who, during the survey week, were either employed or unemployed as defined above.

Seasonally inactive labor force

Persons 15 years of age and over, who during the survey week, were neither employed nor unemployed as defined above, but were waiting for the appropriate season, being persons who usually worked without pay on farms, or in business enterprises engaged in seasonal activities owned or operated by the head of the household or any other member of the household.

Total labor force

All persons 15 years of age and over, who during the survey week, were in the current labor force as defined above or were classified as seasonally inactive labor force as defined above.

Persons not in the labor force

Persons classified in this category are those who were neither employed nor unemployed during the survey week, nor classified as seasonally inactive labor force as defined above. They include:

1. persons who, during the survey week were under 15 years of age,
2. persons who, during the survey week were 15 years of age and over, but were neither employed nor available for employment because they were
 - 2.1 engaged in household work,
 - 2.2 engaged in studies
 - 2.3 too young (below 18 years of age) or too old (above 60 years of age)
 - 2.4 incapable of work because of physical or mental disability or chronic illness,
 - 2.5 voluntarily idle,
 - 2.6 working without pay, profits, dividends or other payments for persons who were not members of the same household,
 - 2.7 working without pay, profits, dividends or any other payments for charitable organizations and institutions,
 - 2.8 otherwise not available for employment.

Job

A job is defined as any of the following:

1. Work for cash wages, salaries or for pay "in kind," or
2. Work for profit on own farm or in own or partly own business, or
3. Work without pay or profit on a farm or in a business owned or operated by the head or

any member of the household.

Occupation

Occupation refers to the kind of work performed by a person at his job. Most persons generally hold only one job. For a person having more than one job, only the job at which he worked for the greater number of hours during the survey week was recorded. If the number of working hours for each job was exactly the same, the job which gave him the higher income was recorded. If the number of working hours and the income earned from each job were the same, the job for which he had preference was recorded. If the respondent could not give his preference, the job at which he had been working for the longest time was the one recorded.

Before 2001, the survey used the classification which was suitable to Thailand's occupation based on International Standard Classification of Occupation, 1958 (ISCO-58). Since January 2001, the survey used International Standard Classification of Occupation, 1988 (ISCO-88) of the International Labor Organization (ILO).

Industry

The term "industry" as herein used refers to the nature of economic activity undertaken in the establishment in which a person worked or the nature of business in which he was engaged during the survey week. If a person had more than one job, the industry corresponding to the occupation recorded was asked.

Before 2001, the survey used the classification which was suitable to Thailand's industry based on International Standard Industrial Classification, (ISIC) 1958. Since January 2001, the survey used the third revision of the International Standard Industrial Classification, (ISIC) 1989, of the United Nations (UN).

Work status

Work status refers to the status of person's occupation in the survey week. Work status was classified as follows :

1. An employer is defined as a person who operates his own enterprise for profit or dividends and hires one or more employees in his enterprise.

2. A government employee is defined as a person who works for pay in a government agency or government enterprise. Included in this category, therefore are civil servants, police, municipal officers, and employees of government enterprises.

3. A private employee is a person who works for pay a non-governmental enterprise owned and operated by an employer.

4. An own account worker is a person who operated an enterprise on his own account or jointly with others in the form of a partnership either for profit or dividends but without engaging any employees.

5. An unpaid family worker is a person who works without pay on a farm or in a business enterprise owned or operated by the household head or any other member.

6. A member of a producers' cooperative is a person who hold a "self-employment" job in a cooperative producing goods and services, in which each member takes part on an equal footing with other members in determining the organization of production, sales and/or other work of the establishment, the investments and the distribution of the proceeds of the establishment amongst their members.

Since January 2001, the survey used the International Classification of Status in Employment, 1993 (ICSE-93) of the International Labor Organization (ILO) which add one more status to those used in the previous year, that is a member of a producers' cooperative.

Hours worked

Hours worked mean hours actually worked during the survey week. For a person holding more than one job, his hours worked would be the sum total of hours worked on all jobs. For a person who had a regular job but was not at work during the survey week, the hours worked would be recorded zero. Before 2001, for a person who had a regular job but was not at work during the survey week, the number of hours normally worked in a week is taken as the hours worked

Wage or salary

Wages or salaries mean basic wages or salaries payable for the specified time or piece of work, not including overtime payments, bonuses or other fringe benefits.

Duration of looking for work

Duration of looking for work is the length of time during which an unemployed person had been looking for work. It is counted from the day he started looking for work to the end of the survey week.

Survey week

A survey week is the reference period of last 7 days before interview's date which information on labor was obtained.

Enumeration period

The enumeration period is the 1st-12th for each month which actual interviews were conducted.

Types of households included in the survey

Households included in the scope of the survey can be divided into two types:

1. Private households which include one person household, i.e. single persons who make provision for their own food or other essentials of living without combining with any other persons, or multi person households, i.e. groups of two or more persons making common provision for food or other essentials for living, residing in any of the following types of housing: wooden dwellings, cement dwellings, row houses, apartments, boats, rafts, etc.

2. Special households which include persons living in group living quarters within the compound of a factory, or in a dormitory, or boarding house which is not exclusively for students.

Household not included in the above mentioned types, e.g. inmates of penal institutions, priests, soldiers living in military barracks, students living in dormitories, etc., were classified as institutional households and not covered in the survey.

Level of educational attainment

Educational levels are classified as follows:

1. **None** means all persons who have never attended school or had no education.
2. **Less than elementary** means all persons who have completed a grade lower than Pratom 6 (or formerly Pratom 7 or Matayom 3).
3. **Elementary level** means all persons who have completed Pratom 6 (or formerly Pratom 7 or Matayom 3) or higher but not lower secondary level.
4. **Lower secondary level** means all persons who have completed Matayom 3 (formerly Matayomsuksa 3 or Matayom 6) or higher but not upper secondary level.
5. **Upper secondary level**
 - 5.1 **Academic** means all persons who completed Matayom 6 (formerly Matayomsuksa 5 or Matayom 8) in general education schools or completed higher but not higher level.
 - 5.2 **Vocational and technical** means all persons who have completed a lower secondary and have then completed the three year course required for this level in vocational and technical colleges or completed higher but not higher level.
 - 5.3 **Teacher training** means all persons who have completed the teacher training course and receiving a certificate equivalent to upper secondary level or completed higher but not higher level.
6. **Higher level**
 - 6.1 **Academic** means all persons who completed a course receiving academic diploma, bachelor, master and doctoral degree level.
 - 6.2 **Higher technical education** means all persons who completed vocational or technical education, and receiving vocational diploma and the degree of bachelor.
 - 6.3 **Teacher training** means all persons who completed a course receiving educational diploma, bachelor, master and doctoral degree level.

7. **Short course vocational training** means all persons who have completed a vocational course of less than twelve months duration and have received a certificate or other document certifying completion of such a course. The educational requirements for persons taking such courses vary, but the minimum requirements are completion of at least grade 4 (Pratom 4) or the equivalent.

8. **Other** means all persons who have completed types of education other than the aforementioned.

CHAPTER 3

MAJOR FINDINGS

This chapter presents a summary of the results of the labor force survey conducted in the whole kingdom during the 1st-12th of July – September 2007, which is the third quarter of the year. The results obtained from this survey showed conditional of the number of employed, unemployed and interesting characteristics of labor force in July – September 2007.

The number of population which had been used in the estimation procedure from the survey round 1 in February, 1995 were changed in order to correspond with those used in the 8th National Economic and Social Development Plan such number were obtained from the new series of Population Projection for Thailand, 1990-2020 which was revised by Quality of life and social development office, National Economic and Social Development Board in May 2003.

1. Structure of the labor force

The total population was estimated at 65.8 million, of which 51.1 million were population aged 15 years and over and 37.6 million were in the labor force. Of the total labor force, about 69.7 per cent were residing in the non-municipal areas and about 53.8 per cent were males.

The “current labor force”, that is the currently active part of the total labor force, which was either employed or was available for employment in July – September 2007, was of the order of 37.6 million. Since the survey period was among the agricultural season, the number of the seasonally inactive labor force was about 47,400 persons. This number will be decreased when the survey is among agriculture season.

The current labor force was largely employed, however 1.2 per cent of which or about 4.4 million were unemployed. Of these, 0.2 per cent were looking for works and the rest 0.9 per cent were not looking for works but available for works.

Persons not in the labor force could be divided into two major groups i.e. persons aged 15 years and over and those under 15 years of age. The first group comprised 20.5 per cent of the total population or 26.4 per cent of total population aged 15 years and over. About 4.2 million were housewives, 4.3 million were students and 4.3 million were young/old or incapable of work. The latter group comprised 14.7 million or 22.3 per cent of the total population.

TABLE A NUMBER AND PERCENTAGE OF POPULATION BY LABOR FORCE STATUS, AREA AND SEX

LABOR FORCE STATUS	Whole kingdom			Municipal areas			Non - municipal areas		
	Total	Male	Female	Total	Male	Female	Total	Male	Female
	Number ('000)								
Total	65,800.1	32,286.0	33,514.1	20,051.8	9,584.0	10,467.8	45,748.2	22,702.0	23,046.3
Total labor force	37,611.6	20,247.3	17,364.4	11,392.7	5,943.8	5,448.9	26,218.9	14,303.5	11,915.4
1.Current labor force	37,564.2	20,234.8	17,329.4	11,387.5	5,941.2	5,446.3	26,176.7	14,293.6	11,883.1
1.1 Employed	37,122.0	19,976.7	17,145.3	11,232.8	5,845.9	5,386.9	25,889.1	14,130.8	11,758.4
1) At work	36,855.0	19,837.0	17,018.1	11,169.4	5,810.0	5,359.5	25,685.6	14,027.0	11,658.6
2) With job but not at work	267.0	139.7	127.3	63.4	35.9	27.5	203.5	103.8	99.8
1.2 Unemployed	442.2	258.1	184.1	154.7	95.3	59.4	287.6	162.9	124.7
1) Looking for a job	87.7	50.9	36.8	37.8	23.3	14.5	50.0	27.6	22.3
2) Not looking /Available for work	354.5	207.2	147.3	116.9	72.0	44.9	237.6	135.3	102.3
2.Seasonally inactive labor force	47.4	12.5	35.0	5.2	2.6	2.6	42.2	9.9	32.4
Not in labor force > 15 years of age	13,507.1	4,542.5	8,964.7	4,608.7	1,595.7	3,013.0	8,898.4	2,946.8	5,951.7
1. Household work	4,211.9	146.8	4,065.1	1,442.3	60.1	1,382.2	2,769.6	86.7	2,682.9
2. Studies	4,306.7	2,090.7	2,216.0	1,529.1	733.7	795.4	2,777.6	1,357.0	1,420.6
3. Too young/old or incapable to work	4,264.5	1,849.0	2,415.5	1,312.9	580.9	732.0	2,951.6	1,268.1	1,683.5
4. Others	724.1	456.0	268.0	324.4	221.0	103.4	399.6	235.0	164.6
Persons under 15 years of age	14,681.3	7,496.3	7,185.0	4,050.5	2,044.6	2,005.9	10,630.9	5,451.8	5,179.1
	Percentage								
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total labor force	57.2	62.7	51.8	56.8	62.0	52.1	57.3	63.0	51.7
1.Current labor force	57.1	62.7	51.7	56.8	62.0	52.0	57.2	63.0	51.6
1.1 Employed	56.4	61.9	51.2	56.0	61.0	51.5	56.6	62.2	51.0
1) At work	56.0	61.4	50.8	55.7	60.6	51.2	56.2	61.8	50.6
2) With job but not at work	0.4	0.4	0.4	0.3	0.4	0.3	0.4	0.5	0.4
1.2 Unemployed	0.7	0.8	0.6	0.8	1.0	0.6	0.6	0.7	0.5
1) Looking for a job	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1
2) Not looking /Available for work	0.5	0.6	0.4	0.6	0.8	0.4	0.5	0.6	0.4
2.Seasonally inactive labor force	0.1	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.1
Not in labor force > 15 years of age	20.5	14.1	26.8	23.0	16.7	28.8	19.5	13.0	25.8
1. Household work	6.4	0.5	12.1	7.2	0.6	13.2	6.1	0.4	11.6
2. Studies	6.6	6.5	6.6	7.6	7.7	7.6	6.1	6.0	6.2
3. Too young/old or incapable to work	6.5	5.7	7.2	6.6	6.1	7.0	6.5	5.6	7.3
4. Others	1.1	1.4	0.8	1.6	2.3	1.0	0.9	1.0	0.7
Persons under 15 years of age	22.3	23.2	21.4	20.2	21.3	19.2	23.2	24.0	22.5

TABLE B NUMBER AND PERCENTAGE OF POPULATION BY LABOR FORCE STATUS, SEX, REGION AND AREA

Labor Force Status and Sex	Whole Kingdom			Bangkok	Central Region			Northern Region			Northeastern Region			Southern Region		
	Total	M.A.	Non-M.A.	Total	M.A.	Non-M.A.	Total	M.A.	Non-M.A.	Total	M.A.	Non-M.A.	Total	M.A.	Non-M.A.	
Number ('000)																
Total	65,800.1	20,051.8	45,748.2	6,920.3	16,079.4	5,297.3	10,782.2	11,688.9	2,270.5	9,418.4	22,110.6	3,446.8	18,663.8	9,000.9	2,117.0	6,883.9
In the labor force	37,611.6	11,392.7	26,218.9	4,046.2	9,613.2	3,135.4	6,477.8	6,786.6	1,264.9	5,521.6	12,116.5	1,816.6	10,299.9	5,049.3	1,129.7	3,919.6
Not in the labor force over 15 years	13,507.1	4,608.7	8,898.4	1,693.5	3,269.2	1,151.3	2,117.9	2,431.2	534.9	1,896.3	4,475.2	776.9	3,698.3	1,638.1	452.1	1,186.0
Not in the labor force under 15 years	14,681.3	4,050.5	10,630.9	1,180.6	3,197.1	1,010.7	2,186.5	2,471.2	470.7	2,000.5	5,518.9	853.3	4,665.6	2,313.5	535.2	1,778.3
Male	32,286.0	9,584.0	22,702.0	3,256.8	7,858.2	2,534.9	5,323.3	5,743.3	1,078.7	4,664.6	10,981.4	1,684.8	9,296.6	4,446.3	1,028.8	3,417.6
In the labor force	20,247.3	5,943.8	14,303.5	2,076.6	5,143.1	1,639.9	3,503.2	3,616.2	643.3	2,972.9	6,658.2	980.1	5,678.1	2,753.2	603.9	2,149.3
Not in the labor force over 15 years	4,542.5	1,595.7	2,946.8	571.3	1,082.3	389.2	693.1	873.3	203.9	669.4	1,502.4	275.6	1,226.7	513.2	155.7	357.5
Not in the labor force under 15 years	7,496.3	2,044.6	5,451.8	608.9	1,632.8	505.8	1,127.0	1,253.8	231.6	1,022.2	2,820.9	429.1	2,391.8	1,179.9	269.2	910.8
Female	33,514.1	10,467.8	23,046.3	3,663.5	8,221.3	2,762.4	5,458.9	5,945.6	1,191.8	4,753.9	11,129.2	1,762.0	9,367.1	4,554.6	1,088.2	3,466.3
In the labor force	17,364.4	5,448.9	11,915.4	1,969.5	4,470.1	1,495.5	2,974.6	3,170.4	621.7	2,548.7	5,458.3	836.5	4,621.8	2,296.0	525.8	1,770.3
Not in the labor force over 15 years	8,964.7	3,013.0	5,951.7	1,122.2	2,186.8	762.0	1,424.8	1,557.9	331.0	1,226.9	2,972.8	501.3	2,471.5	1,124.9	296.4	828.5
Not in the labor force under 15 years	7,185.0	2,005.9	5,179.1	571.7	1,564.3	504.8	1,059.5	1,217.4	239.1	978.3	2,698.0	424.2	2,273.8	1,133.6	266.0	867.6
Percentage																
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
In the labor force	57.2	56.8	57.3	58.5	59.8	59.2	60.1	58.1	55.7	58.6	54.8	52.7	55.2	56.1	53.4	56.9
Not in the labor force over 15 years	20.5	23.0	19.5	24.5	20.3	21.7	19.6	20.8	23.6	20.1	20.2	22.5	19.8	18.2	21.4	17.2
Not in the labor force under 15 years	24.0	20.2	23.2	17.1	19.9	19.1	20.3	21.1	20.7	21.2	25.0	24.8	25.0	30.1	25.3	25.8
Male	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
In the labor force	62.7	62.0	63.0	63.8	65.5	64.7	65.8	63.0	59.6	63.7	60.6	58.2	61.1	61.9	58.7	62.9
Not in the labor force over 15 years	14.1	16.7	13.0	17.5	13.8	15.4	13.0	15.2	18.9	14.4	13.7	16.4	13.2	11.5	15.1	10.5
Not in the labor force under 15 years	23.2	21.3	24.0	18.7	20.8	20.0	21.2	21.8	21.5	21.9	25.7	25.5	25.7	26.5	26.2	26.7
Female	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
In the labor force	51.8	52.1	51.7	53.8	54.4	54.1	54.5	53.3	52.2	53.6	49.1	47.5	49.3	50.4	48.3	51.1
Not in the labor force over 15 years	26.8	28.8	25.8	30.6	26.6	27.6	26.1	26.2	27.8	25.8	26.7	28.5	26.4	24.7	27.2	23.9
Not in the labor force under 15 years	21.4	19.2	22.5	15.6	19.0	18.3	19.4	20.5	20.1	20.6	24.2	24.1	24.3	24.9	24.5	25.0

2. Labor force participation

Table C shows the labor force participation rates which was defined as the percentage of the population in the total labor force to the population 15 years of age and over was 73.6 per cent, and it shows that persons in non-municipal areas had higher participation rates than the municipal areas (74.7 per cent compared with 71.2 per cent).

TABLE C LABOR FORCE PARTICIPATION RATES BY AGE GROUP, SEX, REGION AND AREA

(Percentage)

Age group (Years) and sex	Whole kingdom			Bangkok	Central region			Northern region			Northeastern region			Southern region		
	Total	M.A.	Non-M.A.	Total	M.A.	Non-M.A.	Total	M.A.	Non-M.A.	Total	M.A.	Non-M.A.	Total	M.A.	Non-M.A.	
Total	73.6	71.2	74.7	70.5	74.6	73.1	75.4	73.6	70.3	74.4	73.0	70.0	73.6	75.5	71.4	76.8
15-19	28.5	23.0	30.6	22.3	30.8	26.7	32.8	25.3	18.0	27.1	26.9	20.3	28.1	35.7	26.4	38.6
20-24	70.3	63.4	73.4	56.3	75.3	71.9	77.1	71.8	60.0	74.6	68.2	60.9	69.6	74.3	68.6	76.0
25-29	87.5	88.0	87.2	85.4	90.8	90.9	90.8	88.6	88.6	88.6	84.9	88.7	84.2	86.8	88.9	86.2
30-34	90.4	90.6	90.2	90.4	91.3	90.6	91.7	90.2	91.0	90.0	89.4	90.4	89.2	90.9	91.7	90.6
35-39	91.5	89.6	92.5	89.9	90.3	89.3	90.8	93.1	90.4	93.7	92.4	90.3	92.7	91.8	87.2	93.2
40-49	90.2	87.5	91.4	84.8	89.1	88.1	89.6	91.8	91.4	91.9	91.3	89.1	91.7	91.8	88.9	92.7
50-59	82.5	77.5	84.6	73.2	79.5	76.5	80.8	84.4	82.6	84.8	85.3	81.5	86.0	85.6	82.3	86.6
60 and over	39.4	30.0	43.2	22.6	35.3	28.5	38.3	41.5	35.5	43.0	42.9	37.3	43.9	46.5	36.0	49.7
Male	81.7	78.8	82.9	78.4	82.6	80.8	83.5	80.6	75.9	81.6	81.6	78.1	82.2	84.3	79.5	85.7
15-19	34.7	27.6	37.4	26.3	37.6	30.6	40.8	29.8	20.9	31.9	32.5	25.4	33.8	45.8	34.0	49.4
20-24	78.7	69.3	82.7	62.4	80.9	77.3	82.7	78.1	63.7	81.4	78.7	68.2	80.7	85.6	74.6	89.0
25-29	94.4	92.3	95.5	87.8	96.9	95.7	97.5	93.9	93.0	94.1	94.4	94.6	94.4	96.0	95.4	96.2
30-34	96.6	96.9	96.4	96.7	97.2	97.2	97.1	97.1	95.3	97.5	94.8	96.6	94.5	98.7	98.3	98.8
35-39	97.1	97.1	97.1	97.2	97.2	97.5	97.0	96.5	96.5	96.5	97.1	97.1	97.1	97.8	96.1	98.3
40-49	97.1	96.0	97.6	95.1	96.8	96.7	96.9	96.6	95.9	96.7	98.1	95.9	98.5	97.6	97.6	97.6
50-59	93.1	89.6	94.6	87.3	91.0	88.7	92.0	93.6	91.5	94.1	95.7	92.4	96.2	94.1	92.9	94.5
60 and over	51.6	38.8	56.5	30.2	45.9	36.1	50.1	54.2	43.8	56.7	56.9	49.9	58.1	58.1	44.3	62.2
Female	66.0	64.4	66.7	63.7	67.2	66.2	67.6	67.1	65.3	67.5	64.7	62.5	65.2	67.1	64.0	68.1
15-19	22.0	18.6	23.4	18.4	23.7	22.8	24.2	20.7	15.2	22.0	21.0	15.2	22.1	25.2	18.6	27.2
20-24	61.7	57.6	63.6	50.7	69.4	66.4	71.1	65.3	56.6	67.5	56.9	53.5	57.5	62.6	62.8	62.5
25-29	80.4	84.1	78.3	83.4	84.6	86.2	83.7	83.1	84.3	82.8	74.6	82.5	73.1	77.4	82.4	75.8
30-34	84.3	84.9	84.0	84.8	85.5	84.4	86.1	83.3	87.0	82.4	83.9	84.5	83.8	83.2	85.5	82.5
35-39	86.4	83.0	88.1	83.6	84.0	82.0	85.0	89.9	85.1	91.1	87.9	84.0	88.6	86.1	79.1	88.3
40-49	83.8	80.2	85.5	76.0	82.1	80.6	82.9	87.4	87.5	87.4	84.7	82.7	85.1	86.3	81.0	88.0
50-59	72.8	67.0	75.4	61.3	69.2	66.0	70.8	75.7	74.7	75.9	75.7	71.6	76.5	77.8	72.9	79.3
60 and over	29.6	23.2	32.3	17.1	27.1	22.7	29.0	30.6	28.8	31.0	31.7	27.5	32.4	37.1	29.4	39.4

The participation rates were relatively high in almost every age-group, even in the age-group 15-19 at which the rates in non-municipal areas were higher than municipal areas. This was partly because in the agricultural households, the members who were students could help their families during the busy season. Whereas, this aged group in the municipal areas were mostly students.

Considering sex differentials, it is found that males participated in the labor force more than females (81.7 and 66.0 per cent respectively) . It was true in both areas and every region.

Table D shows that the married participated the highest in the labor force (82.5 per cent) and males participation rates were the highest among the married about 91.0 per cent and females, the highest rate was among the divorced about 79.4 per cent. The results also show that in municipal area, the divorced participated the highest in the labor force, about 80.4 per cent, 88.2 per cent for married males and 79.0 per cent for divorced females. In non-municipal area, the married participated the highest in the labor force about 83.8 per cent, 92.2 per cent for married males and 79.7 per cent for divorced females (excluded the unknown status who ever married were in the labor force only 0.01 per cent of the total labor force).

TABLE D LABOR FORCE PARTICIPATION RATES BY MARITAL STATUS, SEX AND AREA

(Percentage)

Area and sex	Total	Marital status					
		Single	Married	Widowed	Divorced	Separated	Married do not know status
Total	73.6	59.2	82.5	39.3	82.2	80.2	86.0
Male	81.7	64.4	91.0	42.8	87.9	85.7	92.3
Female	66.0	52.4	74.4	38.5	79.4	76.9	83.5
Municipal areas	71.2	62.3	79.3	37.8	80.0	80.4	83.7
Male	78.8	64.5	88.2	39.8	82.5	85.7	92.3
Female	64.4	60.0	70.5	37.4	79.0	77.7	79.4
Non-municipal areas	74.7	57.2	83.8	39.9	83.6	80.2	100.0
Male	82.9	64.3	92.2	43.9	90.4	85.8	-
Female	66.7	46.2	75.9	38.9	79.7	76.3	100.0

Table E illustrates the participation rates by educational attainment, area and sex. It shows that levels of education at which people seem to get more interested in working than at other levels were the higher level, elementary and less than elementary level. Those who completed lower secondary level and upper secondary level especially teacher training seemed to be more interested in continuing education rather than taking up employment. The participation rates in non-municipal areas are mostly higher than in municipal areas, except these of level of education; upper secondary level especially vocational.

TABLE E LABOR FORCE PARTICIPATION RATES BY LEVEL OF EDUCATIONAL ATTAINMENT, AREA AND SEX

(Percentage)

Area and sex	Level of educational attainment											
	Total	None	Less than elementary	Elementary	Lower secondary	Upper secondary level			Higher level			Others ^{1/} and Unknown
						General/academic	Vocational	Teacher training	Academic	Higher technical education	Teacher training	
Total	73.6	50.6	73.3	82.6	61.4	72.9	69.7	50.0	89.0	86.6	87.1	86.3
Male	81.7	64.8	83.0	89.0	70.0	81.8	75.0	51.6	90.9	91.9	88.9	97.2
Female	66.0	43.7	65.4	75.7	51.7	63.5	62.3	48.2	87.3	80.9	85.9	74.4
M.A.	71.2	43.3	65.8	79.3	61.5	64.2	72.0	48.0	88.2	85.8	79.9	89.9
Male	78.8	55.9	77.3	86.7	69.1	72.3	77.8	52.8	90.2	90.8	81.1	97.7
Female	64.4	37.9	57.9	71.7	53.0	56.4	64.2	43.0	86.5	80.9	79.3	82.3
Non-M.A.	74.7	52.7	75.4	83.6	61.3	78.8	67.5	51.8	90.8	87.4	92.6	84.9
Male	82.9	67.1	84.5	89.7	70.4	87.8	72.4	50.5	92.6	92.9	93.3	97.0
Female	66.7	45.4	67.8	76.9	51.0	68.7	60.5	53.5	89.3	80.8	92.0	71.2

^{1/} Including short course vocational

3. Employed labor force

3.1 Work status : (Table F) The highest proportion of the total employed person was employees or about 43.5 per cent and of these 4 in 5 were employed in private sector, followed by own account workers (32.0 per cent). The unpaid family workers and employer which accounted for 21.4 and 3.0 per cent of the total employed. While the percentage of members of producers' cooperatives was very less about 0.1 per cent of the total employed persons.

The majority of employed persons in both areas were employees, followed by own account workers. In municipal area, about 59.3 per cent were employees, among these, mostly working in private sector (46.1 per cent) while only 13.2 per cent were government employees, follow by own account workers (23.8 per cent). In non-municipal areas, about 36.7 per cent were employees, among these, 29.9 per cent working in private sector, followed by own accent workers (35.5 per cent). For the proportion of unpaid family workers in municipal areas was rather low compared with the non-municipal areas (12.2 per cent and 25.3 per cent respectively).

When work status was considered by regions, it was found that the percentages of those employed in all regions include Bangkok were largely worked as employees, follower by own account workers except the Northeast region, large percentages of employed persons were worked as own account workers about 40.8 per cent followed by unpaid family worker and (29.5 percent and 27.9 percent respectively .

3.2 Industry : (Table G) About 41.7 per cent of the total employed persons worked in agricultural sector and about 58.3 per cent in non-agricultural sector. The highest proportions of the employed persons was in the manufacturing and wholesale and retail trade which show nearly the same rate, 15.1 per cent and 14.9 per cent respectively. The next was hotel and restaurants 6.6 per cent, construction 5.2 per cent, public administration 3.5 per cent , transport storage and education 2.9 per cent and transport,storage and commmunication 2.8 per cent. The rest shared in the other industries.

Most employed persons in municipal area worked in non-agriculture sector (90.9 per cent), the principal activities were wholesale and retail trade (23.5 per cent), followed by manufacturing (19.5 per cent), hotel and restaurants (11.9 per cent), While most of those in the non-municipal areas worked in agricultural sector (55.9 per cent).

Considering regional differentials, it was found that the majority of employed persons in the region were non-agricultural sector, especially the Central Region 75.3 per cent, the next was the South region 52.7 per cent, the highest employed person worked in agricultural sector for Northeast 51.0 percent the North 61.3 per cent. For Bangkok the majority of employed person were considerably high in non-agricultural sector (99.0 per cent).

3.3 Occupation : From the distribution of employed persons by occupation (table H), skilled agricultural and fishery workers constituted the bulk of the employed labor force (38.3 per cent). The occupation group with the next largest number of workers was service workers and shop and market sales workers which accounted for 14.0 per cent, elementary occupations workers about 10.7 per cent, craftsmen and related trades workers about 10.4 per cent, and the rest were other occupations.

Again the pattern of occupation in the municipal areas was quite different from that of the non-municipal areas and the whole kingdom. In the municipal areas, about 23.7 per cent of the total employed were service workers and shop and market sales workers, 12.0 per cent were craft and related trades workers, 11.8 percent elementary occupation and 11.4 percent plant and machine operators and assemblers. The occupational patterns in non-municipal areas were similar to the whole kingdom, which the largest number of workers was skilled agricultural and fishery workers (51.4 per cent), followed by elementary occupations workers about 10.2 per cent and craftsmen and related trades workers about 9.8 per cent.

In every region, the occupational patterns were not quite different. That was the principal occupation was agricultural occupation especially in the Northeast, comprised 59.1 per cent, the next was the South 44.4 per cent. The next was the North 44.2 per cent and central 20.5 percent. But in the Bangkok, service workers and shop and market sales workers constituted about 21.9 per cent of the total employed. Around 12.4 per cent were plant and machine operators and same elementary occupation workers, 12.3 per cent were craftsmen and related trades workers, 11.7 per cent were legislator senior officials and managers and 11.4 per cent were technicians, and associate professions and the rest were other occupations.

TABLE F NUMBER AND PERCENTAGE OF EMPLOYED PERSONS BY WORK STATUS, REGION AND AREA

WORK STATUS	Whole Kingdom			Bangkok	Central Region			Northern Region			Northeastern Region			Southern Region		
	Total	M.A.	Non-	Total	M.A.	Non-	Total	M.A.	Non-	Total	M.A.	Non-	Total	M.A.	Non-	
			M.A.													M.A.
Number ('000)																
Total	37,122.0	11,232.8	25,889.1	3,993.2	9,478.1	3,092.9	6,385.1	6,691.7	1,243.6	5,448.1	11,965.7	1,788.5	10,177.2	4,993.4	1,114.6	3,878.7
Employers	1,101.4	512.7	588.7	229.9	275.6	100.9	174.7	214.4	53.9	160.4	170.2	59.0	111.2	211.4	69.0	142.4
Government employees	3,245.8	1,485.7	1,760.2	396.6	786.4	344.4	442.0	605.0	216.6	388.3	1,039.0	369.9	669.1	418.8	158.1	260.7
Private employees	12,929.1	5,177.4	7,751.7	2,321.1	4,659.9	1,658.4	3,001.5	1,883.6	374.9	1,508.6	2,300.8	423.7	1,877.1	1,763.8	399.3	1,364.5
Own - account workers	11,866.5	2,673.6	9,192.8	738.8	2,320.0	656.6	1,663.4	2,334.2	384.2	1,950.0	4,886.1	571.7	4,314.4	1,587.3	322.2	1,265.1
Unpaid family workers	7,927.6	1,374.2	6,553.5	306.1	1,433.6	332.5	1,101.1	1,645.6	212.3	1,433.3	3,533.6	358.9	3,174.7	1,008.8	164.3	844.4
Members of Producers Cooperatives	51.6	9.3	42.3	0.7	2.6	0.1	2.5	8.9	1.4	7.5	36.0	5.4	30.7	3.3	1.7	1.7
Percentage																
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Employers	3.0	4.6	2.3	5.8	2.9	3.3	2.7	3.2	4.3	2.9	1.4	3.3	1.1	4.2	6.2	3.7
Government employees	8.7	13.2	6.8	9.9	8.3	11.1	6.9	9.0	17.4	7.1	8.7	20.7	6.6	8.4	14.2	6.7
Private employees	34.8	46.1	29.9	58.1	49.2	53.6	47.0	28.2	30.1	27.7	19.2	23.7	18.4	35.3	35.8	35.2
Own - account workers	32.0	23.8	35.5	18.5	24.5	21.2	26.1	34.9	30.9	35.8	40.8	32.0	42.4	31.8	28.9	32.6
Unpaid family workers	21.4	12.2	25.3	7.7	15.1	10.8	17.2	24.6	17.0	26.3	29.5	20.1	31.2	20.2	14.7	21.8
Members of Producers Cooperatives	0.1	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.3	0.3	0.3	0.1	0.2	0.0

3.4 Education : The distribution of employed persons by level of educational attainment (Table I) illustrated that of the employed people, vast majority had low level of education, 58.2 per cent only held some elementary level or none at all, while 27.1 per cent in secondary level, 14.3 per cent in higher level and the rest were others.

Among people residing in municipal areas who were employed and completed more than elementary level (secondary and higher level) was higher than those live in non-municipal areas (59.1 per cent and 33.7 per cent respectively). In municipal areas, 40.1 per cent of employed person had some elementary level or none at all, 31.8 per cent had secondary level and 27.3 per cent had higher level, whereas the corresponding educational level for employed persons in non-municipal areas were 66.2, 25.1 and 8.6 per cent respectively.

On the region level, the majority of employed persons in every region had some elementary level of education or none at all, especially the highest percentage in the Northeast (68.0 per cent). The North shows the second highest in such level with 66.1 per cent, followed by the South with 56.8 per cent and the Central with 50.9 per cent. With regards to the secondary level of those employed persons, the Central shows the highest percentage with 32.0 per cent; followed by the South, the Northeast and the North with 29.0, 23.7 and 22.8 respectively. It is also noted that at higher level of education, the Central also shows the highest percentage with 16.3 per cent, followed by the South with 13.7 per cent, the North with 10.9 per cent and the Northeast with 8.4 per cent.

For Bangkok, most of employed person completed more than elementary level (64.4 per cent), especially the high rate in the higher level (33.3 per cent).

TABLE I NUMBER AND PERCENTAGE OF EMPLOYED PERSON BY LEVEL OF EDUCATIONAL ATTAINMENT, REGION AND AREA

LEVEL OF EDUCATIONAL ATTAINMENT	Whole Kingdom			Bangkok	Central Region			Northern Region			Northeastern Region			Southern Region		
	Total	M.A.	Non- M.A.		Total	M.A.	Non- M.A.	Total	M.A.	Non- M.A.	Total	M.A.	Non- M.A.	Total	M.A.	Non- M.A.
Number ('000)																
Total	37,122.0	11,232.8	25,889.1	3,993.2	9,478.1	3,092.9	6,385.1	6,691.7	1,243.6	5,448.1	11,965.7	1,788.5	10,177.2	4,993.4	1,114.6	3,878.7
None	1,266.2	242.6	1,023.6	69.7	265.7	58.7	207.0	512.5	50.0	462.5	190.7	25.1	165.6	227.6	39.1	188.4
Less than Elementary	11,838.3	2,373.6	9,464.7	655.8	2,629.1	640.6	1,988.5	2,610.4	378.9	2,231.5	4,525.8	477.4	4,048.3	1,417.2	220.9	1,196.3
Elementary	8,504.4	1,890.8	6,613.6	660.9	1,937.0	529.6	1,407.4	1,298.9	170.8	1,128.0	3,417.1	331.0	3,086.1	1,190.6	198.5	992.1
Lower Secondary	5,451.8	1,745.1	3,706.7	605.8	1,600.1	547.1	1,053.0	806.1	164.5	641.5	1,649.3	244.1	1,405.2	790.5	183.5	607.0
Upper Secondary Level	4,617.4	1,826.4	2,791.0	633.0	1,431.7	562.2	869.5	714.9	176.3	538.6	1,178.4	271.2	907.2	659.4	183.7	475.7
General/Academic	3,372.2	1,197.1	2,175.1	393.8	992.1	375.8	616.3	540.5	115.1	425.4	970.7	192.1	778.7	475.0	120.3	354.7
Vocational	1,232.8	623.6	609.3	239.0	434.5	184.6	249.9	171.2	59.7	111.5	205.2	77.5	127.7	183.0	62.9	120.1
Teacher Training	12.4	5.7	6.7	0.2	5.1	1.8	3.2	3.1	1.4	1.6	2.6	1.7	0.8	1.4	0.5	1.0
Higher Level	5,288.2	3,062.5	2,225.7	1,327.9	1,543.3	721.6	821.7	731.9	295.0	436.9	1,002.1	439.1	563.0	683.1	278.9	404.1
Academic	2,833.7	1,942.5	891.2	1,025.0	819.2	419.3	400.0	337.8	159.0	178.7	367.5	206.1	161.4	284.2	133.1	151.1
Higher Technical Education	1,671.2	807.8	863.4	254.5	545.5	228.7	316.9	236.9	86.5	150.3	358.0	137.2	220.8	276.3	100.9	175.4
Teacher Training	783.3	312.1	471.2	48.4	178.6	73.7	104.9	157.3	49.4	107.9	276.5	95.7	180.8	122.6	44.9	77.6
Others ^{1/}	37.2	10.8	26.4	-	10.3	3.3	7.0	15.0	7.2	7.7	1.7	-	1.7	10.3	0.3	10.0
Unknown	118.5	81.1	37.4	40.2	60.9	29.9	30.9	2.2	0.6	1.5	0.6	0.6	-	14.7	9.7	5.0
Percentage																
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
None	3.4	2.2	4.0	1.7	2.8	1.9	3.2	7.7	4.0	8.5	1.6	1.4	1.6	4.6	3.5	4.9
Less than Elementary	31.9	21.1	36.6	16.4	27.7	20.7	31.1	39.0	30.4	41.0	37.8	26.7	39.8	28.4	19.8	30.8
Elementary	22.9	16.8	25.6	16.6	20.4	17.1	22.0	19.4	13.7	20.7	28.6	18.5	30.3	23.8	17.8	25.6
Lower Secondary	14.7	15.5	14.3	15.2	16.9	17.7	16.5	12.1	13.2	11.8	13.8	13.7	13.8	15.8	16.5	15.7
Upper Secondary Level	12.4	16.3	10.8	15.9	15.1	18.2	13.6	10.7	14.1	9.9	9.9	15.2	8.9	13.2	16.5	12.3
General/Academic	9.1	10.7	8.4	9.9	10.5	12.2	9.7	8.1	9.2	7.8	8.1	10.7	7.7	9.5	10.8	9.1
Vocational	3.3	5.6	2.4	6.0	4.6	6.0	3.9	2.6	4.8	2.1	1.7	4.3	1.3	3.7	5.6	3.1
Teacher Training	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0
Higher Level	14.3	27.3	8.6	33.3	16.3	23.3	12.9	10.9	23.7	8.0	8.4	24.6	5.5	13.7	25.0	10.4
Academic	7.6	17.3	3.4	25.7	8.6	13.6	6.3	5.1	12.7	3.3	3.1	11.5	1.6	5.7	11.9	3.9
Higher Technical Education	4.5	7.2	3.3	6.4	5.8	7.4	5.0	3.5	6.9	2.8	3.0	7.7	2.2	5.5	9.1	4.5
Teacher Training	2.1	2.8	1.8	1.2	1.9	2.4	1.6	2.4	3.9	2.0	2.3	5.4	1.8	2.5	4.0	2.0
Others ^{1/}	0.1	0.1	0.1	-	0.1	0.1	0.1	0.2	0.5	0.1	0.0	-	0.0	0.2	0.0	0.3
Unknown	0.3	0.7	0.1	1.0	0.6	1.0	0.5	0.0	0.0	0.0	0.0	0.0	-	0.3	0.9	0.1

^{1/} Including short course vocational

4. Unemployment

The unemployment rate is the ratio of the number of unemployed persons to the labor force expressed as a percentage. It depends therefore on the definition of unemployment as well as of the labor force adopted in the survey. Beginning from the survey in August 1982, unemployment has been measured, for a better understanding of the situation, in terms of persons available for works, including not only those actively looking for work but also those not looking for but available for works. As well, the classification of the labor force status or activity has been revised to include, besides the current labor force, the seasonally inactive labor force, to constitute what is described as the total labor force. Different unemployment rates can be computed for purposed of comparative analysis, using different measures of unemployment and labor force as given in Table J.

TABLE J DIFFERENT RATES OF UNEMPLOYMENT, QUARTER 3: JULY-SEPTEMBER 2007

(Percentage)		
Labor force	Actively looking for work	Total available for work
Current labor force	0.2	1.2
Total labor force	0.2	1.2

In general, during the agricultural season, the unemployment rate calculated from the total labor force is very close to that obtained from the current labor force but in the slack season the rates are quite different.

At this quarter of the survey, the rate of total unemployment or percentage of the total labor force who did not work but were available for work (total available for work) was about 1.2 per cent while the open unemployment which measured from those who were actively looking for work was 0.2 per cent.

Generally, any measurement of unemployment shows that the number of unemployed persons was among the off-season of agriculture are more than the numbers among agriculture season of the same year.

Table K reveals that the rate of unemployment was rather high among the young population aged 15-29 years or those who just entered in the labor force. Of these the population aged 15-24 years (include males and females) had very high rates of unemployment, especially the population age 15-19 years had the highest rates (4.9 per cent). This reflects an increasingly widespread problem of unemployment among the young population with middle and high level of educational attainment since the young with secondary level, higher level or equivalent educational levels begin to enter the labor market at around this age-group. Considered unemployment rate

TABLE K UNEMPLOYMENT RATES BY AGE GROUP, SEX, REGION AND AREA

(Percentage)

Sex and age group (years)	Whole kingdom			Bangkok	Central region			Northern region			Northeastern region			Southern region		
	Total	M.A.	Non-M.A.		Total	M.A.	Non-M.A.	Total	M.A.	Non-M.A.	Total	M.A.	Non-M.A.	Total	M.A.	Non-M.A.
Total	1.2	1.4	1.1	1.3	1.4	1.3	1.4	1.3	1.6	1.2	1.0	1.4	0.9	1.1	1.3	1.0
15-19	4.9	6.8	4.4	6.7	4.3	6.9	3.3	5.7	9.5	5.1	4.4	6.9	4.1	5.4	5.1	5.5
20-24	4.3	5.9	3.7	6.5	5.0	5.1	4.9	4.7	7.2	4.2	3.7	6.5	3.2	2.8	4.8	2.2
25-29	1.5	1.7	1.3	1.5	1.6	1.8	1.6	1.4	2.0	1.2	1.2	2.2	1.0	1.6	1.4	1.7
30-34	0.8	0.8	0.9	0.9	1.0	0.6	1.3	0.7	1.2	0.5	0.8	0.6	0.9	0.6	0.6	0.6
35-39	0.6	0.5	0.6	0.5	0.8	0.6	0.9	0.6	0.9	0.6	0.5	0.3	0.5	0.3	0.5	0.3
40-49	0.5	0.5	0.5	0.4	0.5	0.4	0.5	0.7	0.6	0.7	0.4	0.6	0.4	0.3	0.4	0.2
50-59	0.4	0.4	0.4	0.6	0.4	0.2	0.5	0.8	0.7	0.9	0.1	0.3	0.1	0.2	0.5	0.2
60 and over	0.2	0.3	0.2	0.3	0.4	0.1	0.5	0.3	0.6	0.2	0.1	0.1	0.1	0.2	0.7	0.1
Male	1.3	1.6	1.1	1.7	1.4	1.4	1.5	1.3	1.8	1.2	1.1	1.8	1.0	1.1	1.4	0.9
15-19	4.3	7.3	3.5	8.7	3.7	5.9	3.0	5.1	7.6	4.7	3.5	7.9	3.0	4.4	6.8	3.9
20-24	4.7	7.0	3.9	9.6	4.7	5.0	4.5	4.8	8.9	4.0	4.3	7.3	3.9	3.2	4.2	2.9
25-29	1.3	1.8	1.1	1.3	1.6	1.8	1.5	1.6	2.6	1.4	1.1	2.8	0.8	0.9	1.4	0.7
30-34	1.1	1.0	1.2	1.1	1.2	0.6	1.5	0.8	1.4	0.7	1.3	0.9	1.4	0.7	1.1	0.6
35-39	0.6	0.4	0.7	0.2	0.9	0.7	1.1	0.5	0.4	0.5	0.7	0.4	0.7	0.4	0.5	0.4
40-49	0.5	0.6	0.5	0.7	0.5	0.5	0.6	0.6	0.7	0.6	0.5	0.8	0.4	0.3	0.4	0.3
50-59	0.5	0.6	0.4	0.9	0.6	0.3	0.7	0.8	0.8	0.8	0.2	0.4	0.1	0.1	0.2	-
60 and over	0.1	0.4	0.1	0.5	0.3	0.1	0.3	0.1	0.8	-	-	-	-	0.2	0.6	0.1
Female	1.1	1.1	1.1	0.9	1.3	1.3	1.4	1.3	1.4	1.3	0.8	1.0	0.8	1.1	1.2	1.0
15-19	6.0	6.1	6.0	3.8	5.4	8.3	4.0	6.6	12.0	5.7	5.9	5.4	6.0	7.3	1.9	8.5
20-24	3.7	4.6	3.4	2.9	5.3	5.1	5.5	4.6	5.4	4.4	2.7	5.4	2.2	2.2	5.5	1.1
25-29	1.6	1.7	1.6	1.7	1.7	1.7	1.6	1.1	1.4	1.0	1.3	1.6	1.2	2.5	1.4	2.9
30-34	0.5	0.5	0.5	0.6	0.8	0.5	1.0	0.5	1.0	0.3	0.3	0.4	0.3	0.4	0.1	0.5
35-39	0.5	0.7	0.4	0.9	0.6	0.5	0.6	0.7	1.5	0.6	0.2	0.1	0.3	0.2	0.4	0.1
40-49	0.4	0.3	0.5	0.1	0.4	0.3	0.5	0.7	0.4	0.8	0.4	0.4	0.4	0.2	0.4	0.2
50-59	0.3	0.3	0.4	0.1	0.2	0.1	0.2	0.9	0.5	1.0	0.1	0.2	0.1	0.4	0.8	0.3
60 and over	0.4	0.2	0.4	-	0.6	-	0.8	0.6	0.5	0.6	0.3	0.1	0.4	0.1	0.7	-

by sex, it was found that, unemployment rate of male was higher than female (1.3 per cent and 1.1 per cent respectively). The unemployment rate in municipal and higher than non-municipal area (1.4 per cent and 1.1 percent respectively). If the regions were taken into account, the rate of unemployment in the Central showed the highest rate (1.4 per cent). Followed by the Northern (1.3 per cent) and the Bangkok, the next was Southern (1.1 per cent) and the Northeast showed the lowest (1.0 per cent).

Considering on levels of educational attainment of the unemployed person (Table L), it was found that the unemployment rate of persons attained lower secondary level, upper secondary level (general/academic) and higher level (academic) were rather high.

However, there is a remark that the unemployment rate among those with less than elementary and elementary level of education was lower than others because it was during the busy season. Part of agricultural labor of which the majority held less than elementary and elementary level of education. The rate would be rising if the survey are undertaken in the slack season.

TABLE L UNEMPLOYMENT RATES BY LEVEL OF EDUCATIONAL ATTAINMENT, SEX AND AREA

(Percentage)

Area and sex	Level of educational attainment											
	Total	None	Less than elementary	Elementary	Lower secondary	Upper secondary level			Higher level		Others and unknown	
						General/academic	Vocational	Teacher training	Academic	Higher technical education	Teacher training	
Total	1.2	0.7	0.5	0.9	1.9	1.4	2.2	-	2.7	2.4	0.7	-
Male	1.3	0.3	0.5	1.1	1.9	1.6	2.2	-	3.1	2.1	0.8	-
Female	1.1	0.9	0.4	0.6	1.8	1.3	2.2	-	2.3	2.8	0.7	-
M.A.	1.4	0.8	0.5	1.3	1.6	1.4	1.7	-	2.2	1.9	0.5	-
Male	1.6	0.8	0.7	1.6	1.6	1.6	1.7	-	2.6	2.3	0.9	-
Female	1.1	0.8	0.3	0.9	1.6	1.1	1.8	-	1.8	1.5	0.3	-
Non-M.A.	1.1	0.6	0.4	0.8	2.0	1.5	2.7	-	3.7	2.8	0.9	-
Male	1.1	0.2	0.4	1.0	2.0	1.5	2.7	-	4.0	1.9	0.8	-
Female	1.1	0.9	0.5	0.5	1.9	1.3	2.7	-	3.4	4.1	1.0	-

1/ Including short course vocational

5. Characteristics of the unemployed labor force

Table M illustrates that the unemployed persons were largely males, 58.4 per cent whereas the corresponding percentage for females was 41.6 per cent. The percentage of unemployed male were about 61.6 and 38.4 per cent of the total unemployed in the municipal area and non-municipal area respectively which was higher than the female (56.6 percent and 43.4 percent)

TABLE M NUMBER AND PERCENTAGE OF UNEMPLOYED PERSONS BY LEVEL OF EDUCATIONAL ATTAINMENT, SEX AND AREA

Area and sex	Level of educational attainment											
	Total	None	Less than elementary	Elementary	Lower secondary	Upper secondary level			Higher level		Others and unknown	
						General/academic	Vocational	Teacher training	Academic	Higher technical education		Teacher training
Number ('000)												
Total	442.2	8.5	53.0	76.3	103.1	48.7	28.0	-	77.6	40.9	5.8	-
Male	258.1	1.8	27.2	53.1	63.0	30.5	17.5	-	42.3	19.7	2.6	-
Female	184.1	6.7	25.8	23.1	40.1	18.2	10.5	-	35.3	21.2	3.2	-
Municipal areas	154.7	2.0	10.7	23.9	29.0	16.5	11.0	-	43.6	16.0	1.6	-
Male	95.3	0.8	7.6	16.6	17.2	10.4	6.7	-	24.6	10.1	1.0	-
Female	59.4	1.2	3.1	7.3	11.8	6.1	4.4	-	18.9	5.9	0.6	-
Non-municipal areas	287.6	6.5	42.3	52.3	74.1	32.1	17.0	-	34.0	24.9	4.3	-
Male	162.9	1.1	19.7	36.5	45.8	20.1	10.8	-	17.6	9.6	1.7	-
Female	124.7	5.5	22.7	15.8	28.2	12.0	6.2	-	16.4	15.3	2.6	-
Total	100.0	1.9	12.0	17.3	23.3	11.0	6.3	-	17.5	9.2	1.3	-
Male	100.0	0.7	10.6	20.6	24.4	11.8	6.8	-	16.4	7.6	1.0	-
Female	100.0	3.6	14.0	12.6	21.8	9.9	5.7	-	19.2	11.5	1.8	-
Municipal areas	100.0	1.3	6.9	15.5	18.7	10.7	7.1	-	28.2	10.3	1.0	-
Male	100.0	0.8	8.0	17.4	18.0	10.9	7.0	-	25.9	10.6	1.0	-
Female	100.0	2.0	5.3	12.4	19.9	10.3	7.4	-	31.9	9.9	1.1	-
Non-municipal areas	100.0	2.3	14.7	18.2	25.8	11.2	5.9	-	11.8	8.7	1.5	-
Male	100.0	0.7	12.1	22.4	28.1	12.3	6.6	-	10.8	5.9	1.0	-
Female	100.0	4.4	18.2	12.7	22.7	9.7	5.0	-	13.2	12.3	2.1	-

1/ Including short course vocational

The majority of the unemployed persons (65.0 per cent) were in the non-municipal areas because these areas constituted a larger part of the total labor force. About 63.1 per cent of the total unemployed males were in the non-municipal areas while it was 67.7 per cent for females. However, the percentage of unemployed males and females were lower in busy season than the slack season.

The unemployed persons completed in some elementary education and none constituted the highest proportion (31.2 per cent) of the total unemployed, the secondary level (40.6 per cent) and higher level (28.0 per cent). In the non-municipal areas they accounted higher than the municipal areas for elementary and none (35.2 per cent compared with 23.7 per cent). While in the municipal areas, they accounted higher than non-municipal area for higher level (39.5 per cent compared with 22.0 per cent).

6. Hours worked

Data on hours worked and additional hours available for work have been obtained in respect of all the employed persons. In the case of persons who had job but did not work at all during the survey week, the question on hours worked was interpreted as the zero hours per week. The data on hours worked included hours worked on all occupations, principal as well as others.

The data summarized in Table N show that about 36.0 per cent of the employed persons worked 50 hours or more per week. About 47.3 per cent of employed persons worked 35-49 hours per week. On the other word, about 83.3 per cent of employed person worked 35 hours or more per week and they might be classified as fully employed. About 16.7 per cent, for worked less than 35 hours per week and may be regarded as under-employed. For employed persons who did not work during the survey week (0 hours) but had regular job, which accounted only 0.7 per cent.

TABLE N NUMBER AND PERCENTAGE OF EMPLOYED PERSONS BY HOURS WORKED PER WEEK

Hours work per week	Employed persons		Persons available for additional work	
	Number	Percentage	Number	Percentage
	(in thousands)		(in thousands)	(as compared to employed)
Total	37,122.0	100.0	770.2	2.1
0 hours	267.0	0.7	52.7	19.7
1 - 9 hours	276.4	0.7	55.0	19.9
10 - 19 hours	1,110.6	3.0	149.1	13.4
20 - 29 hours	2,783.5	7.5	221.8	8.0
30 - 34 hours	1,761.8	4.8	77.0	4.4
35 - 39 hours	3,572.2	9.6	61.0	1.7
40 - 49 hours	13,982.7	37.7	114.9	0.8
50 hours and over	13,367.8	36.0	38.8	0.3

The percentage of employed persons who were available for additional work, which is also an indicator for under-employment, accounted for about 2.1 per cent. Of the employed persons who worked less than 35 hours per week, 8.5 per cent desired and were available for additional work. The details of hours worked by occupation, industry and work status are illustrated in the Statistical Tables (Table 8-10).

7. Wages and salaries

Data on wages and salaries have been collected in respect of all employees in accordance with the system applicable to each case and converted into the equivalent monthly wages and salaries. The data have been tabulated by industry, sex and area separately for government and private employees (see Table 15 and 16 in the statistical tables). In this chapter, data on the number of male and female employees by wage level or salary (not including supplementary earnings) and area are presented in Table O.

On the whole, about 40.4 per cent of 16.2 million employees had monthly wage or salary of Baht 2,501-5,500, around 28.8 per cent had monthly wage or salary of Baht 5,501-10,000, about 19.5 per cent had over Baht 10,000 per month and about 10.5 per cent received less than Baht 2,501 per month.

The majority of employees in the municipal areas had higher level of wage or salary than their counterpart in the other area. For instance, only about 32.2 per cent of employees in the municipal areas received monthly wage or salary of below Baht 5,501 whereas the corresponding figure in the non-municipal areas was 64.1 per cent. Around 66.4 per cent of employees in the municipal areas earned more than Baht 5,500 compared with 35.6 per cent in the non-municipal areas. Moreover, about 30.0 per cent of employees in the municipal areas earned more than Baht 10,000 per month while the percentages in the non-municipal areas was only 12.2 per cent.

TABLE O NUMBER AND PERCENTAGE OF EMPLOYEES BY WAGE/SALARY, SEX AND AREA

Monthly wage/ Salary level (Baht)	Whole kingdom			Municipal areas			Non- municipal areas		
	Total	Government sector	Private sector	Total	Government sector	Private sector	Total	Government sector	Private sector
Number ('000)									
Total	16,174.9	3,245.8	12,929.1	6,663.1	1,485.7	5,177.4	9,511.9	1,760.2	7,751.7
Up to 2,500	1,702.2	84.6	1,617.6	226.7	8.8	217.9	1,475.5	75.8	1,399.7
2,501-5,500	6,541.2	552.8	5,988.3	1,919.8	142.4	1,777.3	4,621.4	410.4	4,211.0
5,501-10,000	4,649.9	916.8	3,733.1	2,421.7	403.7	2,018.0	2,228.2	513.1	1,715.1
10,001 & Over	3,160.2	1,664.7	1,495.5	1,999.2	910.4	1,088.8	1,161.0	754.3	406.7
Unknown	121.4	26.9	94.5	95.7	20.3	75.4	25.7	6.6	19.1
Male	8,900.3	1,852.3	7,048.0	3,496.1	805.9	2,690.2	5,404.1	1,046.3	4,357.8
Up to 2,500	772.7	62.5	710.2	98.2	6.2	92.0	674.5	56.3	618.2
2,501-5,500	3,548.4	341.8	3,206.6	918.7	86.0	832.6	2,629.7	255.8	2,373.9
5,501-10,000	2,707.5	484.8	2,222.7	1,328.5	210.5	1,118.0	1,379.0	274.2	1,104.7
10,001 & Over	1,810.5	948.2	862.3	1,105.3	491.9	613.4	705.2	456.3	248.9
Unknown	61.2	15.0	46.2	45.4	11.2	34.2	15.8	3.8	12.0
Female	7,274.7	1,393.6	5,881.1	3,166.9	679.7	2,487.2	4,107.7	713.8	3,393.9
Up to 2,500	929.6	22.1	907.5	128.5	2.6	125.9	801.0	19.5	781.5
2,501-5,500	2,992.8	211.0	2,781.7	1,001.1	56.4	944.7	1,991.7	154.6	1,837.0
5,501-10,000	1,942.4	432.0	1,510.4	1,093.2	193.2	900.0	849.3	238.9	610.4
10,001 & Over	1,349.7	716.5	633.2	893.8	418.5	475.4	455.8	298.0	157.8
Unknown	60.2	11.9	48.3	50.3	9.1	41.2	9.9	2.8	7.1
Percentage									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Up to 2,500	10.5	2.6	12.5	3.4	0.6	4.2	15.5	4.3	18.1
2,501-5,500	40.4	17.0	46.3	28.8	9.6	34.3	48.6	23.3	54.3
5,501-10,000	28.8	28.3	28.9	36.4	27.2	39.0	23.4	29.2	22.1
10,001 & Over	19.5	51.3	11.6	30.0	61.3	21.0	12.2	42.9	5.3
Unknown	0.8	0.8	0.7	1.4	1.4	1.5	0.3	0.4	0.3
Male	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Up to 2,500	8.7	3.4	10.1	2.8	0.8	3.4	12.5	5.4	14.2
2,501-5,500	39.9	18.5	45.5	26.3	10.7	31.0	48.7	24.5	54.5
5,501-10,000	30.4	26.2	31.5	38.0	26.1	41.6	25.5	26.2	25.4
10,001 & Over	20.3	51.2	12.2	31.6	61.0	22.8	13.1	43.6	5.7
Unknown	0.7	0.8	0.7	1.3	1.4	1.3	0.3	0.4	0.3
Female	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Up to 2,500	12.8	1.6	15.4	4.1	0.4	5.1	19.5	2.7	23.0
2,501-5,500	41.1	15.1	47.3	31.6	8.3	38.0	48.5	21.7	54.1
5,501-10,000	26.7	31.0	25.7	34.5	28.4	36.2	20.7	33.5	18.0
10,001 & Over	18.6	51.4	10.8	28.2	61.6	19.1	11.1	41.8	4.7
Unknown	0.8	0.9	0.8	1.6	1.3	1.7	0.2	0.4	0.2

It was observed that, on the whole, government employees got higher level of monthly wage or salary than the private ones. This partly because, in this survey, the private employee also included those daily wage employees and laborers who usually earn rather low income. About 58.8 per cent of the private employees earned less than Baht 5,501 a month as compared with 19.6 per cent of the government employees. On the other hand, the government employees who received over Baht 5,500 per month accounted for about 79.6 per cent of the total government employees while the private employees only accounted for 40.5 per cent.

8. Supplementary benefits

Apart from data on basic wages and salaries, information was also collected on receipt of supplementary benefits in cash such as bonuses and overtime payments, and in kind such as food, clothing, housing, and others; the amount received have not however been ascertained. The data on number of employees receiving benefits are summarized in Table P.

TABLE P NUMBER AND PERCENTAGE OF PRIVATE EMPLOYEES AND GOVERNMENT EMPLOYEES BY RECEIVING SUPPLEMENTARY BENEFITS, AREA AND SEX

(In thousands)

Sector, area and sex	Total employees	Number of employees receiving supplementary benefits						
		Bonus	Overtime	Other Cash	Food	Clothing	Housing	Others
Total	5,461.4	133.2	1,704.0	2,554.2	1,537.8	82.5	888.8	611.9
		(2.4)	(31.2)	(46.8)	(28.2)	(1.5)	(16.3)	(11.2)
Male	2,915.6	69.3	849.6	1,398.2	723.0	41.5	539.1	277.7
		(2.4)	(29.1)	(48.0)	(24.8)	(1.4)	(18.5)	(9.5)
Female	2,545.8	64.0	854.5	1,156.0	814.8	41.0	349.7	334.2
		(2.5)	(33.6)	(45.4)	(32.0)	(1.6)	(13.7)	(13.1)
Private sector	4,141.6	90.3	1,512.8	1,540.0	1,504.2	71.2	630.5	592.5
		(2.2)	(36.5)	(37.2)	(36.3)	(1.7)	(15.2)	(14.3)
Male	2,158.2	48.8	764.7	802.2	711.8	33.0	362.4	266.8
		(2.3)	(35.4)	(37.2)	(33.0)	(1.5)	(16.8)	(12.4)
Female	1,983.4	41.5	748.1	737.8	792.4	38.1	268.1	325.7
		(2.1)	(37.7)	(37.2)	(40.0)	(1.9)	(13.5)	(16.4)
Government sector	1,319.9	43.0	191.2	1,014.2	33.6	11.4	258.3	19.4
		(3.3)	(14.5)	(76.8)	(2.5)	(0.9)	(19.6)	(1.5)
Male	757.4	20.5	84.9	596.0	11.3	8.5	176.7	11.0
		(2.7)	(11.2)	(78.7)	(1.5)	(1.1)	(23.3)	(1.4)
Female	562.5	22.5	106.4	418.1	22.3	2.9	81.5	8.5
		(4.0)	(18.9)	(74.3)	(4.0)	(0.5)	(14.5)	(1.5)

TABLE P NUMBER AND PERCENTAGE OF PRIVATE EMPLOYEES AND GOVERNMENT EMPLOYEES BY RECEIVING SUPPLEMENTARY BENEFITS, AREA AND SEX (Contd.)

Sector, area and sex	Total employees	Number of employees receiving supplementary benefits						
		1/						
		Bonus	Overtime	Other cash	Food	Clothing	Housing	Others
Private sector								
Municipal areas	1,757.0	26.6 (1.5)	604.5 (34.4)	687.3 (39.1)	625.0 (35.6)	41.1 (2.3)	396.2 (22.5)	206.8 (11.8)
Male	885.4	12.8 (1.4)	319.0 (36.0)	364.4 (41.2)	262.3 (29.6)	19.7 (2.2)	189.8 (21.4)	95.6 (10.8)
Female	871.6	13.8 (1.6)	285.5 (32.8)	322.8 (37.0)	362.6 (41.6)	21.5 (2.5)	206.4 (23.7)	111.2 (12.8)
Non-municipal areas	2,384.5	63.7 (2.7)	908.4 (38.1)	852.7 (35.8)	879.3 (36.9)	30.0 (1.3)	234.3 (9.8)	385.7 (16.2)
Male	1,272.8	36.0 (2.8)	445.8 (35.0)	437.7 (34.4)	449.4 (35.3)	13.4 (1.0)	172.6 (13.6)	171.2 (13.4)
Female	1,111.7	27.7 (2.5)	462.6 (41.6)	415.0 (37.3)	429.8 (38.7)	16.7 (1.5)	61.7 (5.6)	214.5 (19.3)
Government sector								
Municipal areas	608.4	15.5 (2.6)	105.5 (17.3)	457.6 (75.2)	10.4 (1.7)	6.2 (1.0)	166.5 (27.4)	8.9 (1.5)
Male	352.5	7.2 (2.1)	45.2 (12.8)	266.3 (75.5)	6.1 (1.7)	4.5 (1.3)	118.5 (33.6)	5.1 (1.5)
Female	255.8	8.3 (3.2)	60.3 (23.6)	191.3 (74.8)	4.3 (1.7)	1.6 (0.6)	48.0 (18.8)	3.7 (1.5)
Non-municipal areas	711.5	27.4 (3.9)	85.7 (12.0)	556.5 (78.2)	23.3 (3.3)	5.2 (0.7)	91.8 (12.9)	10.6 (1.5)
Male	404.9	13.3 (3.3)	39.6 (9.8)	329.7 (81.4)	5.2 (1.3)	4.0 (1.0)	58.2 (14.4)	5.8 (1.4)
Female	306.6	14.2 (4.6)	46.1 (15.0)	226.8 (74.0)	18.1 (5.9)	1.2 (0.4)	33.5 (10.9)	4.7 (1.5)

1/ One employee can receive more than 1 type of supplementary benefits.

Certain types of supplementary benefits such as overtime, food supplies, clothing and other seem to be more common in the private sector than in the government sector. Other cash, housing and bonus benefits, however, seem to be more common in the government sector than in the private sector. The private employees in the municipal area received more supplementary benefits such as other cash, housing and clothing than those in the non-municipal areas, for instance, about 39.1 per cent for other cash and 22.5 per cent for housing and 2.3 per cent for clothing. The private employees in non-municipal area received more supplementary benefits such as overtime, food supplies and bonus than those in the municipal area or about 38.1 per cent for overtime 36.9 per cent for food supplies and 2.7 per cent for bonus. The government employees in the municipal area received more supplementary benefits such as housing overtime and clothing than those in the non-municipal area. For instance about 27.4 per cent, 17.3 per cent and 1.0 per cent respectively. The government employees in the non-municipal area received more supplementary benefits, such as other cash, bonus and food supplies than those in the municipal area or about 78.2 per cent, 3.9 per cent and 3.3 per cent respectively.

CHAPTER 2

METHODOLOGY

1. Sample design

A Stratified Two-Stage Sampling was adopted for the survey. Provinces were constituted strata. The primary and secondary sampling units were blocks for municipal areas/villages for non-municipal areas and private households/persons in the special households respectively.

Stratification

Provinces were constituted strata. There were altogether 76 strata. Each stratum was divided into two parts according to the type of local administration, namely municipal areas and non-municipal areas.

Selection of primary sampling unit

The sample selection of blocks/villages were performed separately and independently in each part by using probability proportional to size-total numbers of households. The total sample blocks/villages was 5,796 from 109,966 blocks/villages.

The total number of sample blocks/villages selected for enumeration by region and type of local administration was as follows:

Region	Total	Municipal areas	Non-municipal areas
Bangkok	312	312	-
Central (excluding Bangkok)	1,968	1,080	888
North	1,236	696	540
Northeast	1,296	720	576
South	984	528	456
Total	5,796	3,336	2,460

Selection of secondary sampling unit

Private households were our ultimate sampling units. A new listing of private households were made for every sample block/village to serve as the sampling frame. In each sample block/village, a systematic sample of private households were selected with the following sample size:

Municipal areas : 15 sample households per block

Non-municipal areas : 12 sample households per village

Before selecting sample private households in each sample block/village, the list of private households was rearranged by household's size-member of the household.

All special households located within the sample areas were included in the sample and the persons in the special household were systematically selected for the interviewing.

The total number of sample private households selected for enumeration by region and type of local administration was as follows:

Region	Total	Municipal areas	Non-municipal areas
Bangkok	4,680	4,680	-
Central (excluding Bangkok)	26,856	16,200	10,656
North	16,920	10,440	6,480
Northeast	17,712	10,800	6,912
South	13,392	7,920	5,472
Total	79,560	50,040	29,520

The Rotation Sampling

In order to improve the quality of estimators, the national Statistical office (NSO) has applied the contemporary sampling method , “ Rotation Sampling”, to the 2004 Labour Force Survey (LFS) since 2002. The sampling plan has been designed as 4 rotation groups and 2 -2 -2 pattern. With this method, the samples of BLK / villages will be divided into 4 rotation groups and this causes the number of PSUs in each province to be equal to a quarter of that of total PSUs. In each PSU, two household sample sets will be selected for operation use. The selected sample households will be interviewed for two continuous quarters. And these households will not be interviewed until the next two quarters. This procedure will result in the 50 % repeated household samples during the continuously sequent quarter and the 0 – 100% repeated household samples during the same quarter in the continuously sequent year.

In 2004, PSU in each rotation group will be replaced quarter by quarter. And this will be done until 4 groups is completely rotated in 2002 , and will be used in LFS 2005 and some parts of LFS 2006. In 2007, PSU in each 2004 rotation group will be replaced in the same way until 2008.

2. Method of estimation

The survey results were at regional and provincial level. At the regional level the results were presented separately for the Bangkok and the remaining 75 provinces were classified by region, municipal areas and non-municipal areas.

Let

$k = 1,2,3,\dots,m_{hlj}$ (serial number of sample block/village)

$i = 1,2,3,\dots,20$ (age - sex group)

$j = 1,2$ (type of local administration)

$l = 1,2,3,\dots,A_h$ (province)

$h = 1,2,3,4,5$ (region)

Estimate of the total number of persons with characteristic X

1. Adjusted estimate of the total number of persons with characteristic X

for the i^{th} age-sex group, j^{th} area, l^{th} province, h^{th} region was based on the formula :

$$x''_{hlji} = \frac{x'_{hlji}}{y'_{hlji}} Y_{hlji} = r_{hlji} Y_{hlji} \dots\dots\dots(1)$$

where

x'_{hlji} is the ordinary estimate of the total number of persons with characteristic X for the i^{th} age-sex group, j^{th} area, l^{th} province, h^{th} region.

y'_{hlji} is the ordinary estimate of the total population for the i^{th} age-sex group, j^{th} area, l^{th} province, h^{th} region.

Y_{hlji} ^{1/} is the estimate, based on the population projection of the total population for the i^{th} age-sex group, j^{th} area, l^{th} province, h^{th} region.

r_{hlji} is the ratio of the estimate of the total number of persons with characteristic X to the estimate of the total population for the i^{th} age-sex group, j^{th} area, l^{th} province, h^{th} region.

^{1/} Population projections for Thailand 2000-2025, Quality of life and social development office, National Economic and Social Development Board, the Ninth National Economic and Social Development Planning, May 2003.

The formula of the estimate from a stratified two-stage sampling was as follows.

$$i) \quad x'_{hlji} = \frac{1}{m_{hlj}} \sum_{k=1}^{m_{hlj}} \frac{1}{P_{hljk}} \frac{N_{hljk}}{n_{hljk}} x_{hljki} \dots\dots\dots (2)$$

where

x_{hljki} is the total number of persons with characteristic X for the i^{th} age-sex group, k^{th} sample block/village, j^{th} area, l^{th} province, h^{th} region.

N_{hljk} is the total number of listing households in the k^{th} sample block/village, j^{th} area, l^{th} province, h^{th} region.

n_{hljk} is the total number of sample households in the k^{th} sample block/village, j^{th} area, l^{th} province, h^{th} region.

P_{hljk} is the probability of selection of the k^{th} sample block/village, j^{th} area, l^{th} province, h^{th} region.

m_{hlj} is the total number of sample block/village in the j^{th} area, l^{th} province, h^{th} region.

$$ii) \quad y'_{hlji} = \frac{1}{m_{hlj}} \sum_{k=1}^{m_{hlj}} \frac{1}{P_{hljk}} \frac{N_{hljk}}{n_{hljk}} y_{hljki} \dots\dots\dots (3)$$

where

y_{hljki} is the total number of the population enumerated for the i^{th} age-sex group, k^{th} sample block/village, j^{th} area, l^{th} province, h^{th} region.

2. Adjusted estimate of the total number of persons with characteristic X for the j^{th} area, l^{th} province, h^{th} region was based on the formula :

$$x''_{hlj} = \sum_{i=1}^{20} x''_{hlji} \dots\dots\dots(4)$$

3. Adjusted estimate of the total number of persons with characteristic X for the i^{th} age-sex group, l^{th} province, h^{th} region was based on the formula :

$$x''_{hli} = \sum_{j=1}^2 x''_{hlji} \dots\dots\dots(5)$$

4. Adjusted estimate of the total number of persons with characteristic X for the l^{th} province, h^{th} region was based on the formula :

$$x''_{hl} = \sum_{j=1}^2 x''_{hlj} = \sum_{i=1}^{20} x''_{hli} \dots\dots\dots (6)$$

5. Adjusted estimate of the total number of persons with characteristic X for the i^{th} age-sex group, j^{th} area, h^{th} region was based on the formula :

$$x''_{hji} = \sum_{l=1}^{A_h} x''_{hlji} \dots\dots\dots (7)$$

where

$$A_h \text{ is the total number of provinces in the } h^{\text{th}} \text{ region and } \sum_{h=1}^5 A_h = 76$$

6. Adjusted estimate of the total number of persons with characteristic X for the j^{th} area, h^{th} region was based on the formula :

$$x''_{hj} = \sum_{l=1}^{A_h} x''_{hlj} = \sum_{i=1}^{20} x''_{hji} \dots\dots\dots (8)$$

7. Adjusted estimate of the total number of persons with characteristic X for the i^{th} age-sex group, h^{th} region was based on the formula :

$$x''_{hi} = \sum_{l=1}^{A_h} x''_{hli} = \sum_{j=1}^2 x''_{hji} \dots\dots\dots (9)$$

8. Adjusted estimate of the total number of persons with characteristic X for the h^{th} region was based on the formula :

$$x''_h = \sum_{l=1}^{A_h} x''_{hl} = \sum_{j=1}^2 x''_{hj} = \sum_{i=1}^{20} x''_{hi} \dots\dots\dots (10)$$

9. Adjusted estimate of the total number of persons with characteristic X for the jth area was based on the formula :

$$x''_j = \sum_{h=1}^5 x''_{hj} \dots\dots\dots (11)$$

10. Adjusted estimate of the total number of persons with characteristic X for the ith age-sex group of whole kingdom was based on the formula :

$$x''_i = \sum_{h=1}^5 x''_{hi} \dots\dots\dots (12)$$

11 Adjusted estimate of the total number of persons with characteristic X for the whole kingdom was based on the formula :

$$x'' = \sum_{h=1}^5 x''_h = \sum_{j=1}^2 x''_j = \sum_{i=1}^{20} x''_i \dots\dots\dots(13)$$

3. Data Collection

Labor force information for this survey quarterly which was conducted during the 1st-12th of July-September 2007 was obtained through interviews head or member of households of 4,680 households in the Bangkok, 45,360 households in other municipal areas and 29,520 households in non-municipal areas or a total of 79,560 households throughout the kingdom. Forty four enumerators with previous experience in survey operations were employed in the Bangkok, while in the other provinces (changwats), the field staff comprised 830 enumerators.

4. In round figures

In the statistical tables, all absolute figures are independently rounded to the nearest thousand; hence the group total may not always be equal to the sum of the individual figures.