

EXECUTIVE SUMMARY

LABOR FORCE SURVEY IN THE 4th QUARTER OF 2009

CHART OF THE NUMBER OF POPULATION BY LABOR FORCE

THE LABOR FORCE SURVEY , QUARTER 4 : 2009

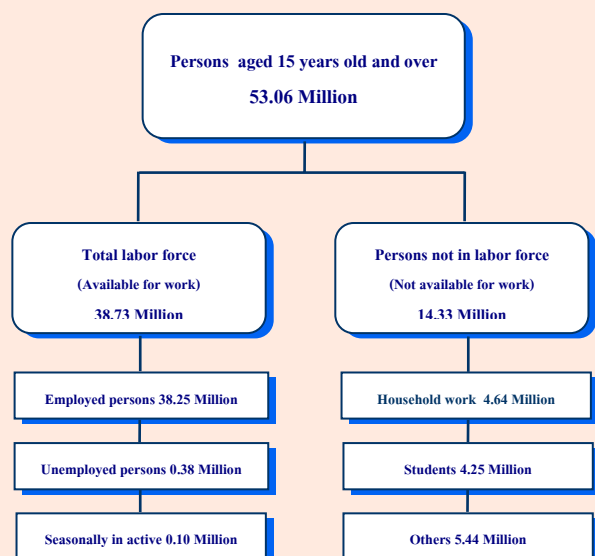


FIGURE 1 COMPARISON OF THE NUMBER OF EMPLOYED PERSONS BETWEEN QUARTER 4 OF 2008 AND 2009 BY INDUSTRY

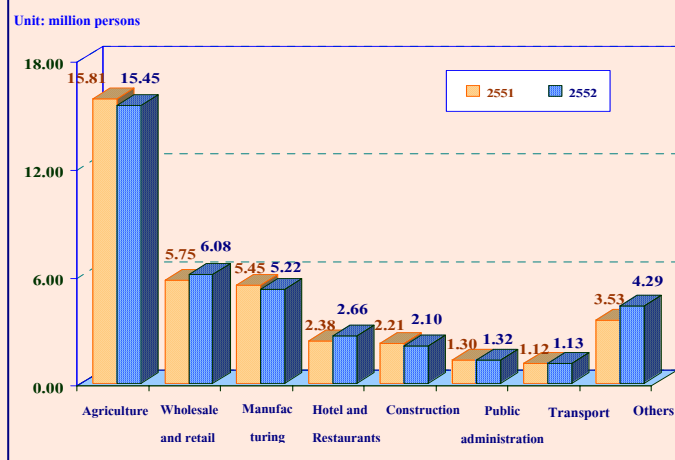
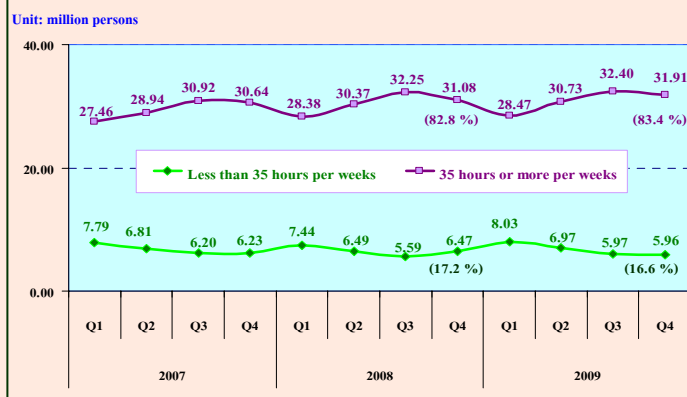


FIGURE 2 COMPARISON OF THE NUMBER OF EMPLOYED PERSONS BETWEEN QUARTER 4 OF 2007 to 2009 BY HOURS WORKED



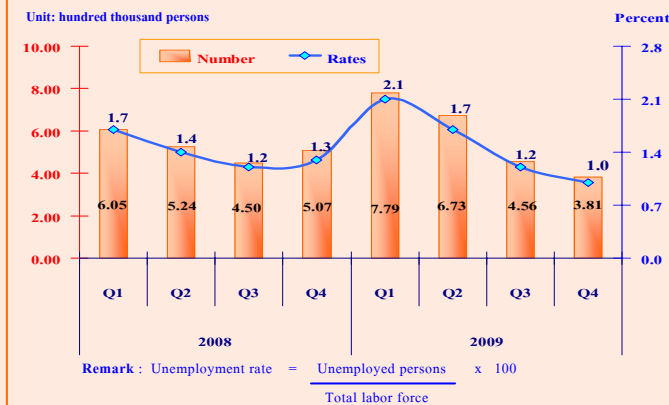
Some major findings of Labor Force Survey in the fourth quarter of 2009, conducted by NSO showed that for people aged 15 years and over of 53.06 million persons, 38.73 million were in the labor force (38.25 million were employed, 0.38 million were unemployed and 0.10 million were seasonally inactive labor force) and 14.33 million were not in the labor force.

Comparing to the same period of 2008, the number of persons employed increased 0.70 million persons. (from 37.55 million to 38.25 million) or about 1.9%. Considering by industry, it was found that the number of employed persons in non-agriculture sector increased 1.06 million persons (from 21.74 million to 22.80 million). This increment was found in various industries, i.e. Wholesale and Retail trade about (0.31 million), Hotel and Restaurants about (0.27 million), Construction about (0.10 million) Public Administration and Transport with the same about (0.04 million) manufacturing sector about (0.01 million) the rest were in the other sectors. Those in agriculture sector decreased about 0.36 million persons (from 15.81 million to 15.45 million)

Regarding working hours per day of employed persons in the fourth quarter of 2009 showed that about 31.91 million persons or 83.4% of the total employed persons worked more than 35 hours per weeks. On the other word, about 6.34 million persons or 16.6% of total employed persons worked less than 35 hours per weeks.

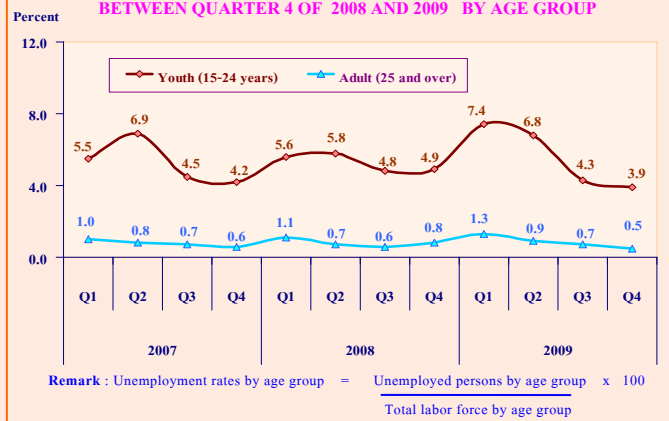
Comparing to the same period of last year, the results revealed that the employed persons working more than 35 hours per weeks which considered as a full time worker of increased, about 0.6% and those working less than 35 hours per weeks or part time worker decreased, of about 0.6%

**FIGURE 3 NUMBER AND UNEMPLOYMENT RATE
BETWEEN QUARTER 4 OF 2008 AND 2009**



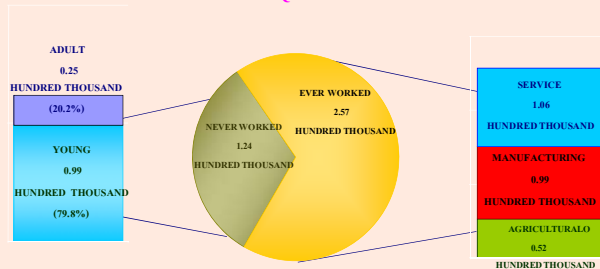
From the 4th quarter of 2009, there were 0.38 million unemployed persons or 1.0% of the unemployment rate. Comparing to the same period of last year, the number of unemployment decreased by 1.26 hundred thousand persons (from 5.07 hundred thousand persons to 3.81 hundred thousand persons). Considering by age group, there were 1.99 hundred thousand persons in a youth group (15 – 24 years old) or 3.9% of the unemployment rate and 1.82 hundred thousand persons in adult group (25 years and over) or 0.5% of the unemployment rate. Comparing to the same period of 2008 the Unemployed persons decreased 56 thousand or about 1.0% (from 2.55 hundred thousand persons to 1.99 hundred thousand persons) for a youth group and 70 thousand persons or 0.3% for adult group.

**FIGURE 4 COMPARIISON OF UNEMPLOYMENT RATE
BETWEEN QUARTER 4 OF 2008 AND 2009 BY AGE GROUP**

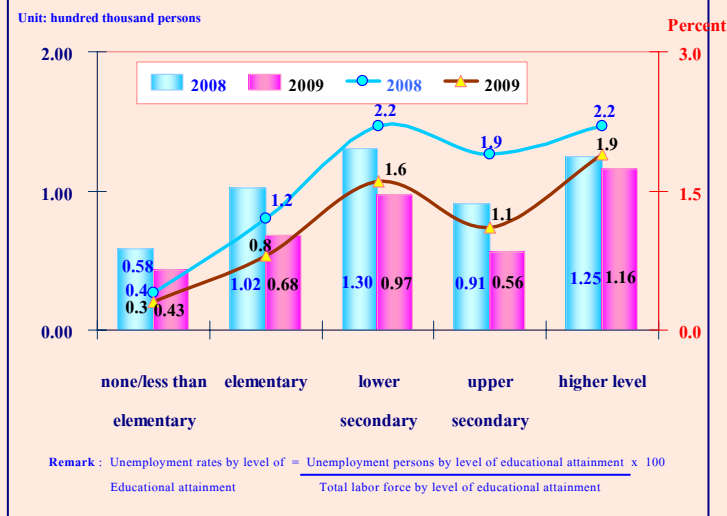


Concerning unemployed persons by experience in work, about 1.24 hundred thousand persons had never worked. With this numbr, 99 thousand persons were from the youth group and 25 thousand persons from the adult group. About 2.57 hundred thousand persons of unemployed persons had ever worked. They were unemployed from manufacturing 99 thousand persons, from service sector 1.06 hundred thousand persons and the least from the agriculture sector, of about 52 thousand persons.

**FIGURE 5 NUMBER OF UNEMPLOYED PERSONS BY EXPERIENCE
OF WORK QUARTER 4 : 2009**



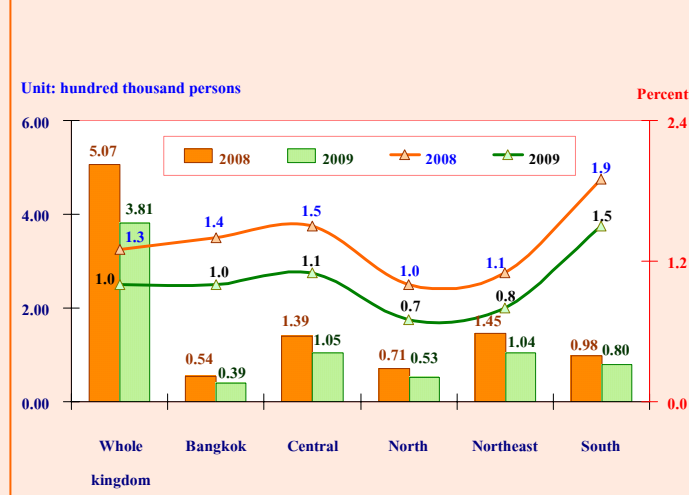
**FIGURE 6 COMPARISON NUMBER AND UNEMPLOYMENT RATES
BY LEVEL OF EDUCATION, QUARTER 4 : 2009**



For level of educational attainment of the unemployed persons, it showed that the highest number of unemployed persons was with higher level (1.16 hundred thousand), followed by the lower secondary level (97 thousand persons), elementary level (68 thousand persons) and upper secondary level (56 thousand persons). Unemployed persons with less than elementary and no education were about 43 thousand persons.

Comparing by region, it was found that the highest number of unemployment was in the Northeast which decreased by 41 thousand persons followed by the Central (34 thousand persons), the North and South with the same (18 thousand persons) and Bangkok (15 thousand persons).

**FIGURE 7 COMPARISON OF THE NUMBER OF UNEMPLOYMENT
BETWEEN QUARTER 4 OF 2008 AND 2009 BY REGION**



Comparing with the same period of last year, it showed that the unemployment rates decreased of about 0.3%, Bangkok the Central and the South with the same rate (decreased 0.4%), the North and the Northeast with the same rate (decreased 0.3%).

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 15 years of age and over, but were neither employed nor available for employment because they were

1.1 engaged in household work,

1.2 engaged in studies

1.3 too young (below 18 years of age) or too old (above 60 years of age)

1.4 incapable of work because of physical or mental disability or chronic illness,

1.5 voluntarily idle,

1.6 working without pay, profits, dividends or other payments for persons who were not members of the same household,

1.7 working without pay, profits, dividends or any other payments for charitable organizations and institutions,

1.8 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 public servants, municipal employees, local management staff. Included in this employees and local employees in the corporate state.

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

2.1 Academic means all persons who completed a course receiving academic diploma, bachelor, master and doctoral degree level.

2.2 Higher technical education means all persons who completed vocational or technical education, and receiving vocational diploma and the degree of bachelor.

2.3 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 2

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 October – December 2009, which is the fourth 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 October – December 2009.

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.

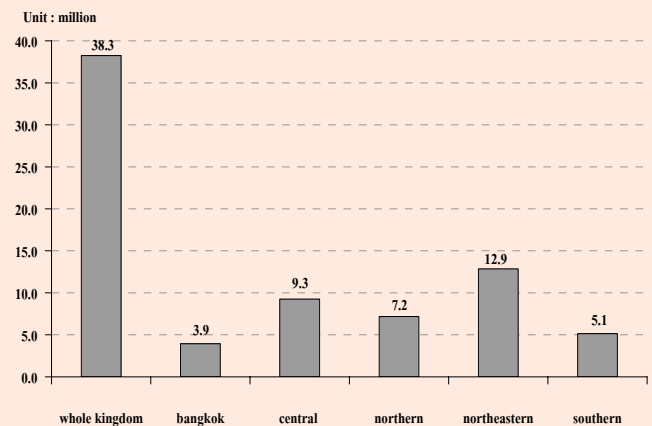
1. Structure of the labor force

The total population was estimated at 38.73 million, were in the labor force. Of the total labor force, about 73.9 per cent were residing in the non-municipal areas and about 54.2 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 October – December 2009, was of the order of 38.6 million. Since the survey period was among the agricultural season, the number of the seasonally inactive labor force was about 102,300 persons. This number will be increased when the survey in non-agriculture season.

FIGURE 1 NUMBER OF EMPLOYED PERSONS BY REGION



The current labor force was largely employed, however 1.0 per cent of which or about 0.38 million were unemployed. Of these, 0.2 per cent were looking for works and the rest 0.8 per cent were not looking for works but available for works.

Persons not in the labor force could be divided persons aged 15, about 14.3 million or 27.0 per cent of total population aged 15 years and over. About 4.6 million were housewives, 4.2 million were students and 4.4 million were young/old or incapable of work.

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)									
Persons over 15 years	53,063.0	25,792.9	27,270.1	16,893.0	7,973.2	8,919.8	36,170.0	17,819.7	18,350.4
Total labor force	38,734.8	20,998.0	17,736.8	11,995.7	6,261.1	5,734.6	26,739.1	14,736.9	12,002.2
1.Current labor force	38,632.5	20,954.1	17,678.4	11,987.0	6,256.9	5,730.0	26,645.5	14,697.1	11,948.4
1.1 Employed	38,251.6	20,744.2	17,507.4	11,853.4	6,181.4	5,672.0	26,398.2	14,562.8	11,835.4
1) At work	37,872.7	20,521.6	17,351.1	11,787.1	6,145.4	5,641.7	26,085.6	14,376.2	11,709.4
2) With job but not at work	378.9	222.6	156.3	66.3	36.0	30.3	312.6	186.5	126.0
1.2 Unemployed	380.9	209.9	171.0	133.6	75.5	58.0	247.4	134.4	113.0
1) Looking for a job	78.5	45.8	32.7	30.9	17.5	13.4	47.7	28.3	19.3
2) Not looking /Available for work	302.4	164.1	138.3	102.7	58.1	44.6	199.7	106.0	93.7
2.Seasonally inactive labor force	102.3	43.9	58.4	8.7	4.1	4.6	93.6	39.8	53.8
Not in labor force > 15 years of age	14,328.2	4,794.9	9,533.3	4,897.3	1,712.1	3,185.2	9,430.9	3,082.8	6,348.2
1. Household work	4,639.5	198.1	4,441.4	1,552.8	87.1	1,465.7	3,086.7	111.0	2,975.7
2. Studies	4,246.3	2,062.9	2,183.5	1,474.5	721.7	752.8	2,771.8	1,341.2	1,430.6
3. Too young/old or incapable to work	4,405.6	1,883.3	2,522.2	1,338.1	563.9	774.2	3,067.5	1,319.5	1,748.1
4. Others	1,036.9	650.6	386.3	532.0	339.5	192.5	504.9	311.1	193.8
Percentage									
Persons over 15 years	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Total labor force	73.0	81.4	65.0	71.0	78.5	64.3	73.9	82.7	65.4
1.Current labor force	72.8	81.2	64.8	71.0	78.5	64.2	73.7	82.5	65.1
1.1 Employed	72.1	80.4	64.2	70.2	77.5	63.6	73.0	81.7	64.5
1) At work	71.4	79.6	63.6	69.8	77.1	63.3	72.1	80.7	63.8
2) With job but not at work	0.7	0.9	0.6	0.4	0.5	0.3	0.9	1.1	0.7
1.2 Unemployed	0.7	0.8	0.6	0.8	1.0	0.7	0.7	0.8	0.6
1) Looking for a job	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.1
2) Not looking /Available for work	0.6	0.6	0.5	0.6	0.7	0.5	0.6	0.6	0.5
2.Seasonally inactive labor force	0.2	0.2	0.2	0.1	0.1	0.1	0.3	0.2	0.3
Not in labor force > 15 years of age	27.0	18.6	35.0	29.0	21.5	35.7	26.1	17.3	34.6
1. Household work	8.7	0.8	16.3	9.2	1.1	16.4	8.5	0.6	16.2
2. Studies	8.0	8.0	8.0	8.7	9.1	8.4	7.7	7.5	7.8
3. Too young/old or incapable to work	8.3	7.3	9.3	7.9	7.1	8.7	8.5	7.4	9.5
4. Others	2.0	2.5	1.4	3.2	4.3	2.2	1.4	1.8	1.1

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	53,063.0	16,893.0	36,170.0	5,594.2	12,773.1	4,378.9	8,394.2	9,882.5	2,163.4	7,719.1	17,750.3	2,914.2	14,836.1	7,063.0	1,842.4	5,220.6
In the labor force	38,734.8	11,995.7	26,739.1	3,982.1	9,355.5	3,160.3	6,195.2	7,200.4	1,514.0	5,686.4	12,948.1	2,023.1	10,925.0	5,248.7	1,316.2	3,932.5
Not in the labor force over 15 years	14,328.2	4,897.3	9,430.9	1,612.1	3,417.6	1,218.6	2,199.0	2,682.1	649.4	2,032.8	4,802.2	891.1	3,911.1	1,814.3	526.2	1,288.0
Male	25,792.9	7,973.2	17,819.7	2,553.0	6,160.9	2,089.6	4,071.3	4,841.7	1,030.8	3,810.9	8,767.1	1,414.0	7,353.1	3,470.2	885.8	2,584.4
In the labor force	20,998.0	6,261.1	14,736.9	2,021.3	5,013.7	1,666.0	3,347.7	3,906.0	788.7	3,117.3	7,155.2	1,080.6	6,074.7	2,901.8	704.5	2,197.3
Not in the labor force over 15 years	4,794.9	1,712.1	3,082.8	531.7	1,147.2	423.6	723.6	935.7	242.1	693.7	1,611.9	333.5	1,278.4	568.4	181.3	387.1
Female	27,270.1	8,919.8	18,350.4	3,041.2	6,612.1	2,289.2	4,322.9	5,040.8	1,132.6	3,908.2	8,983.2	1,500.1	7,483.1	3,592.8	956.7	2,636.2
In the labor force	17,736.8	5,734.6	12,002.2	1,960.8	4,341.8	1,494.3	2,847.5	3,294.4	725.3	2,569.1	5,792.9	942.5	4,850.3	2,347.0	611.7	1,735.3
Not in the labor force over 15 years	9,533.3	3,185.2	6,348.2	1,080.4	2,270.4	795.0	1,475.4	1,746.4	407.3	1,339.1	3,190.3	557.6	2,632.8	1,245.9	345.0	900.9
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	73.0	71.0	73.9	71.2	73.2	72.2	73.8	72.9	70.0	73.7	73.0	69.4	73.6	74.3	71.4	75.3
Not in the labor force over 15 years	27.0	29.0	26.1	28.8	26.8	27.8	26.2	27.1	30.0	26.3	27.1	30.6	26.4	25.7	28.6	24.7
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	81.4	78.5	82.7	79.2	81.4	79.7	82.2	80.7	76.5	81.8	81.6	76.4	82.6	83.6	79.5	85.0
Not in the labor force over 15 years	18.6	21.5	17.3	20.8	18.6	20.3	17.8	19.3	23.5	18.2	18.4	23.6	17.4	16.4	20.5	15.0
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	65.0	64.3	65.4	64.5	65.7	65.3	65.9	65.4	64.0	65.7	64.5	62.8	64.8	65.3	63.9	65.8
Not in the labor force over 15 years	35.0	35.7	34.6	35.5	34.3	34.7	34.1	34.7	36.0	34.3	35.5	37.2	35.2	34.7	36.1	34.2

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 73.0 per cent, and it shows that persons in non-municipal areas had higher participation rates than the municipal areas (73.9 per cent compared with 71.0 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	73.0	71.0	73.9	71.2	73.2	72.2	73.8	72.9	70.0	73.7	73.0	69.4	73.6	74.3	71.4	75.3
15-19	26.4	21.0	28.5	19.2	27.6	24.1	29.2	23.7	19.5	24.9	25.7	17.9	27.3	32.8	24.7	35.5
20-24	70.2	63.5	72.9	59.2	73.2	69.5	75.0	69.0	58.8	71.8	69.5	60.4	71.3	73.9	68.6	75.6
25-29	87.7	89.1	87.0	89.9	89.4	89.6	89.3	86.7	86.3	86.8	86.5	88.5	86.1	87.3	89.2	86.7
30-34	90.1	90.3	90.0	90.0	91.4	91.7	91.2	90.8	90.2	91.0	89.2	88.8	89.3	89.0	90.0	88.6
35-39	90.9	90.4	91.3	90.3	90.0	89.7	90.2	91.6	91.5	91.6	91.7	91.5	91.7	90.8	89.4	91.3
40-49	89.8	88.1	90.7	86.9	88.7	87.0	89.6	91.5	90.6	91.8	90.2	89.6	90.4	91.0	89.4	91.6
50-59	82.2	77.8	84.3	72.4	79.7	79.1	80.0	85.0	81.2	86.1	84.6	81.4	85.2	84.8	81.9	85.8
60 and over	39.3	30.1	43.4	23.1	34.9	29.4	37.6	40.3	36.7	41.4	44.7	34.9	46.6	43.7	34.9	46.8
Male	81.4	78.5	82.7	79.2	81.4	79.7	82.2	80.7	76.5	81.8	81.6	76.4	82.6	83.6	79.5	85.0
15-19	33.6	25.5	36.6	21.2	33.9	30.4	35.6	32.9	24.9	35.0	32.0	21.5	33.9	43.2	30.9	47.2
20-24	78.9	68.0	83.0	62.0	80.6	73.1	84.3	77.7	63.8	81.4	78.9	65.9	81.4	84.4	74.8	87.6
25-29	94.9	93.7	95.5	92.7	95.1	94.6	95.3	96.0	91.3	97.2	94.4	93.7	94.5	96.2	96.4	96.1
30-34	95.8	96.0	95.8	95.7	96.6	97.0	96.4	95.3	95.8	95.2	94.9	94.8	94.9	97.5	97.0	97.7
35-39	96.8	96.9	96.8	96.7	96.4	97.0	96.1	95.9	95.6	96.0	97.0	96.6	97.1	98.4	99.0	98.2
40-49	96.8	96.2	97.0	96.7	96.2	95.1	96.8	96.6	95.9	96.8	96.6	95.7	96.8	98.5	98.4	98.5
50-59	92.6	89.3	94.1	86.4	90.4	90.7	90.2	93.7	89.4	94.9	95.3	91.7	95.9	93.1	90.9	93.9
60 and over	51.6	39.0	56.9	32.4	45.8	36.2	50.3	51.3	46.9	52.5	59.4	45.0	62.1	55.0	42.9	59.1
Female	65.0	64.3	65.4	64.5	65.7	65.3	65.9	65.4	64.0	65.7	64.5	62.8	64.8	65.3	63.9	65.8
15-19	18.9	16.5	19.9	17.3	21.0	17.8	22.5	14.1	14.2	14.1	19.2	14.2	20.2	21.8	18.3	23.0
20-24	61.2	59.2	62.1	56.8	65.5	66.1	65.2	59.7	53.8	61.4	59.5	54.8	60.5	62.5	62.2	62.7
25-29	80.2	84.7	78.0	87.6	83.7	84.8	83.1	76.9	81.3	75.6	77.8	83.0	76.7	78.2	82.0	76.8
30-34	84.4	85.0	84.0	85.3	86.1	86.6	85.8	86.2	84.7	86.6	83.3	82.6	83.4	80.3	83.4	79.2
35-39	85.4	84.5	85.9	84.8	84.0	82.9	84.6	87.4	87.8	87.2	86.5	86.7	86.5	83.5	80.6	84.6
40-49	83.3	80.9	84.6	78.5	81.7	79.6	82.8	86.8	85.9	87.0	84.1	84.1	84.1	83.8	81.2	84.8
50-59	72.7	67.7	75.1	60.6	70.1	68.8	70.9	76.9	73.9	77.8	74.6	72.0	75.1	77.0	73.8	78.1
60 and over	29.6	23.3	32.5	16.2	26.7	24.3	27.8	31.3	28.7	32.1	32.8	27.0	33.9	34.7	28.8	36.8

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.

FIGURE 2 LABOR FORCE PARTICIPATION RATES BY AGE GROUP (YEARS)

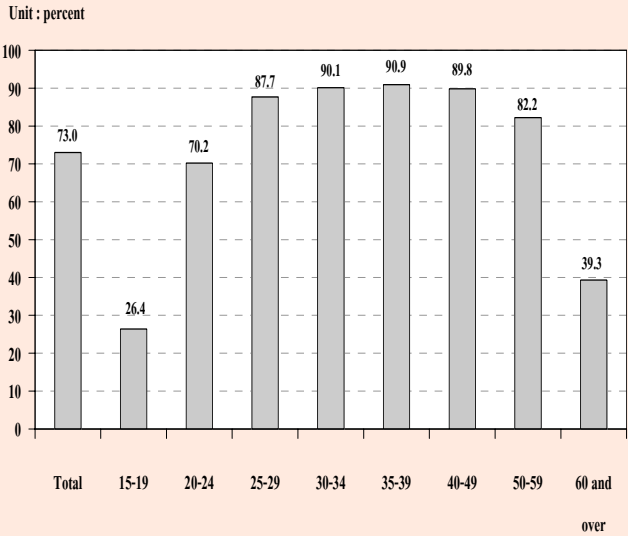


TABLE D LABOR FORCE PARTICIPATION RATES BY MARITAL STATUS, SEX AND AREA

(Percentage)

Area and sex	Total	Marital status					
		Single	Married	Widowed	Divorced	Separated	Married do not know status
Total	73.0	59.4	81.6	38.6	82.7	80.5	89.1
Male	81.4	64.8	90.5	43.8	86.9	85.1	72.6
Female	65.0	52.1	73.1	37.3	80.2	77.4	95.9
Municipal areas	71.0	62.3	78.6	37.0	82.3	80.8	85.8
Male	78.5	64.3	87.3	41.9	85.2	83.4	72.6
Female	64.3	60.3	70.1	35.8	81.0	79.3	94.0
Non-municipal areas	73.9	57.5	82.9	39.4	83.0	80.3	100.0
Male	82.7	65.0	91.9	44.7	87.8	86.2	-
Female	65.4	45.8	74.4	38.0	79.7	76.1	100.0

Considering sex differentials, it is found that males participated in the labor force more than females (81.4 and 65.0 per cent respectively) . It was true in both areas and every region.

Table D shows that the divorced participated the highest in the labor force (82.7 per cent) and males participation rates were the highest among the married about 90.5 per cent and females, the highest rate was among the divorced about 80.2 per cent. The results also show that in municipal area, the divorced participated the highest in the labor force, about 82.3 per cent, 87.3 per cent for married males and 81.0 per cent for divorced females. In non-municipal area, the divorced participated the highest in the labor force about 83.0 per cent, 91.9 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 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 upper secondary level. Those who completed less than elementary level and lower secondary

level 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 (Vocational and Teacher training)

FIGURE 3 LABOR FORCE PARTICIPATION RATES BY LEVEL OF EDUCATIONAL ATTAINMENT

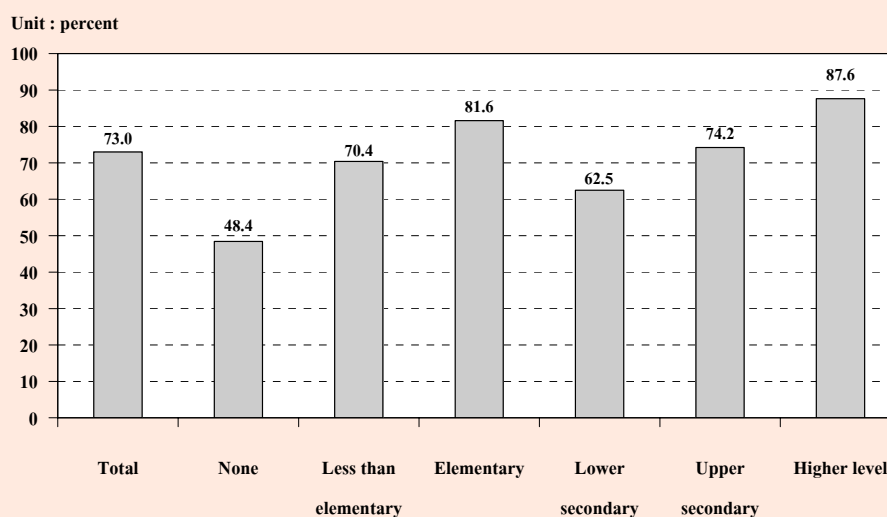


TABLE E LABOR FORCE PARTICIPATION RATES BY LEVEL OF EDUCATIONAL ATTAINMENT, AREA AND SEX

(Percentage)

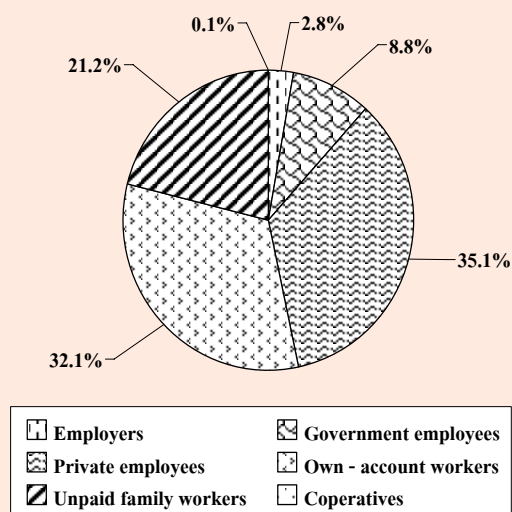
Area and sex	Level of educational attainment												
	Total	None	Less than elementary	Elementary	Lower secondary	Upper secondary level			Higher level			Others ^{1/}	Unknown
						General/academic	Vocational	Teacher training	Academic	Higher technical education	Teacher training		
Total	73.0	48.4	70.4	81.6	62.5	75.2	71.6	57.0	89.9	85.2	83.2	87.2	74.7
Male	81.4	60.8	81.1	87.9	72.2	83.9	76.5	56.3	92.7	90.1	82.3	96.1	78.3
Female	65.0	42.2	61.7	74.7	51.4	65.9	65.1	57.4	87.8	79.9	83.8	75.5	70.7
M.A.	71.0	42.4	63.0	77.7	62.0	68.4	72.0	57.9	88.9	84.1	77.2	78.4	72.1
Male	78.5	56.8	74.6	84.9	69.8	75.4	78.2	66.5	91.4	88.1	76.6	95.2	73.8
Female	64.3	36.4	54.8	70.5	53.2	60.9	64.5	48.8	86.8	80.2	77.5	61.7	70.1
Non-M.A.	73.9	50.3	72.7	82.9	62.8	79.3	71.3	56.2	92.0	86.3	89.0	91.1	79.9
Male	82.7	61.9	82.9	88.8	73.3	89.0	75.1	42.7	95.6	91.8	87.4	96.5	88.1
Female	65.4	44.2	64.0	76.2	50.6	68.8	65.6	62.5	89.6	79.6	89.9	83.0	71.7

^{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 43.9 per cent and of these 4 in 5 were employed in private sector, followed by own account workers (32.1 per cent). The unpaid family workers and employer which accounted for 21.2 and 2.8 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.

FIGURE 4 PERCENTAGE OF EMPLOYED PERSONS BY WORK STATUS



The majority of employed persons in both areas were employees, followed by own account workers. In municipal area, about 57.0 per cent were employees, among these, mostly working in private sector (43.8 per cent) while only 13.2 per cent were government employees. In non-municipal areas, about 38.0 per cent were employees, among these, 31.2 per cent working in private sector, followed by own account workers (25.6 per cent in municipal area and 35.0 percent

in non-municipal area. For the proportion of unpaid family workers in municipal areas was rather low compared with the non-municipal areas (13.2 per cent and 24.7 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, followed by own account workers except the Northeast region, large percentages of employed persons were worked as own account workers about 39.5 per cent followed by employees about 30.6 percent and unpaid family worker about 28.2 percent.

3.2 Industry : (Table G) About 40.4 per cent of the total employed persons worked in agricultural sector and about 59.6 per cent in non-agricultural sector. The highest proportions of the employed persons was in the wholesale and retail trade 15.9 per cent, followed by manufacturing 13.7 per cent. The next was hotel and restaurants 7.0 per cent, construction 5.5 per cent, public administration 3.4 per cent, education and transport storage show equally 3.0 per cent. The rest shared in the other industries.

Most employed persons in municipal area worked in non-agriculture sector 90.6 per cent, the principal activities were wholesale and retail trade (24.3 per cent), followed by manufacturing 17.5 per cent, hotel and restaurants 12.7 per cent, While most of those in the non-municipal areas worked in agricultural sector 54.3 per cent.

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-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	38,251.6	11,853.4	26,398.2	3,942.5	9,242.8	3,123.0	6,119.9	7,131.3	1,499.7	5,631.6	12,767.6	1,996.6	10,771.1	5,167.4	1,291.7	3,875.7
Employers	1,085.6	502.6	583.0	187.6	313.7	114.7	199.0	176.1	57.3	118.8	202.7	62.7	140.0	205.4	80.1	125.3
Government employees	3,352.2	1,561.5	1,790.7	411.6	727.6	327.0	400.6	658.3	245.4	412.8	1,106.3	399.0	707.4	448.5	178.5	270.0
Private employees	13,414.3	5,187.8	8,226.5	2,197.0	4,425.7	1,567.2	2,858.5	2,158.0	478.4	1,679.5	2,796.9	477.5	2,319.4	1,836.8	467.6	1,369.1
Own - account workers	12,272.0	3,030.4	9,241.5	828.1	2,348.4	739.9	1,608.5	2,376.6	457.2	1,919.3	5,040.4	636.9	4,403.4	1,678.6	368.3	1,310.3
Unpaid family workers	8,091.1	1,564.3	6,526.8	318.2	1,422.0	373.1	1,048.9	1,755.0	260.0	1,495.0	3,599.9	415.8	3,184.0	996.1	197.2	798.9
Members of Producers Cooperatives	36.5	6.8	29.7	-	5.5	1.0	4.5	7.4	1.1	6.2	21.5	4.6	16.9	2.1	-	2.1
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	2.8	4.2	2.2	4.8	3.4	3.7	3.3	2.5	3.8	2.1	1.6	3.1	1.3	4.0	6.2	3.2
Government employees	8.8	13.2	6.8	10.4	7.9	10.5	6.6	9.2	16.3	7.3	8.7	20.0	6.6	8.7	13.8	7.0
Private employees	35.1	43.8	31.2	55.7	47.9	50.2	46.7	30.3	31.9	29.8	21.9	23.9	21.5	35.6	36.2	35.3
Own - account workers	32.1	25.6	35.0	21.0	25.4	23.7	26.3	33.3	30.4	34.1	39.5	31.9	40.9	32.5	28.5	33.8
Unpaid family workers	21.2	13.2	24.7	8.1	15.4	12.0	17.1	24.6	17.3	26.6	28.2	20.8	29.6	19.3	15.3	20.6
Members of Producers Cooperatives	0.1	0.1	0.1	-	0.1	0.0	0.1	0.1	0.0	0.1	0.2	0.2	0.2	0.0	-	0.1

TABLE G NUMBER AND PERCENTAGE OF EMPLOYED PERSONS BY INDUSTRY, REGION AND AREA

INDUSTRY	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	38,251.6	11,853.4	26,398.2	3,942.5	9,242.8	3,123.0	6,119.9	7,131.3	1,499.8	5,631.5	12,767.3	1,996.6	10,771.1	5,167.4	1,291.7	3,875.7
Agricultural	15,448.8	1,119.4	14,329.3	48.5	2,404.1	218.5	2,185.6	3,483.7	280.3	3,203.4	7,239.3	423.3	6,816.0	2,273.2	148.8	2,124.4
1. Agriculture, hunting and forestry	14,982.8	1,027.7	13,955.1	45.0	2,211.1	176.7	2,034.4	3,455.8	274.1	3,181.7	7,161.8	412.4	6,749.4	2,109.1	119.5	1,989.6
2. Fishing	466.0	91.7	374.2	3.5	193.0	41.8	151.2	27.9	6.3	21.6	77.5	11.0	66.6	164.1	29.3	134.8
Non-Agricultural	22,802.9	10,734.0	12,068.9	3,894.0	6,838.8	2,904.5	3,934.3	3,647.7	1,219.5	2,428.2	5,527.9	1,573.2	3,955.1	2,894.2	1,142.9	1,751.3
1. Mining and quarrying	54.1	21.7	32.4	0.4	25.3	14.0	11.3	10.8	3.3	7.5	11.3	0.5	10.8	6.3	3.6	2.8
2. Manufacturing	5,221.4	2,071.1	3,150.3	823.6	2,321.7	815.2	1,506.5	669.6	160.5	509.0	987.0	158.3	828.7	419.4	113.4	306.0
3. Electricity, gas and water supply	102.1	56.7	45.4	13.6	30.6	15.7	14.9	18.3	11.3	7.0	27.2	9.9	17.3	12.5	6.3	6.2
4. Construction	2,103.6	574.2	1,529.4	158.6	555.1	162.7	392.3	475.4	79.6	395.8	610.2	96.5	513.7	304.4	76.9	227.5
5. Wholesale and retail trade, repair of motor vehicles motorcycles and personal and household goods	6,079.7	2,884.5	3,195.1	953.7	1,532.6	710.5	822.1	1,026.6	373.9	652.6	1,656.4	494.6	1,161.7	910.5	351.8	558.7
6. Hotel and restaurants	2,658.8	1,506.2	1,152.6	477.1	714.6	367.2	347.5	397.2	189.7	207.5	606.9	231.5	375.4	463.0	240.7	222.2
7. Transport, storage and communication	1,130.4	675.1	455.3	348.9	358.7	182.1	176.6	101.0	33.9	67.2	203.8	53.8	150.0	118.0	56.4	61.6
8. Financial intermediation	385.4	253.9	131.5	132.7	97.8	55.9	41.9	60.5	22.7	37.8	64.4	28.9	35.4	30.0	13.7	16.4
9. Real estate, renting and business activities	790.1	563.5	226.6	320.5	217.9	118.3	99.6	83.1	39.8	43.2	92.1	41.9	50.2	76.5	42.9	33.6
10. Public administration and defence, compulsory social security	1,316.7	611.9	704.8	169.4	275.2	138.0	137.2	249.1	83.8	165.3	445.8	147.1	298.7	177.2	73.7	103.5
11. Education	1,159.9	540.5	619.5	136.5	247.0	114.3	132.7	217.6	93.0	124.7	399.1	136.8	262.3	159.9	60.0	99.9
12. Health and social work	709.7	346.8	363.0	92.2	175.5	75.3	100.2	155.2	57.2	98.0	199.6	80.2	119.4	87.2	41.8	45.4
13. Other community, social and personal service activity	836.9	455.8	381.1	160.1	237.6	109.2	128.4	142.7	54.2	88.5	182.2	79.9	102.4	114.3	52.4	61.9
14. Private households with employed persons	230.5	150.9	79.6	88.6	44.1	23.4	20.8	40.7	16.6	24.1	42.2	13.2	28.9	14.9	9.1	5.8
15. Extra-territorial organizations and bodies	1.6	1.3	0.3	1.3	0.3	-	0.3	-	-	-	-	-	-	-	-	-
16. Unknown	21.9	19.9	2.0	16.8	4.8	2.8	2.0	-	-	-	-	0.4	-	-	-	-

TABLE G NUMBER AND PERCENTAGE OF EMPLOYED PERSONS BY INDUSTRY, REGION AND AREA (Contd.)

INDUSTRY	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.
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
Agricultural	40.4	9.4	54.3	1.2	26.0	7.0	35.7	48.9	18.7	56.9	56.7	21.2	63.3	44.0	11.5	54.8
1. Agriculture, hunting and forestry	39.2	8.7	52.9	1.1	23.9	5.7	33.2	48.5	18.3	56.5	56.1	20.7	62.7	40.8	9.3	51.3
2. Fishing	1.2	0.8	1.4	0.1	2.1	1.3	2.5	0.4	0.4	0.4	0.6	0.6	0.6	3.2	2.3	3.5
Non-Agricultural	59.6	90.6	45.7	98.7	74.0	93.0	64.3	51.2	81.3	43.1	43.3	78.8	36.7	56.0	88.5	45.2
1. Mining and quarrying	0.1	0.2	0.1	0.0	0.3	0.5	0.2	0.2	0.2	0.1	0.1	0.0	0.1	0.1	0.3	0.1
2. Manufacturing	13.7	17.5	11.9	20.9	25.1	26.1	24.6	9.4	10.7	9.0	7.7	7.9	7.7	8.1	8.8	7.9
3. Electricity, gas and water supply	0.3	0.5	0.2	0.3	0.3	0.5	0.2	0.3	0.8	0.1	0.2	0.5	0.2	0.2	0.5	0.2
4. Construction	5.5	4.8	5.8	4.0	6.0	5.2	6.4	6.7	5.3	7.0	4.8	4.8	4.8	5.9	6.0	5.9
5. Wholesale and retail trade, repair of motor vehicles motorcycles and personal and household goods	15.9	24.3	12.1	24.2	16.6	22.8	13.4	14.4	24.9	11.6	13.0	24.8	10.8	17.6	27.2	14.4
6. Hotel and restaurants	7.0	12.7	4.4	12.1	7.7	11.8	5.7	5.6	12.7	3.7	4.8	11.6	3.5	9.0	18.6	5.7
7. Transport, storage and communication	3.0	5.7	1.7	8.9	3.9	5.8	2.9	1.4	2.3	1.2	1.6	2.7	1.4	2.3	4.4	1.6
8. Financial intermediation	1.0	2.1	0.5	3.4	1.1	1.8	0.7	0.9	1.5	0.7	0.5	1.5	0.3	0.6	1.1	0.4
9. Real estate, renting and business activities	2.1	4.8	0.9	8.1	2.4	3.8	1.6	1.2	2.7	0.8	0.7	2.1	0.5	1.5	3.3	0.9
10. Public administration and defence, compulsory social security	3.4	5.2	2.7	4.3	3.0	4.4	2.2	3.5	5.6	2.9	3.5	7.4	2.8	3.4	5.7	2.7
11. Education	3.0	4.6	2.4	3.5	2.7	3.7	2.2	3.1	6.2	2.2	3.1	6.9	2.4	3.1	4.6	2.6
12. Health and social work	1.9	2.9	1.4	2.3	1.9	2.4	1.6	2.2	3.8	1.7	1.6	4.0	1.1	1.7	3.2	1.2
13. Other community, social and personal service activity	2.2	3.9	1.4	4.1	2.6	3.5	2.1	2.0	3.6	1.6	1.4	4.0	1.0	2.2	4.1	1.6
14. Private households with employed persons	0.6	1.3	0.3	2.3	0.5	0.8	0.3	0.6	1.1	0.4	0.3	0.7	0.3	0.3	0.7	0.2
15. Extra-territorial organizations and bodies	0.0	0.0	0.0	0.0	0.0	-	0.0	-	-	-	-	-	-	-	-	-
16. Unknown	0.1	0.2	0.0	0.4	0.1	0.1	0.0	-	-	-	-	0.0	-	-	-	-

Considering regional differentials, it was found that the majority of employed persons in the region were non-agricultural sector, especially the Central region 74.0 per cent, the next was the South region 56.0 per cent, North 51.2 per cent and Northeast 43.3 per cent the highest employed. For Bangkok the majority of employed person were considerably high in non-agricultural sector (98.7 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 35.8 per cent. The occupation group with the next largest number of workers was service workers and shop and market sales workers which accounted for 17.5 per cent, and craft and related trades workers about 12.9 per cent, elementary occupations workers about 11.1 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 29.2 per cent of the total employed were service workers and shop and market sales workers, 12.7 per cent were craft and same related trades workers, 11.9 per cent were elementary occupation, and 10.8 per cent were 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 48.0 per cent, followed by elementary occupations workers 13.3 per cent,

service workers and shop and market sales workers 12.2 per cent, and craftsmen and related trades workers about 10.4 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 51.2 per cent, the next was the South 42.1 per cent. The next was the North 41.3 per cent and central 21.4 percent. But in the Bangkok, service workers and shop and market sales workers constituted about 26.2 per cent of the total employed. Around 13.1 per cent were plant and machine operators and assemblers, craftsmen and related trade workers, 12.6 per cent, elementary occupation worker 12.3 per cent, technicians and associate professionals about 10.1 per cent, Professionals about 8.7 per cent, clerks about 8.6 per cent and legislator senior officials and manage about 6.9 per cent and the rest were other occupations.

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, 55.2 per cent only held some elementary level or none at all, while 29.0 per cent in secondary level, 15.5 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 (60.5 per cent and 37.4 per cent respectively). In municipal areas, 38.9 per cent of employed person had some elementary level or none at all,

TABLE H NUMBER AND PERCENTAGE OF EMPLOYED PERSONS BY OCCUPATION, REGION AND AREA

OCCUPATION	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	38,251.6	11,853.4	26,398.2	3,942.5	9,242.8	3,123.0	6,119.9	7,131.3	1,499.8	5,631.6	12,767.6	1,996.6	10,771.1	5,167.4	1,291.7	3,875.7
1. Legislator, senior officials and manage	1,064.2	542.7	521.4	273.8	280.6	121.4	159.2	150.8	43.9	106.9	258.5	59.5	199.0	100.6	44.3	56.3
2. Professionals	1,583.9	908.7	675.2	344.1	369.4	192.1	177.3	252.8	119.3	133.5	440.3	174.4	265.9	177.3	78.7	98.6
3. Technicians and associate professionals	1,520.7	912.1	608.6	398.2	546.5	257.5	289.0	184.8	77.6	107.2	227.6	98.8	128.8	163.6	79.9	83.7
4. Clerks	1,508.2	821.6	686.6	337.8	474.5	210.9	263.6	221.1	82.5	138.6	301.4	116.4	185.1	173.3	74.0	99.3
5. Service workers and shop and market sales workers	6,690.8	3,459.0	3,231.8	1,032.4	1,735.9	848.9	887.0	1,147.7	464.7	683.0	1,709.8	635.9	1,073.9	1,065.0	477.1	587.9
6. Skilled agricultural and fishery workers	13,681.6	998.8	12,682.8	51.3	1,975.8	185.3	1,790.5	2,945.7	239.2	2,706.5	6,533.6	382.3	6,151.4	2,175.2	140.7	2,034.5
7. Craftsmen and related trades workers	4,246.4	1,509.0	2,737.4	495.9	1,184.9	411.2	773.7	866.7	208.1	658.6	1,143.0	218.9	924.0	556.0	174.9	381.1
8. Plant and machine operators and assemblers	3,015.9	1,277.0	1,738.9	515.8	1,357.8	512.7	845.2	312.8	71.2	241.5	622.1	101.5	520.6	207.4	75.8	131.5
9. Elementary occupations	4,928.3	1,414.2	3,514.1	484.7	1,315.0	381.5	933.5	1,049.0	193.3	855.7	1,531.4	208.9	1,322.5	548.2	145.9	402.3
10. Workers not classifiable by occupation	11.7	10.3	1.4	8.4	2.6	1.6	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
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
1. Legislator, senior officials and manage	2.8	4.6	2.0	6.9	3.0	3.9	2.6	2.1	2.9	1.9	2.0	3.0	1.9	2.0	3.4	1.5
2. Professionals	4.1	7.7	2.6	8.7	4.0	6.2	2.9	3.5	8.0	2.4	3.5	8.7	2.5	3.4	6.1	2.5
3. Technicians and associate professionals	4.0	7.7	2.3	10.1	5.9	8.3	4.7	2.6	5.2	1.9	1.8	5.0	1.2	3.2	6.2	2.2
4. Clerks	3.9	6.9	2.6	8.6	5.1	6.8	4.3	3.1	5.5	2.5	2.4	5.8	1.7	3.4	5.7	2.6
5. Service workers and shop and market sales workers	17.5	29.2	12.2	26.2	18.8	27.2	14.5	16.1	31.0	12.1	13.4	31.9	10.0	20.6	36.9	15.2
6. Skilled agricultural and fishery workers	35.8	8.4	48.0	1.3	21.4	5.9	29.3	41.3	16.0	48.1	51.2	19.2	57.1	42.1	10.9	52.5
7. Craftsmen and related trades workers	11.1	12.7	10.4	12.6	12.8	13.2	12.6	12.2	13.9	11.7	9.0	11.0	8.6	10.8	13.5	9.8
8. Plant and machine operators and assemblers	7.9	10.8	6.6	13.1	14.7	16.4	13.8	4.4	4.8	4.3	4.9	5.1	4.8	4.0	5.9	3.4
9. Elementary occupations	12.9	11.9	13.3	12.3	14.2	12.2	15.3	14.7	12.9	15.2	12.0	10.5	12.3	10.6	11.3	10.4
10. Workers not classifiable by occupation	0.0	0.1	0.0	0.2	0.0	0.1	0.0	-	-	-	-	-	-	0.0	0.0	0.0

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	38,251.6	11,853.4	26,398.2	3,942.5	9,242.8	3,123.0	6,119.9	7,131.3	1,499.7	5,631.6	12,767.6	1,996.6	10,771.1	5,167.4	1,291.7	3,875.7
None	1,139.4	241.9	897.5	65.4	260.1	69.2	190.9	434.8	52.4	382.4	180.5	19.1	161.3	198.6	35.7	162.9
Less than Elementary	11,377.0	2,391.6	8,985.3	606.2	2,554.7	673.6	1,881.1	2,519.0	422.2	2,096.8	4,360.9	460.8	3,900.1	1,336.2	228.8	1,107.4
Elementary	8,587.8	1,982.5	6,605.3	662.4	1,855.9	518.8	1,337.1	1,375.4	206.3	1,169.1	3,503.7	369.9	3,133.9	1,190.4	225.1	965.2
Lower Secondary	5,883.9	1,831.1	4,052.8	568.2	1,598.8	556.7	1,042.0	992.9	200.6	792.3	1,845.1	282.5	1,562.6	878.9	223.0	655.9
Upper Secondary Level	5,198.4	1,935.9	3,262.5	635.6	1,359.8	528.9	830.9	883.8	227.4	656.4	1,555.3	321.1	1,234.2	764.0	222.8	541.1
General/Academic	3,848.3	1,310.8	2,537.6	406.1	941.0	355.2	585.7	677.8	162.0	515.8	1,271.3	236.2	1,035.2	552.1	151.2	400.9
Vocational	1,335.7	618.9	716.8	228.8	413.6	171.4	242.2	200.4	64.2	136.2	281.8	83.3	198.5	211.2	71.1	140.0
Teacher Training	14.5	6.3	8.1	0.7	5.2	2.3	3.0	5.7	1.2	4.4	2.1	1.6	0.5	0.7	0.5	0.2
Higher Level	5,938.0	3,402.8	2,535.2	1,375.3	1,560.2	755.6	804.5	910.3	382.9	527.4	1,320.1	542.8	777.3	772.2	346.1	426.0
Academic	3,389.3	2,215.6	1,173.7	1,073.7	870.2	468.3	401.9	474.4	215.7	258.7	593.8	278.2	315.6	377.3	179.8	197.5
Higher Technical Education	1,782.0	841.6	940.5	241.9	522.0	209.5	312.5	296.8	105.4	191.4	432.6	162.4	270.2	288.7	122.2	166.5
Teacher Training	766.7	345.7	421.0	59.7	168.0	77.9	90.1	139.1	61.7	77.4	293.8	102.3	191.5	106.2	44.1	62.0
Others ^{1/}	37.5	10.3	27.3	-	17.2	2.1	15.1	14.1	7.5	6.6	1.1	0.1	1.0	5.1	0.6	4.6
Unknown	89.6	57.3	32.3	29.4	36.2	18.0	18.2	0.9	0.1	0.8	1.0	0.3	0.7	22.1	9.6	12.6
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
None	3.0	2.0	3.4	1.7	2.8	2.2	3.1	6.1	3.5	6.8	1.4	1.0	1.5	3.8	2.8	4.2
Less than Elementary	29.7	20.2	34.0	15.4	27.6	21.6	30.7	35.3	28.1	37.2	34.2	23.1	36.2	25.9	17.7	28.6
Elementary	22.5	16.7	25.0	16.8	20.1	16.6	21.9	19.3	13.7	20.8	27.4	18.5	29.1	23.0	17.4	24.9
Lower Secondary	15.4	15.5	15.4	14.4	17.3	17.8	17.0	13.9	13.3	14.1	14.5	14.2	14.5	17.0	17.3	16.9
Upper Secondary Level	13.6	16.3	12.4	16.1	14.7	16.9	13.6	12.4	15.1	11.7	12.2	16.1	11.5	14.8	17.3	14.0
General/Academic	10.1	11.1	9.6	10.3	10.2	11.4	9.6	9.5	10.8	9.2	10.0	11.8	9.6	10.7	11.7	10.3
Vocational	3.5	5.2	2.7	5.8	4.5	5.5	4.0	2.8	4.2	2.4	2.2	4.2	1.8	4.1	5.5	3.6
Teacher Training	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0
Higher Level	15.5	28.7	9.6	34.9	16.9	24.2	13.2	12.8	25.5	9.4	10.3	27.2	7.2	14.9	26.8	11.0
Academic	8.9	18.7	4.5	27.2	9.4	15.0	6.6	6.7	14.3	4.6	4.7	13.9	2.9	7.3	13.9	5.1
Higher Technical Education	4.7	7.1	3.6	6.1	5.7	6.7	5.1	4.2	7.0	3.4	3.4	8.1	2.5	5.6	9.5	4.3
Teacher Training	2.0	2.9	1.6	1.5	1.8	2.5	1.5	2.0	4.1	1.4	2.3	5.1	1.8	2.1	3.4	1.6
Others ^{1/}	0.1	0.1	0.1	-	0.2	0.1	0.3	0.2	0.5	0.1	0.0	0.0	0.0	0.1	0.0	0.1
Unknown	0.2	0.5	0.1	0.7	0.4	0.6	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.7	0.3

1/ Including short course vocational

31.8 per cent had secondary level and 28.7 per cent had higher level, whereas the corresponding educational level for employed persons in non-municipal areas were 62.4, 27.8 and 9.6 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 about 63.0 per cent. The North shows the second highest in such level with 60.7 per cent, followed by the South with 52.7 per cent and the Central with 50.5 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, 31.8 per cent the Northeast 26.7 per cent. and the North, 26.3 per cent respectively It is also noted that at higher level of education, the Central also shows the highest percentage with 16.9 per cent, followed by the South the North and the Northeast with 14.9, 12.8 and 10.3 per cent respectively.

For Bangkok, most of employed person completed more than elementary level (65.4 per cent), especially the high rate in the higher level (34.9 per cent).

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 4 : OCTOBER-DECEMBER 2009

(Percentage)		
Labor force	Actively looking for work	Total available for work
Current labor force	0.2	1.0
Total labor force	0.2	1.0

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 1.0 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 (4.3 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.

FIGURE 5 UNEMPLOYMENT RATES BY AGE GROUP (YEARS)

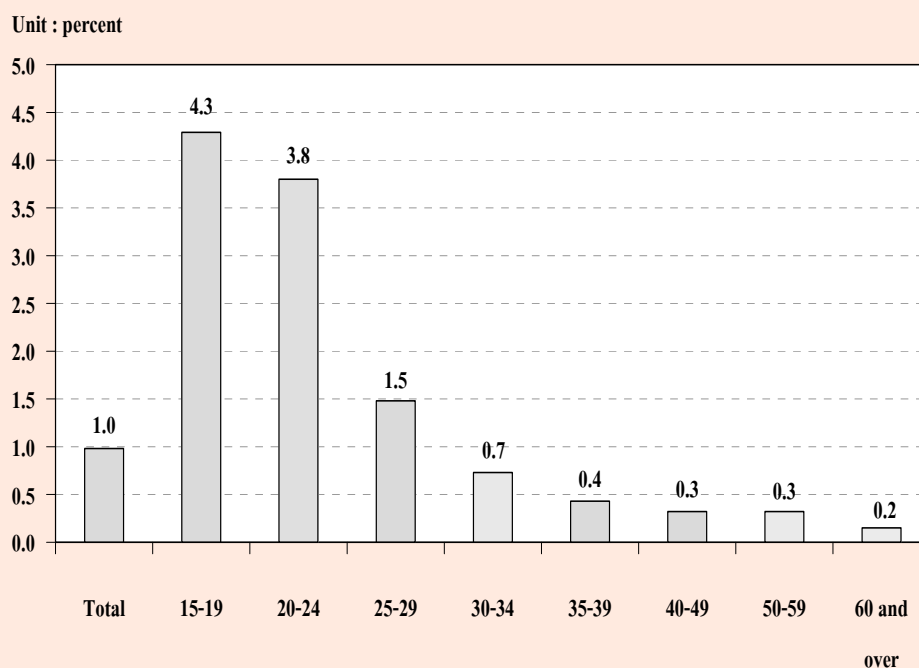


TABLE K UNEMPLOYMENT RATES BY AGE GROUP, SEX, REGION AND AREA

(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	1.0	1.1	0.9	1.0	1.1	1.1	1.1	0.7	0.9	0.7	0.8	1.1	0.8	1.5	1.9	1.4
15-19	4.3	5.8	3.9	6.9	5.5	7.3	4.8	2.7	5.6	2.1	3.6	2.7	3.7	4.8	5.5	4.6
20-24	3.8	4.4	3.6	3.7	3.8	3.5	3.9	3.4	3.6	3.4	3.2	4.9	2.9	5.7	7.4	5.2
25-29	1.5	1.9	1.3	1.5	2.0	1.9	2.0	1.1	2.0	0.8	1.2	2.2	1.0	1.8	2.7	1.5
30-34	0.7	0.9	0.6	0.9	1.0	1.1	0.9	0.6	0.5	0.6	0.5	1.0	0.4	0.8	0.8	0.8
35-39	0.4	0.5	0.4	0.5	0.4	0.4	0.4	0.4	0.1	0.5	0.3	0.4	0.2	1.0	1.0	1.0
40-49	0.3	0.4	0.3	0.4	0.3	0.4	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.4	0.7	0.3
50-59	0.3	0.4	0.3	0.6	0.3	0.4	0.3	0.3	0.3	0.3	0.2	0.1	0.2	0.4	0.3	0.4
60 and over	0.2	0.2	0.1	0.6	0.2	0.1	0.3	0.0	0.1	0.0	0.1	0.0	0.1	0.2	0.4	0.2
Male	1.0	1.2	0.9	1.0	1.2	1.2	1.2	0.6	0.9	0.5	0.8	1.2	0.7	1.7	2.1	1.6
15-19	4.5	7.0	3.8	10.0	5.4	8.8	4.0	2.1	5.9	1.3	4.1	1.9	4.3	5.3	6.6	5.0
20-24	3.3	4.7	2.9	4.2	4.2	3.5	4.5	1.9	3.3	1.6	2.2	5.1	1.8	5.8	8.2	5.1
25-29	1.5	2.2	1.2	1.6	2.0	2.1	2.0	0.8	2.0	0.5	1.0	2.2	0.8	2.5	4.1	2.0
30-34	0.7	0.7	0.7	0.4	0.9	0.7	1.0	0.5	0.6	0.5	0.7	1.5	0.6	0.8	1.0	0.7
35-39	0.4	0.4	0.4	0.6	0.4	0.2	0.4	0.4	-	0.5	0.3	0.6	0.2	0.7	0.1	1.0
40-49	0.3	0.4	0.3	0.4	0.4	0.5	0.3	0.1	0.1	0.0	0.3	0.4	0.3	0.4	0.4	0.4
50-59	0.4	0.5	0.4	0.8	0.4	0.5	0.4	0.4	0.2	0.4	0.3	0.2	0.3	0.4	0.1	0.5
60 and over	0.2	0.2	0.1	0.5	0.2	0.1	0.2	0.0	0.2	-	0.2	-	0.2	0.2	0.5	0.1
Female	1.0	1.0	0.9	0.9	1.0	1.0	1.0	1.0	0.8	1.0	0.8	0.9	0.8	1.3	1.6	1.2
15-19	4.0	4.0	3.9	3.3	5.7	4.6	6.2	4.4	4.9	4.3	2.9	3.9	2.7	3.7	3.6	3.8
20-24	4.4	4.1	4.6	3.3	3.2	3.4	3.0	5.6	3.9	6.0	4.4	4.5	4.4	5.6	6.3	5.4
25-29	1.5	1.6	1.4	1.4	2.0	1.6	2.1	1.4	2.0	1.3	1.4	2.1	1.2	0.9	1.1	0.8
30-34	0.8	1.1	0.6	1.4	1.0	1.4	0.8	0.6	0.4	0.7	0.3	0.4	0.2	0.8	0.5	0.8
35-39	0.5	0.5	0.4	0.4	0.4	0.5	0.3	0.4	0.2	0.5	0.2	0.2	0.3	1.3	1.9	1.0
40-49	0.3	0.4	0.3	0.4	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	1.1	0.2
50-59	0.2	0.3	0.2	0.3	0.3	0.4	0.2	0.3	0.4	0.2	0.1	-	0.1	0.4	0.6	0.4
60 and over	0.1	0.2	0.1	0.7	0.2	0.1	0.3	0.1	-	0.1	0.0	0.1	-	0.2	0.2	0.2

Considered unemployment rate by sex, it was found that, unemployment rate of male and female show equally was (1.0 per cent) The unemployment rate in municipal and higher than non-municipal area (1.1 per cent and 0.9 per cent respectively). If the regions were taken into account, the rate of unemployment in the South show highest percentage with 1.5 per cent, Followed Central 1.1 per cent, Bangkok 1.0 per cent, Northeast 0.8 per cent and North 0.7 per cent respectively.

Considering on levels of educational attainment of the unemployed person (Table L), it was found that the unemployment rate of persons attained higher level (academic and technical), upper secondary (vocational and

academic) and lower secondary level were rather high.

FIGURE 6 UNEMPLOYMENT RATES BY LEVEL OF EDUCATIONAL ATTAINMENT

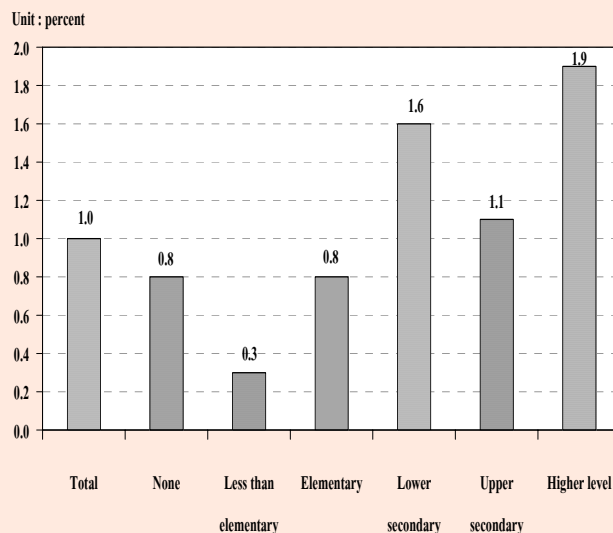


TABLE L UNEMPLOYMENT RATES BY LEVEL OF EDUCATIONAL ATTAINMENT, SEX AND AREA

(Percentage)												
Area and sex	Level of educational attainment											
	Total	None	Less than elementary	Elementary	Lower secondary	Upper secondary level			Higher level			Others ^{1/} and unknown
						General/academic	Vocational	Teacher training	Academic	Higher technical education	Teacher training	
Total	1.0	0.8	0.3	0.8	1.6	0.9	1.4	4.0	2.3	1.8	0.3	0.4
Male	1.0	1.1	0.4	0.9	1.7	0.8	1.3	9.9	1.9	1.8	0.4	-
Female	1.0	0.6	0.2	0.7	1.5	1.1	1.6	-	2.7	1.9	0.2	1.0
M.A.	1.1	1.4	0.4	0.8	1.8	1.0	1.1	8.7	1.6	1.5	0.2	0.7
Male	1.2	1.7	0.6	0.9	2.0	1.0	1.0	14.7	1.5	1.6	0.5	-
Female	1.0	1.1	0.3	0.6	1.5	1.0	1.3	-	1.7	1.3	0.1	1.5
Non-M.A.	0.9	0.7	0.3	0.8	1.5	0.9	1.7	-	3.6	2.1	0.3	-
Male	0.9	1.0	0.3	0.9	1.5	0.8	1.5	-	2.7	1.9	0.3	-
Female	0.9	0.4	0.2	0.7	1.6	1.1	1.9	-	4.3	2.4	0.4	-

^{1/} Including short course vocational

5. Characteristics of the unemployed labor force

Table M illustrates that the unemployed persons were largely males, 55.1 per cent whereas the corresponding percentage for females was 44.9 per cent. The percentage of unemployed male

were about 56.6 and 45.4 per cent of the total unemployed in the municipal area and non-municipal area respectively which was higher than the female about 54.3 per cent and 45.7 per cent.

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

Level of educational attainment													
Area and sex	Total	None	Less	Elemen-	Lower	Upper secondary level			Higher level			Others	
			than	tary	secon-	General/	Voca-	Teacher	Academic	Higher	Teacher		
			elemen-	dary	academic	tional	training		technical	training	unknown		
			tary						education				
Number ('000)													
Total	380.9	9.3	34.1	68.1	97.0	36.0	19.2	0.6	80.6	33.2	2.2	0.4	
Male	209.9	5.5	21.4	42.9	61.8	18.9	11.0	0.6	28.8	18.0	1.1	-	
Female	171.0	3.8	12.7	25.3	35.2	17.1	8.3	-	51.8	15.2	1.2	0.4	
Municipal areas	133.6	3.3	10.7	15.3	33.4	13.2	7.1	0.6	36.3	12.6	0.8	0.4	
Male	75.5	1.7	6.5	10.2	22.3	7.3	3.8	0.6	15.4	7.2	0.6	-	
Female	58.0	1.6	4.2	5.1	11.1	5.8	3.2	-	20.9	5.5	0.2	0.4	
Non-municipal areas	247.3	6.0	23.4	52.9	63.7	22.9	12.2	-	44.3	20.6	1.4	-	
Male	134.4	3.8	14.9	32.7	39.5	11.6	7.1	-	13.4	10.9	0.5	-	
Female	113.0	2.2	8.5	20.2	24.1	11.3	5.0	-	30.9	9.7	1.0	-	
Percentage													
Total	100.0	2.4	9.0	17.9	25.5	9.5	5.0	0.2	21.2	8.7	0.6	0.1	
Male	100.0	2.6	10.2	20.4	29.4	9.0	5.2	0.3	13.7	8.6	0.5	-	
Female	100.0	2.2	7.4	14.8	20.6	10.0	4.8	-	30.3	8.9	0.7	0.2	
Municipal areas	100.0	2.5	8.0	11.5	25.0	9.9	5.3	0.5	27.2	9.5	0.6	0.3	
Male	100.0	2.2	8.6	13.5	29.5	9.7	5.1	0.8	20.4	9.5	0.8	-	
Female	100.0	2.8	7.2	8.8	19.1	10.1	5.5	-	36.0	9.5	0.3	0.7	
Non-municipal areas	100.0	2.4	9.5	21.4	25.7	9.2	4.9	-	17.9	8.3	0.6	-	
Male	100.0	2.8	11.1	24.3	29.4	8.6	5.3	-	10.0	8.1	0.4	-	
Female	100.0	2.0	7.5	17.9	21.4	10.0	4.5	-	27.4	8.6	0.9	-	

^{1/} Including short course vocational

The majority of the unemployed persons show with 64.9 per cent were in the non-municipal areas because these areas constituted a larger part of the total labor force. About 64.0 per cent of the total unemployed males were in the non-municipal

areas while it was 66.1 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 (29.3 per cent) of the total unemployed, the secondary level (48.2 per cent) and higher level (22.4 per cent). In the non-municipal areas they accounted higher than the municipal areas for elementary and none (33.3 per cent compared with 22.0 per cent). While in the municipal areas, they accounted higher than non-municipal area for higher level (28.6 per cent compared with 19.0 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 36.6 per cent of the employed persons worked 50 hours or more per week. About 46.9 per cent of employed persons worked 35-49 hours per week. On the other word, about 83.5 per cent of employed person worked 35 hours or more per week and they might be classified as fully employed. About 15.6 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 1.0 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 (in thousands)	Percentage	Number (in thousands)	Percentage (as compared to employed)
Total	38,251.6	100.0	974.8	2.6
0 hours	378.9	1.0	66.5	17.6
1 - 9 hours	395.8	1.0	105.2	26.6
10 - 19 hours	1,263.4	3.3	150.3	11.9
20 - 29 hours	2,712.3	7.1	214.8	7.9
30 - 34 hours	1,590.6	4.2	89.1	5.6
35 - 39 hours	3,703.1	9.7	89.9	2.4
40 - 49 hours	14,216.9	37.2	175.1	1.2
50 hours and over	13,990.6	36.6	83.9	0.6

The percentage of employed persons who were available for additional work, which is also an indicator for under-employment, accounted for about 2.6 per cent. Of the employed persons who worked less than 35 hours per week, 9.4 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 37.8 per cent of 16.8 million employees had monthly wage or salary of Baht 2,501-5,500, around 31.9 per cent had monthly wage or salary of Baht 5,501-10,000, about 20.7 percent had over Baht 10,000 per month and about 9.2 per cent received less than Baht 2,500 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 27.1 per cent of employees in the municipal areas received monthly wage or salary of below Baht 5,500 whereas the corresponding figure in the non-municipal areas was 60.4 per cent. Around 72.4 per cent of employees in the municipal areas earned more than Baht 5,500 compared with 39.2 per cent in the non-municipal areas. Moreover, about 33.9 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 11.8 per cent.

FIGURE 7 PERCENTAGE OF EMPLOYEES BY WAGE / SALARY

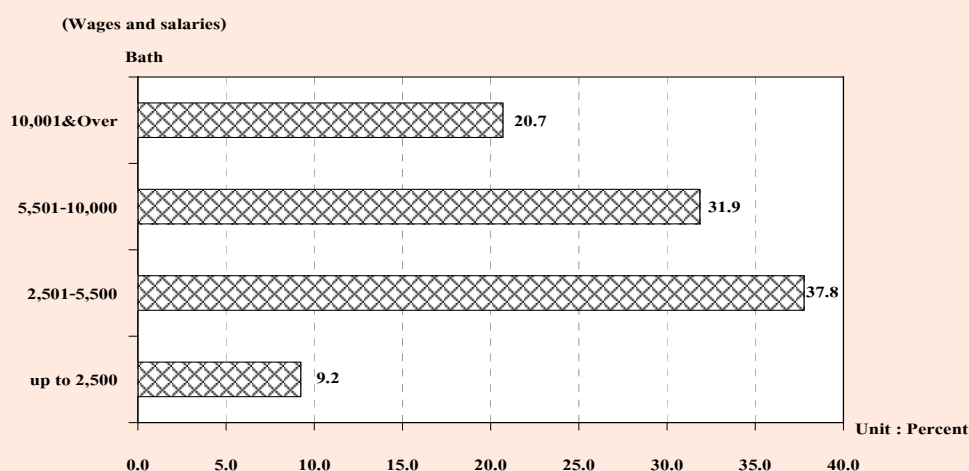


TABLE O NUMBER AND PERCENTAGE OF EMPLOYEES BY WAGE/SALARY, SEX AND AREA

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	16,766.5	3,352.2	13,414.3	6,749.3	1,561.5	5,187.8	10,017.2	1,790.7	8,226.5
Up to 2,500	1,549.0	55.3	1,493.7	197.2	7.5	189.7	1,351.9	47.9	1,304.0
2,501-5,500	6,333.3	470.3	5,863.0	1,633.9	114.2	1,519.7	4,699.4	356.1	4,343.3
5,501-10,000	5,341.7	1,064.7	4,277.0	2,595.6	429.2	2,166.4	2,746.1	635.5	2,110.6
10,001 & Over	3,471.1	1,749.2	1,722.0	2,286.9	1,000.4	1,286.5	1,184.3	748.8	435.5
Unknown	71.4	12.7	58.7	35.8	10.3	25.5	35.6	2.4	33.2
Male	9,259.2	1,781.7	7,477.5	3,528.8	812.9	2,715.9	5,730.3	968.8	4,761.6
Up to 2,500	738.1	34.2	703.9	86.8	4.3	82.5	651.3	29.9	621.4
2,501-5,500	3,471.6	287.0	3,184.6	786.5	63.2	723.3	2,685.1	223.8	2,461.3
5,501-10,000	3,087.7	524.7	2,563.0	1,407.9	221.1	1,186.8	1,679.8	303.6	1,376.1
10,001 & Over	1,913.9	928.0	985.9	1,226.7	518.8	707.9	687.2	409.2	278.0
Unknown	47.9	7.8	40.1	21.0	5.6	15.4	27.0	2.2	24.8
Female	7,507.4	1,570.5	5,936.8	3,220.5	748.6	2,471.9	4,286.9	821.9	3,464.9
Up to 2,500	810.9	21.1	789.8	110.4	3.2	107.2	700.5	17.9	682.6
2,501-5,500	2,861.6	183.3	2,678.3	847.3	51.0	796.4	2,014.3	132.3	1,882.0
5,501-10,000	2,254.1	540.0	1,714.1	1,187.7	208.1	979.6	1,066.4	331.9	734.5
10,001 & Over	1,557.3	821.2	736.1	1,060.2	481.6	578.6	497.1	339.6	157.5
Unknown	23.5	4.9	18.6	14.9	4.7	10.2	8.6	0.2	8.4
Percentage									
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Up to 2,500	9.2	1.7	11.1	2.9	0.5	3.7	13.5	2.7	15.9
2,501-5,500	37.8	14.0	43.7	24.2	7.3	29.3	46.9	19.9	52.8
5,501-10,000	31.9	31.8	31.9	38.5	27.5	41.8	27.4	35.5	25.7
10,001 & Over	20.7	52.2	12.8	33.9	64.1	24.8	11.8	41.8	5.3
Unknown	0.4	0.4	0.4	0.5	0.7	0.5	0.4	0.1	0.4
Male	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Up to 2,500	8.0	1.9	9.4	2.5	0.5	3.0	11.4	3.1	13.1
2,501-5,500	37.5	16.1	42.6	22.3	7.8	26.6	46.9	23.1	51.7
5,501-10,000	33.4	29.5	34.3	39.9	27.2	43.7	29.3	31.3	28.9
10,001 & Over	20.7	52.1	13.2	34.8	63.8	26.1	12.0	42.2	5.8
Unknown	0.5	0.4	0.5	0.6	0.7	0.6	0.5	0.2	0.5
Female	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Up to 2,500	10.8	1.4	13.3	3.4	0.4	4.3	16.3	2.2	19.7
2,501-5,500	38.1	11.7	45.1	26.3	6.8	32.2	47.0	16.1	54.3
5,501-10,000	30.0	34.4	28.9	36.9	27.8	39.6	24.9	40.4	21.2
10,001 & Over	20.7	52.3	12.4	32.9	64.3	23.4	11.6	41.3	4.6
Unknown	0.3	0.3	0.3	0.5	0.6	0.4	0.2	0.0	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 54.8 per cent of the private employees earned less than Baht 5,501 a month as compared with 15.7 per cent of the government employees. On the other hand, the government employees who received over Baht 5,500 per month accounted for about 84.0 per cent of the

total government employees while the private employees only accounted for 44.7 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	5,501.3	95.7	1,623.0	2,728.9	1,601.3	105.7	745.4	562.3
		(1.7)	(29.5)	(49.6)	(29.1)	(1.9)	(13.6)	(10.2)
Male	2,886.8	53.7	796.5	1,439.2	763.5	51.5	461.0	253.7
		(1.9)	(27.6)	(49.9)	(26.4)	(1.8)	(16.0)	(8.8)
Female	2,614.5	42.0	826.4	1,289.7	837.8	54.2	284.4	308.6
		(1.6)	(31.6)	(49.3)	(32.0)	(2.1)	(10.9)	(11.8)
Private sector	4,093.9	44.1	1,395.3	1,595.0	1,573.8	95.3	539.6	534.7
		(1.1)	(34.1)	(39.0)	(38.4)	(2.3)	(13.2)	(13.1)
Male	2,145.0	25.0	706.2	831.9	753.8	44.1	321.1	237.3
		(1.2)	(32.9)	(38.8)	(35.1)	(2.1)	(15.0)	(11.1)
Female	1,949.0	19.1	689.1	763.1	820.0	51.2	218.5	297.5
		(1.0)	(35.4)	(39.2)	(42.1)	(2.6)	(11.2)	(15.3)
Government sector	1,407.4	51.7	227.6	1,134.0	27.5	10.4	205.8	27.5
		(3.7)	(16.2)	(80.6)	(2.0)	(0.7)	(14.6)	(2.0)
Male	741.8	28.7	90.3	607.3	9.7	7.4	139.9	16.4
		(3.9)	(12.2)	(81.9)	(1.3)	(1.0)	(18.9)	(2.2)
Female	665.5	23.0	137.3	526.6	17.7	2.9	65.9	11.2
		(3.4)	(20.6)	(79.1)	(2.7)	(0.4)	(9.9)	(1.7)

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

(In thousands)								
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	1,670.9	17.4	573.2	709.9	603.3	41.2	290.7	181.1
		(1.0)	(34.3)	(42.5)	(36.1)	(2.5)	(17.4)	(10.8)
Male	843.3	9.6	302.5	369.0	248.8	18.1	143.3	81.8
		(1.1)	(35.9)	(43.8)	(29.5)	(2.1)	(17.0)	(9.7)
Female	827.6	7.8	270.7	340.9	354.5	23.2	147.4	99.3
		(0.9)	(32.7)	(41.2)	(42.8)	(2.8)	(17.8)	(12.0)
Non-municipal areas	2,423.0	26.7	822.2	885.1	970.6	54.1	248.9	353.6
		(1.1)	(33.9)	(36.5)	(40.1)	(2.2)	(10.3)	(14.6)
Male	1,301.6	15.4	403.7	462.9	505.0	26.0	177.8	155.5
		(1.2)	(31.0)	(35.6)	(38.8)	(2.0)	(13.7)	(11.9)
Female	1,121.4	11.3	418.5	422.2	465.6	28.1	71.1	198.1
		(1.0)	(37.3)	(37.6)	(41.5)	(2.5)	(6.3)	(17.7)
Government sector								
Municipal areas	678.6	20.7	138.0	523.1	11.1	3.8	140.9	18.9
		(3.1)	(20.3)	(77.1)	(1.6)	(0.6)	(20.8)	(2.8)
Male	363.2	11.2	64.0	284.5	3.3	2.3	99.6	10.6
		(3.1)	(17.6)	(78.3)	(0.9)	(0.6)	(27.4)	(2.9)
Female	315.4	9.5	74.0	238.6	7.9	1.5	41.4	8.3
		(3.0)	(23.5)	(75.6)	(2.5)	(0.5)	(13.1)	(2.6)
Non-municipal areas	728.8	31.0	89.6	610.9	16.3	6.6	64.9	8.7
		(4.2)	(12.3)	(83.8)	(2.2)	(0.9)	(8.9)	(1.2)
Male	378.6	17.5	26.3	322.8	6.5	5.1	40.3	5.8
		(4.6)	(7.0)	(85.3)	(1.7)	(1.4)	(10.7)	(1.5)
Female	350.2	13.5	63.3	288.1	9.8	1.5	24.5	2.8
		(3.8)	(18.1)	(82.3)	(2.8)	(0.4)	(7.0)	(0.8)

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

Certain types of supplementary benefits such as overtime, clothing and food supplies seem to be more common in the private sector than in the government sector. Other cash, housing and bonus 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 overtime, other cash, clothing and housing than those in the non-municipal areas, for instance, about 42.5 per cent for other cash, 34.3 per cent for overtime 17.4 per cent for housing, and 2.5 per cent for clothing.

The private employees in non-municipal area received more supplementary benefits such

as, food supplies and bonus than those in the municipal area or about 40.1 per cent for food supplies and 1.1 per cent for bonus. The government employees in the municipal area received more supplementary benefits such as housing and overtime than those in the non-municipal area. For instance about 20.8 and 20.3 per cent respectively. The government employees in the non-municipal area received more supplementary benefits, such as other cash, bonus, food supplies and clothing than those in the municipal area or about 83.8, 4.2 , 2.2 and 0.9 per cent respectively.

APPENDIX A

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 number 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 / Stratum	Total	Municipal Areas	Non - Municipal Areas
Bangkok Metropolis	312	312	-
Central (Excluding Bangkok Metropolis)	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 and type of economic 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 / Stratum	Total	Municipal Areas	Non - Municipal Areas
Bangkok Metropolis	4,680	4,680	-
Central (Excluding Bangkok Metropolis)	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

2. Method of estimation

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

$$\begin{aligned} \text{Let } g &= 1, 2, 3, \dots, 20 && (\text{age - sex group}) \\ k &= 1, 2, 3, \dots, m_{hij} && (\text{sample block / village}) \\ j &= 1, 2 && (\text{type of local administration}) \\ i &= 1, 2, 3, \dots, A_h && (\text{province}) \\ h &= 1, 2, 3, 4, 5 && (\text{region}) \end{aligned}$$

Estimate of the total number of persons with characteristic X

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

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

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

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

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

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

^{1/} Population Projections for Thailand 2000 - 2030, National Economic and Social Development Board, The Tenth National Economic and Social Development Planning, October 2007.

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

$$i) \quad x'_{hijg} = \frac{1}{m_{hij}} \sum_{k=1}^{m_{hij}} \frac{1}{P_{hijk}} \frac{N_{hijk}}{n_{hijk}} x_{hijk} \quad \dots\dots\dots (2)$$

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

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

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

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

m_{hij} is the total number of sample blocks / villages in the j^{th} area, i^{th} province, h^{th} region.

$$ii) \quad y'_{hijg} = \frac{1}{m_{hij}} \sum_{k=1}^{m_{hij}} \frac{1}{P_{hijk}} \frac{N_{hijk}}{n_{hijk}} y_{hijk} \quad \dots\dots\dots (3)$$

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

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

$$x''_{hij} = \sum_{g=1}^{20} x''_{hijg} \quad \dots\dots\dots (4)$$

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

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

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

$$x''_{hi} = \sum_{j=1}^2 x''_{hij} = \sum_{g=1}^{20} x''_{hig} \dots\dots\dots (6)$$

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

$$x''_{h j g} = \sum_{i=1}^{A_h} x''_{h i j g} \dots\dots\dots (7)$$

where A_h is the total number of provinces in the h^{th} 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 :

$$x''_{hj} = \sum_{i=1}^{A_h} x''_{hij} = \sum_{g=1}^{20} x''_{h j g} \dots\dots\dots (8)$$

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

$$x''_{hg} = \sum_{i=1}^{A_h} x''_{hig} = \sum_{j=1}^2 x''_{h j g} \dots\dots\dots (9)$$

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

$$x_h'' = \sum_{i=1}^{A_h} x_{hi}'' = \sum_{j=1}^2 x_{hj}'' = \sum_{g=1}^{20} x_{hg}'' \quad \dots\dots\dots (10)$$

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

$$x_j'' = \sum_{h=1}^5 x_{hj}'' \quad \dots\dots\dots (11)$$

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

$$x_g'' = \sum_{h=1}^5 x_{hg}'' \quad \dots\dots\dots (12)$$

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

$$x'' = \sum_{h=1}^5 x_h'' = \sum_{j=1}^2 x_j'' = \sum_{g=1}^{20} x_g'' \quad \dots\dots\dots (13)$$

Estimate of Variance of the Total Number of Persons with Characteristic X

1. The estimate variance of x_{hijg}'' was

$$\hat{V}(x_{hijg}'') = \left[\frac{Y_{hijg}}{y_{hijg}'} \right]^2 \frac{m_{hij}}{m_{hij} - 1} \sum_{k=1}^{m_{hij}} z_{hijkg}^2 \quad \dots\dots\dots (14)$$

where

$$z_{hijkg} = \bar{x}_{hijkg}' - r_{hijg} \bar{y}_{hijkg}'$$

$$\bar{x}_{hijkg}' = \frac{1}{m_{hij}} \frac{1}{P_{hijk}} \frac{N_{hijk}}{n_{hijk}} x_{hijkg}$$

$$\bar{y}'_{hijk} = \frac{1}{m_{hij}} \frac{1}{P_{hijk}} \frac{N_{hijk}}{n_{hijk}} y_{hijk}$$

2. The estimate variance of x''_{hij} was

$$\hat{V}(x''_{hij}) = \sum_{g=1}^{20} \hat{V}(x''_{hijg}) \dots\dots\dots (15)$$

3. The estimate variance of x''_{hig} was

$$\hat{V}(x''_{hig}) = \sum_{j=1}^2 \hat{V}(x''_{hijg}) \dots\dots\dots (16)$$

4. The estimate variance of x''_{hi} was

$$\hat{V}(x''_{hi}) = \sum_{j=1}^2 \hat{V}(x''_{hij}) = \sum_{g=1}^{20} \hat{V}(x''_{hig}) \dots\dots\dots (17)$$

5. The estimate variance of $x''_{h jg}$ was

$$\hat{V}(x''_{h jg}) = \sum_{i=1}^{A_h} \hat{V}(x''_{hijg}) \dots\dots\dots (18)$$

6. The estimate variance of x''_{hj} was

$$\hat{V}(x''_{hj}) = \sum_{i=1}^{A_h} \hat{V}(x''_{hij}) = \sum_{g=1}^{20} \hat{V}(x''_{h jg}) \dots\dots\dots (19)$$

7. The estimate variance of x''_{hg} was

$$\hat{V}(x''_{hg}) = \sum_{i=1}^{A_h} \hat{V}(x''_{hig}) = \sum_{j=1}^2 \hat{V}(x''_{h jg}) \dots\dots\dots (20)$$

8. The estimate variance of x''_h was

$$\hat{V}(x''_h) = \sum_{i=1}^{A_h} \hat{V}(x''_{hi}) = \sum_{j=1}^2 \hat{V}(x''_{hj}) = \sum_{g=1}^{20} \hat{V}(x''_{hg}) \dots\dots\dots (21)$$

9. The estimate variance of x_j'' was

$$\hat{V}(x_j'') = \sum_{h=1}^5 \hat{V}(x_{hj}'') \dots\dots\dots (22)$$

10. The estimate variance of x_g'' was

$$\hat{V}(x_g'') = \sum_{h=1}^5 \hat{V}(x_{hg}'') \dots\dots\dots (23)$$

11. The estimate variance of x'' was

$$\hat{V}(x'') = \sum_{h=1}^5 \hat{V}(x_h'') = \sum_{j=1}^2 \hat{V}(x_j'') = \sum_{g=1}^{20} \hat{V}(x_g'') \dots\dots\dots (24)$$

Estimate of Coefficient of Variation of the Total Number of Persons with Characteristic X

1. The estimate coefficient of variation of x_{hijg}'' was

$$cv(x_{hijg}'') = \frac{\sqrt{\hat{V}(x_{hijg}'')}}{x_{hijg}''} \times 100\% \dots\dots\dots (25)$$

2. The estimate coefficient of variation of x_{hij}'' was

$$cv(x_{hij}'') = \frac{\sqrt{\hat{V}(x_{hij}'')}}{x_{hij}''} \times 100\% \dots\dots\dots (26)$$

3. The estimate coefficient of variation of x_{hig}'' was

$$cv(x_{hig}'') = \frac{\sqrt{\hat{V}(x_{hig}'')}}{x_{hig}''} \times 100\% \dots\dots\dots (27)$$

4. The estimate coefficient of variation of x''_{hi} was

$$cv(x''_{hi}) = \frac{\sqrt{\hat{V}(x''_{hi})}}{x''_{hi}} \times 100\% \quad \dots\dots\dots (28)$$

5. The estimate coefficient of variation of $x''_{h j g}$ was

$$cv(x''_{h j g}) = \frac{\sqrt{\hat{V}(x''_{h j g})}}{x''_{h j g}} \times 100\% \quad \dots\dots\dots (29)$$

6. The estimate coefficient of variation of $x''_{h j}$ was

$$cv(x''_{h j}) = \frac{\sqrt{\hat{V}(x''_{h j})}}{x''_{h j}} \times 100\% \quad \dots\dots\dots (30)$$

7. The estimate coefficient of variation of $x''_{h g}$ was

$$cv(x''_{h g}) = \frac{\sqrt{\hat{V}(x''_{h g})}}{x''_{h g}} \times 100\% \quad \dots\dots\dots (31)$$

8. The estimate coefficient of variation of x''_h was

$$cv(x''_h) = \frac{\sqrt{\hat{V}(x''_h)}}{x''_h} \times 100\% \quad \dots\dots\dots (32)$$

9. The estimate coefficient of variation of x''_j was

$$cv(x''_j) = \frac{\sqrt{\hat{V}(x''_j)}}{x''_j} \times 100\% \quad \dots\dots\dots (33)$$

10. The estimate coefficient of variation of x''_g was

$$cv(x''_g) = \frac{\sqrt{\hat{V}(x''_g)}}{x''_g} \times 100\% \quad \dots\dots\dots (34)$$

11. The estimate coefficient of variation of x'' was

$$cv(x'') = \frac{\sqrt{\hat{V}(x'')}}{x''} \times 100\% \quad \dots\dots\dots (35)$$

3. Data Collection

Labor force information for this survey quarterly which was conducted during the 1st-12th of October-December 2009 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. Fourty 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.

Coefficient of Variation (CV) of the Total Number of Persons by Labor force status, Age group and areas

Whole kingdom

Whole kingdom	Age group	C.V.%								
		Total labor force			Employed			Unemployed		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	Total	0.18	0.20	0.32	0.19	0.21	0.33	4.57	6.05	6.97
	15-17	3.05	3.60	5.64	3.15	3.73	5.85	15.61	18.63	*
	18-19	2.50	2.98	4.49	2.61	3.14	4.62	15.38	19.67	*
	20-24	0.94	1.06	1.68	1.01	1.15	1.81	8.52	11.09	12.96
	25-29	0.51	0.45	0.99	0.55	0.54	1.02	10.06	13.35	15.30
	30-34	0.39	0.38	0.71	0.41	0.42	0.74	13.26	19.52	17.85
	35-39	0.34	0.27	0.64	0.35	0.29	0.65	16.41	*	*
	40-49	0.24	0.20	0.46	0.26	0.24	0.47	15.17	*	19.61
	50-59	0.36	0.31	0.70	0.37	0.34	0.72	16.63	*	*
	60 and over	0.96	1.16	1.65	0.97	1.16	1.65	*	*	*
Municipal areas										
	Total	0.24	0.27	0.41	0.25	0.28	0.42	5.17	6.93	7.76
	15-17	4.71	5.57	8.48	4.88	5.79	8.69	*	*	*
	18-19	3.29	3.99	5.63	3.48	4.30	5.81	15.98	18.79	*
	20-24	1.35	1.77	2.06	1.40	1.87	2.12	9.25	12.59	13.62
	25-29	0.51	0.55	0.88	0.56	0.65	0.93	11.18	15.14	16.40
	30-34	0.51	0.44	0.94	0.53	0.47	0.98	15.99	*	*
	35-39	0.49	0.34	0.93	0.50	0.37	0.94	*	*	*
	40-49	0.39	0.30	0.73	0.39	0.31	0.74	17.70	*	*
	50-59	0.60	0.61	1.10	0.61	0.62	1.10	*	*	*
	60 and over	1.64	2.17	2.53	1.65	2.18	2.54	*	*	*
Non-municipal areas										
	Total	0.24	0.26	0.43	0.25	0.28	0.44	6.46	8.62	9.77
	15-17	3.62	4.24	6.87	3.75	4.37	7.16	19.28	*	*
	18-19	3.12	3.67	5.75	3.25	3.84	5.91	*	*	*
	20-24	1.18	1.27	2.21	1.27	1.38	2.39	11.47	15.38	16.87
	25-29	0.71	0.59	1.44	0.76	0.71	1.48	15.27	*	*
	30-34	0.53	0.54	0.98	0.57	0.59	1.03	*	*	*
	35-39	0.45	0.37	0.85	0.46	0.40	0.87	*	*	*
	40-49	0.31	0.26	0.59	0.33	0.32	0.61	*	*	*
	50-59	0.45	0.37	0.88	0.47	0.40	0.91	*	*	*
	60 and over	1.16	1.36	2.03	1.16	1.36	2.03	*	*	*

Remark : * C.V.more than 20%

Coefficient of Variation (CV) of the Total Number of Persons by Labor force status, Age group

Bangkok Metropolis

Bangkok	Age group	C.V.%								
		Total labor force			Employed			Unemployed		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
	รวม	0.55	0.60	0.94	0.56	0.61	0.96	11.76	16.00	17.32
	15-17	13.82	16.48	*	14.28	16.91	*	*	*	*
	18-19	10.09	12.92	15.73	10.77	14.24	16.18	*	*	*
	20-24	3.52	4.84	5.11	3.64	5.06	5.22	*	*	*
	25-29	1.09	1.33	1.70	1.16	1.47	1.77	*	*	*
	30-34	1.09	0.94	1.92	1.14	0.96	2.02	*	*	*
	35-39	1.07	0.74	1.98	1.08	0.79	1.99	*	*	*
	40-49	0.92	0.59	1.78	0.93	0.62	1.79	*	*	*
	50-59	1.54	1.56	2.84	1.55	1.58	2.84	*	*	*
	60 and over	5.13	6.52	8.30	5.17	6.57	8.35	*	*	*

Remark : * C.V.more than 20%

Coefficient of Variation (CV) of the Total Number of Persons by Labor force status, Age group and areas

Central Region

Central Region	Age group	C.V.%								
		Total labor force			Employed			Unemployed		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	Total	0.27	0.30	0.48	0.28	0.32	0.49	6.61	8.92	9.79
	15-17	5.05	5.91	9.34	5.26	6.19	9.66	*	*	*
	18-19	3.35	4.06	5.82	3.57	4.37	6.13	17.73	*	*
	20-24	1.28	1.50	2.19	1.38	1.68	2.31	11.99	16.12	17.24
	25-29	0.64	0.58	1.20	0.72	0.75	1.28	16.25	*	*
	30-34	0.51	0.48	0.94	0.54	0.54	0.98	19.10	*	*
	35-39	0.56	0.47	1.05	0.57	0.50	1.06	*	*	*
	40-49	0.41	0.36	0.76	0.42	0.38	0.78	*	*	*
	50-59	0.69	0.67	1.26	0.70	0.68	1.28	*	*	*
	60 and over	1.71	2.07	2.87	1.70	2.07	2.85	*	*	*
Municipal areas										
	Total	0.39	0.44	0.67	0.40	0.46	0.68	8.42	11.42	12.40
	15-17	7.62	9.54	12.68	8.01	10.07	13.21	*	*	*
	18-19	4.76	5.72	8.44	5.10	6.36	8.48	*	*	*
	20-24	1.96	2.64	2.93	2.04	2.76	3.03	14.46	*	*
	25-29	0.92	0.79	1.70	1.00	1.02	1.76	*	*	*
	30-34	0.67	0.67	1.20	0.71	0.71	1.27	*	*	*
	35-39	0.82	0.55	1.62	0.85	0.63	1.63	*	*	*
	40-49	0.66	0.69	1.15	0.67	0.72	1.15	*	*	*
	50-59	0.98	0.83	1.88	0.99	0.86	1.91	*	*	*
	60 and over	2.63	3.47	4.01	2.63	3.47	4.01	*	*	*
Non-municipal areas										
	Total	0.36	0.40	0.64	0.38	0.43	0.66	9.05	12.12	13.52
	15-17	6.34	7.30	12.02	6.59	7.63	12.34	*	*	*
	18-19	4.31	5.25	7.41	4.58	5.56	7.93	*	*	*
	20-24	1.64	1.82	2.97	1.79	2.08	3.14	15.85	*	*
	25-29	0.86	0.79	1.62	0.97	1.01	1.74	*	*	*
	30-34	0.70	0.64	1.32	0.75	0.75	1.37	*	*	*
	35-39	0.74	0.66	1.37	0.76	0.70	1.39	*	*	*
	40-49	0.52	0.41	0.99	0.54	0.44	1.03	*	*	*
	50-59	0.91	0.92	1.65	0.92	0.93	1.67	*	*	*
	60 and over	2.13	2.51	3.71	2.12	2.51	3.69	*	*	*

Remark : * C.V.more than 20%

Coefficient of Variation (CV) of the Total Number of Persons by Labor force status, Age group and areas

Northern Region

Northern Region	Age group	C.V.%								
		Total labor force			Employed			Unemployed		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	Total	0.40	0.45	0.69	0.41	0.46	0.71	11.88	17.11	16.21
	15-17	7.87	9.28	14.86	8.08	9.50	15.36	*	*	*
	18-19	5.82	5.71	14.56	6.00	5.88	15.20	*	*	*
	20-24	2.20	2.48	3.97	2.35	2.64	4.29	*	*	*
	25-29	1.17	0.75	2.54	1.23	0.90	2.58	*	*	*
	30-34	0.86	0.94	1.51	0.89	0.99	1.54	*	*	*
	35-39	0.83	0.85	1.47	0.86	0.89	1.50	*	*	*
	40-49	0.51	0.42	0.96	0.52	0.42	0.97	*	*	*
	50-59	0.65	0.56	1.23	0.66	0.59	1.24	*	*	*
	60 and over	1.93	2.41	3.16	1.93	2.41	3.16	*	*	*
Municipal areas										
	Total	0.47	0.58	0.77	0.49	0.60	0.78	12.03	16.49	17.58
	15-17	9.53	11.29	17.06	9.70	11.61	17.06	*	*	0.00
	18-19	6.96	8.60	11.83	7.62	9.65	12.39	*	*	*
	20-24	3.37	3.99	5.68	3.46	4.11	5.81	*	*	*
	25-29	1.29	1.55	2.12	1.47	1.72	2.45	*	*	*
	30-34	1.01	0.82	1.93	1.04	0.89	1.95	*	*	*
	35-39	0.78	0.88	1.30	0.79	0.88	1.32	*	0.00	*
	40-49	0.57	0.53	1.00	0.57	0.54	1.01	*	*	*
	50-59	0.81	0.90	1.38	0.83	0.93	1.41	*	*	*
	60 and over	2.36	3.02	3.75	2.37	3.03	3.76	*	*	0.00
Non-municipal areas										
	Total	0.49	0.54	0.87	0.50	0.56	0.88	15.20	*	19.61
	15-17	9.15	10.60	18.05	9.43	10.85	18.97	*	*	*
	18-19	7.00	6.66	18.74	7.13	6.77	19.44	*	*	*
	20-24	2.58	2.88	4.76	2.77	3.08	5.18	*	*	*
	25-29	1.46	0.85	3.26	1.51	1.04	3.29	*	*	*
	30-34	1.07	1.18	1.86	1.10	1.23	1.90	*	*	*
	35-39	1.05	1.05	1.86	1.08	1.11	1.90	*	*	*
	40-49	0.64	0.51	1.20	0.65	0.51	1.22	*	*	*
	50-59	0.79	0.66	1.53	0.81	0.71	1.54	*	*	*
	60 and over	2.34	2.91	3.86	2.34	2.91	3.86	*	0.00	*

Remark : * C.V.more than 20%

Coefficient of Variation (CV) of the Total Number of Persons by Labor force status, Age group and areas

Northeastern Region

Northeastern		C.V.%								
Region	Age group	Total labor force			Employed			Unemployed		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	Total	0.39	0.44	0.69	0.41	0.46	0.72	11.39	14.80	17.70
	15-17	5.78	7.01	10.22	5.98	7.22	10.65	*	*	*
	18-19	5.37	6.95	8.46	5.57	7.33	8.54	*	*	*
	20-24	1.98	2.18	3.65	2.13	2.32	4.02	*	*	*
	25-29	1.20	1.07	2.41	1.29	1.27	2.49	*	*	*
	30-34	0.92	0.97	1.67	0.98	1.05	1.75	*	*	*
	35-39	0.69	0.54	1.31	0.70	0.56	1.33	*	*	*
	40-49	0.48	0.44	0.90	0.54	0.57	0.95	*	*	*
	50-59	0.70	0.49	1.43	0.75	0.59	1.50	*	*	*
	60 and over	1.76	2.03	3.15	1.76	2.04	3.16	*	*	*
Municipal areas										
	Total	0.48	0.60	0.77	0.49	0.62	0.79	11.83	14.95	19.30
	15-17	8.38	10.84	13.08	8.51	11.08	13.14	*	*	*
	18-19	6.66	8.35	10.92	6.77	8.44	11.24	*	*	*
	20-24	3.12	4.21	4.64	3.26	4.36	4.91	*	*	*
	25-29	1.07	1.15	1.90	1.18	1.34	2.04	*	*	*
	30-34	1.01	0.98	1.86	1.06	1.12	1.89	*	*	*
	35-39	0.77	0.70	1.39	0.78	0.74	1.40	*	*	*
	40-49	0.59	0.57	1.07	0.62	0.59	1.12	*	*	*
	50-59	0.97	0.95	1.77	0.99	1.00	1.79	*	*	0.00
	60 and over	2.63	3.41	4.10	2.63	3.41	4.13	*	0.00	*
Non-municipal areas										
	Total	0.46	0.50	0.81	0.48	0.54	0.85	14.09	18.76	*
	15-17	6.31	7.61	11.26	6.54	7.85	11.80	*	*	*
	18-19	6.10	7.85	9.67	6.34	8.34	9.70	*	*	*
	20-24	2.25	2.43	4.23	2.43	2.59	4.67	*	*	*
	25-29	1.43	1.25	2.91	1.53	1.49	3.00	*	*	*
	30-34	1.09	1.14	1.97	1.16	1.24	2.08	*	*	*
	35-39	0.81	0.63	1.55	0.82	0.65	1.58	*	*	*
	40-49	0.57	0.51	1.07	0.63	0.67	1.12	*	*	*
	50-59	0.81	0.56	1.67	0.87	0.67	1.76	*	*	*
	60 and over	1.97	2.26	3.59	1.98	2.27	3.60	*	*	0.00

Remark : * C.V.more than 20%

Coefficient of Variation (CV) of the Total Number of Persons by Labor force status, Age group and areas

Southern Region

Southern Region	Age group	C.V. %								
		Total labor force			Employed			Unemployed		
		Total	Male	Female	Total	Male	Female	Total	Male	Female
Total	Total	0.43	0.45	0.79	0.44	0.49	0.79	9.20	12.13	13.94
	15-17	5.74	6.28	12.41	5.93	6.52	12.79	*	*	*
	18-19	4.82	5.05	10.14	5.02	5.28	10.33	*	*	*
	20-24	1.91	1.97	3.72	2.05	2.29	3.77	15.14	*	*
	25-29	1.07	0.84	2.18	1.14	1.05	2.21	*	*	*
	30-34	0.86	0.55	1.79	0.90	0.69	1.82	*	*	*
	35-39	0.69	0.38	1.41	0.75	0.59	1.46	*	*	*
	40-49	0.54	0.29	1.11	0.57	0.41	1.12	*	*	*
	50-59	0.86	0.88	1.54	0.87	0.90	1.55	*	*	*
	60 and over	2.29	2.73	3.87	2.29	2.73	3.88	*	*	*
Municipal areas										
	Total	0.65	0.77	1.09	0.68	0.84	1.10	12.26	16.98	17.07
	15-17	10.17	11.86	19.22	10.85	12.97	19.60	*	*	*
	18-19	8.01	10.40	12.55	8.37	10.99	12.90	*	*	*
	20-24	3.52	4.40	5.70	3.82	5.09	5.78	*	*	*
	25-29	1.28	1.06	2.49	1.55	1.85	2.56	*	*	*
	30-34	1.16	0.96	2.20	1.20	1.13	2.20	*	*	*
	35-39	1.00	0.32	2.10	1.04	0.33	2.19	*	*	*
	40-49	0.76	0.38	1.55	0.80	0.45	1.63	*	*	*
	50-59	1.32	1.51	2.24	1.32	1.51	2.24	*	*	*
	60 and over	4.28	5.60	6.57	4.29	5.63	6.58	*	*	*
Non-municipal areas										
	Total	0.53	0.55	0.99	0.55	0.59	1.00	12.08	15.63	18.91
	15-17	6.61	7.15	14.69	6.79	7.35	15.22	*	*	*
	18-19	5.71	5.74	12.68	5.94	5.99	12.86	*	*	*
	20-24	2.26	2.20	4.60	2.41	2.57	4.65	19.80	*	*
	25-29	1.38	1.06	2.86	1.45	1.26	2.90	*	*	*
	30-34	1.09	0.67	2.34	1.15	0.85	2.39	*	*	*
	35-39	0.87	0.51	1.77	0.96	0.79	1.83	*	*	*
	40-49	0.69	0.38	1.41	0.72	0.53	1.41	*	*	*
	50-59	1.06	1.06	1.93	1.08	1.09	1.94	*	*	*
	60 and over	2.66	3.10	4.60	2.66	3.11	4.61	*	*	*

Remark : * C.V.more than 20%