Chapter 2

Major Findings

General Information

The Central Region (Excluding Bangkok Metropolis) area is 102,336 square kilometers, it has common boundary with Uthai Thani, Nakhon Sawan and Phetchabun in the North, Nakhon Ratchasima and Kingdom of Cambodia in the East, Chumphon and Golf of Thailand in the South. The Republic of the Union of Myanmar in the West. The climate is moderate throughout the year.

In the year 2010, the Central Region had 25 provinces (Changwat), 209 districts (Amphoe), 1,932 sub-districts (Tambon), 13,383 villages (Moo baan), 552 municipalities and 1,425 non-municipalities (Tambon Administration Organization: TAO).

1. Demographic characteristics

1.1 Number of population and distribution of population

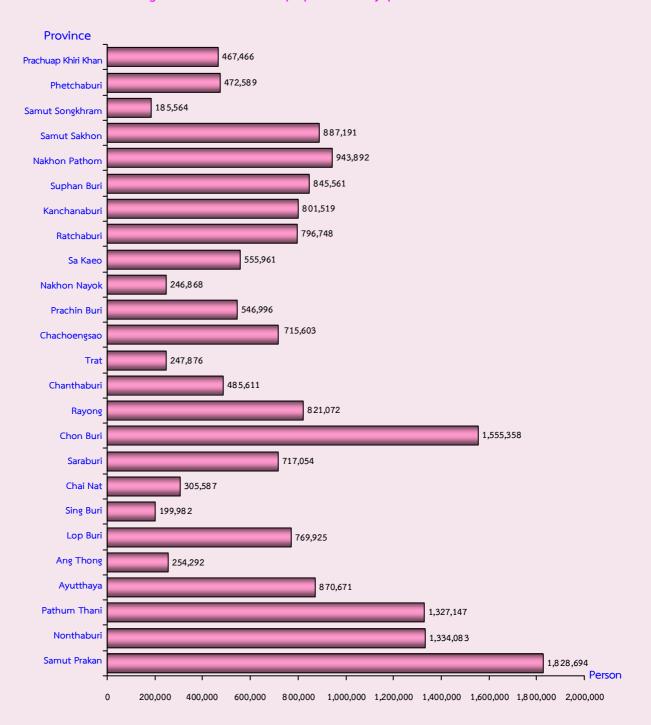
On September 1, 2010, the number of population in the Central Region was 18,183,308 out of these, 8,931,091 were males and 9,252,217 were females. The sex ratio which is defined as the number of males over 100 females was 96.0. This indicated that the number of females were slightly more than males. This appeared in the most of the provinces of the Central, except Lop Buri, Rayong, Trat, and Prachuap Khiri Khan. The annual population growth rate between 2000 to 2010 was 2.46 percent per year.

Most of the population in this region or about 54.5 percent lived in non-municipal area while only about 45.5 percent lived in municipal area (Table 1). In comparison of population at provincial level, it reveals that Samut Prakan was the most populous, of 1,828,694 people or 10.1 percent, followed by Chon Buri and Nonthaburi (8.6 and 7.3 percent, respectively). Samut Songkhram was the least populous, of 185,564 people or 1.0 percent (Figure 1).

Table 1 Number of population by sex and area

Area -		Population	Population				
Alea	Total	Male	Female	— Percent			
Total	18,183,308	8,931,091	9,252,217	100.0			
Municipal area	8,280,992	4,026,629	4,254,363	45.5			
Non-municipal area	9,902,316	4,904,461	4,997,855	54.5			

Figure 1 Number of population by province in 2010



1.2 Population density

The population density of Central Region was 177.7 persons per 1 square kilometer (km 2). The province, with highest density was Nonthaburi with 2,143.8 persons per 1 km 2 , followed by Samut Prakan and Samut SaKhon with of 1,821.2 and 1,017.1 persons per 1 km 2 , respectively. Kanchanaburi was the lowest density of 41.1 persons per 1 km 2 (Table 2).

Table 2 Average population density by province

Province	Area	Number of population	Population density
	(Square kilometer)	(Person)	(Person per 1 Km²)
Total	102,336.0	18,183,305	177.7
Samut Prakan	1,004.1	1,828,694	1,821.2
Nonthaburi	622.3	1,334,083	2,143.8
Pathum Thani	1,525.9	1,327,147	869.7
Ayutthaya	2,556.6	870,671	340.6
Ang Thong	968.4	254,292	262.6
Lop Buri	6,199.8	769,925	124.2
Sing Buri	822.5	199,982	243.1
Chai Nat	2,469.7	305,587	123.7
Saraburi	3,576.5	717,054	200.5
Chon Buri	4,363.0	1,555,358	356.5
Rayong	3,552.0	821,072	231.2
Chanthaburi	6,338.0	485,611	76.6
Trat	2,819.0	247,876	87.9
Chachoengsao	5,351.0	715,603	133.7
Prachin Buri	4,762.4	546,996	114.9
Nakhon Nayok	2,122.0	246,868	116.3
Sa Kaeo	7,195.1	555,961	77.3
Ratchaburi	5,196.5	796,748	153.3
Kanchanaburi	19,483.2	801,519	41.1
Suphan Buri	5,358.0	845,561	157.8
Nakhon Pathom	2,168.3	943,892	435.3
Samut Sakhon	872.3	887,191	1,017.1
Samut Songkhram	416.7	185,564	445.3
Phetchaburi	6,225.1	472,589	75.9
Prachuap Khiri Khan	6,367.6	467,466	73.4

1.3 Number of households, household size and sex of household head

There were 5,988,011 households in this region, about 5,920,172 private households, 67,839 collective households (such as institutional household, worker's household). The average size of private households was 2.9 persons per household. The average size of private households in municipal area was smaller than in non-municipal area (2.7 and 3.1 persons, respectively) (Table 3).

Considering provincial differentials, Trat had the biggest average size of private households, of about 4.0 persons, followed by Samut Songkhram 3.6 persons. Pathum Thani and Chon Buri had the smallest average size of private households (2.5 persons per household) (Statistical table 1).

In private households, there was higher percentage of male headed households than female headed households (62.8 and 37.2 percent, respectively). In municipal area and non-municipal area, there was similar proportion of female headed households (Table 3).

Table 3 Number of household and average size of household, percentage of household head by sex and area

Area	Number of private	Number of private Average size of		Percentage of household head		
Alea	household	household	Total	Male	Female	
Total	5,920,172	2.9	100.0	62.8	37.2	
Municipal area	2,864,829	2.7	100.0	63.0	37.0	
Non-municipal area	3,055,343	3.1	100.0	62.7	37.3	

1.4 Population age-sex structure

Considering population age-sex structure in the Central Region (Table 4), it was found that young population (0 - 14 years) accounted for 16.6 percent, working age population (15 – 59 years) for 71.4 percent and aging population (60 years and over) was 11.9 percent. The proportion of the young group and that of the elderly group in non-municipal area were higher than those in municipal area, while the working-age group in the municipal area was higher than those in the non-municipal area. When consideration about sex, it showed that proportion of young population group was more male than female, working-aged group was male and female similar, while elderly group was more female than male.

Average age of population (Median age) was about 34.1 years. The population in non-municipal area had a little higher median age than those in municipal area (34.4 and 33.8 years, respectively).

The dependency ratio, which defines as population working aged 15-59 years who have to be responsible for population at the other aged-groups, was 40.0, it means that 100 persons of working age population have to be responsible to take care of young and elderly population, approximately 40 persons. Age dependency ratio for young population was 23.3 and was 16.7 for elderly population. The young and elderly dependency ratios in non-municipal area were higher than those in municipal area (Table 4).

Table 4 Population characteristics by area

Demolation about state	Tatal	Ar	Area		
Population characteristics	Total —	Municipal area	Non-municipal area		
Population by aged-group (%)					
Children aged 0-14 years					
Total	16.6	14.6	18.3		
Male	17.3	15.2	19.2		
Female	15.9	14.1	17.5		
Working aged 15-59 years					
Total	71.4	74.3	69.0		
Male	71.8	74.7	69.4		
Female	71.1	73.9	68.6		
Old aged 60 years and over					
Total	11.9	11.1	12.7		
Male	10.8	10.1	11.4		
Female	13.0	12.0	13.9		
Median age (year)	34.1	33.8	34.4		
Sex ratio (%)					
Total	96.5	94.7	98.2		
Children aged 0-14 years	104.9	101.7	107.2		
Working aged 15-59 years	97.6	95.7	99.3		
Old aged 60 years and over	80.6	80.0	81.0		
Dependency ratio (%)					
Total	40.0	34.6	44.8		
Children aged 0-14 years	23.3	19.7	26.5		
Old aged 60 years and over	16.7	14.9	18.3		

1.5 Religion and nationality

Most of population in the Central Region were Buddhist (97.4 percent), followed by Islamic (1.5 percent) and Christian (0.8 percent). The proportion of Buddhist in non-municipal area and the municipal area was similar (97.5 and 97.2 percent, respectively).

The majority of population, of about 94.2 percent was Thais, 3.3 percent was Burmese and the rest were other nationalities, such as, Cambodian, Laotian and Chinese etc. (Table 5).

Table 5 Percentage of population by religion, nationality and area

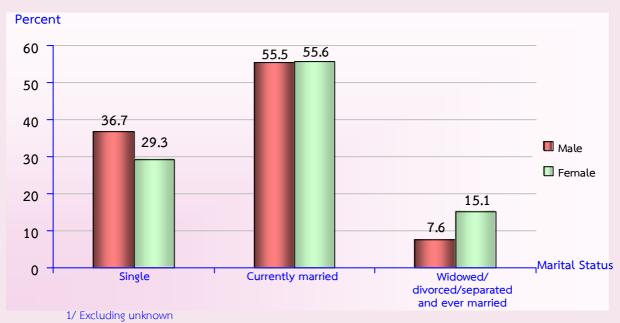
Religion and nationality	Total	Ar	ea
neuglon and nationality		Municipal area	Non-municipal area
Religion	100.0	100.0	100.0
Buddhism	97.4	97.2	97.5
Islam	1.5	1.2	1.8
Christianity	0.8	1.2	0.5
Others	0.3	0.4	0.2
Nationality	100.0	100.0	100.0
Thai	94.2	93.0	95.3
Burmese	3.3	3.6	2.9
Cambodian, Laotian, Chinese	1.6	1.9	1.3
Others ^{1/}	0.9	1.5	0.5

^{1/} Excluding who do not have citizenship

1.6 Marital status

Figure 2 shows marital status of population aged 13 years and over, it was found that more than 50 percent of population was currently married. The proportion of male and female with currently married status were not different (55.5 and 55.6 percent, respectively). The single male was higher than female (36.7 and 29.3 percent, respectively), but ratio of female population who were widowed, divorced, separated and ever married were nearly double compared to those of male (15.1 and 7.7 percent, respectively).

Figure 2 Percentage of population aged 13 years and over by marital status 1 and sex



1.7 House registration

Regarding the question "whether their names were listed in the house registration according to actual place of residence?", it was found that there were 72.2 percent of population residing in such province had registered in the house registration, 9.3 percent of them had their names registered in actual place of residence in the provinces, while 13.5 percent had been in other provinces, the rest of 4.7 percent had their names in the house registration in other countries, most of them were foreigners or non-Thai living in Thailand, but there was about 0.3 percent of population, not being in the house registration in any countries at all. Population, in municipal area had been in the registration at the actual place of actual residence was lower than those in non-municipal area; 63.8 and 79.3 percent, respectively (Table 6).

Table 6 Percentage of population by house registration, sex and area

Name listing in	Total ·	9	Sex		Area
house registration ¹⁷	Total	Male	Female	Municipal area	Non-municipal area
Total	100.0	100.0	100.0	100.0	100.0
Listed in the house actual living	72.2	70.7	73.7	63.8	79.3
Listed in other house					
In this province	9.3	9.6	9.1	11.2	7.7
In other province	13.5	13.9	13.2	18.9	9.1
In other country	4.7	5.5	3.8	5.9	3.6
No where	0.3	0.3	0.2	0.2	0.3

^{1/} Excluding unknown

1.8 Disability

Regarding the questions on disability which refers to visible disability or can be obviously seen based the definition of Ministry of Social Development and Human Security, asked every person whether they have disability or not. It was found that for 18,148,676 population in the Central Region (excluding unknown disabled), 99.2 percent of them, were not disable, only 0.8 percent were disable (Table 7).

Table 7 Percentage of population by disability condition, sex and area

Disability condition 1/	Total	Se		Area	
Disability Condition	Total ·	Male	Female	Municipal area	Non-municipal area
Total	100.0	100.0	100.0	100.0	100.0
No disability	99.2	99.2	99.3	99.3	99.2
With disability	0.8	0.8	0.7	0.7	0.8

^{1/} Excluding unknown

2. Social and economic characteristics

2.1 Education

Normally population aged 6-24 years should be enrolled in school at any educational levels. However, table 8 indicates that approximately 35.5 percent of population, aged-group 6-24, were not attending school. Male, not attending school, was higher proportion than female (37.5 and 33.5 percent, respectively). Population, not attending school, in non-municipal area was lower proportion than of those in municipal area (34.6 and 36.7 percent, respectively).

About 50.6 percent of population, aged 15 years and over, were finished some levels of schooling, which was higher than elementary levels. Comparing between sex, male finished higher than elementary school with higher proportion than female (52.4 and 48.8 percent, respectively). Population in municipal area finished higher than elementary school more than those in non-municipal area (57.2 and 44.8 percent, respectively). For an average years of schooling, the results of the 2010 census showed that the population aged 15 years and over had an average 8.3 years of schooling, which was similar to both sexes. (8.5 and 8.2 years, respectively).

Table 8 Population of education by sex and area

Education	Total	Sex		Area	
Education		Male	Female	Municipal area	Non-municipal area
Population aged 6-24 years, not attending school (%)	35.5	37.5	33.5	36.7	34.6
Population aged 15 yrs. and over, with higher than elementary school (%)	50.6	52.4	48.8	57.2	44.8
Average year of schooling, population aged 15 yrs. and over (year)	8.3	8.5	8.2	9.0	7.7

2.2 Literacy

Regarding the ability to read and write both Thai and other languages, it was found that 95.1 percent of population aged 15 years and over, in the Central Region can read and write Thai. Moreover, the Thai literacy rate was not significantly different in terms of area and sex (Table 9).

For literacy rate of other languages, it was found that about 19.1 percent were the English, Myanmar and Cambodia, it showed that population in the municipal area higher literacy rate in other languages than those in non-municipal area (23.5 and 15.3 percent, respectively).

Table 9 Percentage of population aged 15 years and over by literacy, sex and area

Literacy 1/	Total -	Se	ex		Area
Literacy	Total	Male	Female	Municipal area	Non-municipal area
Thai language	100.0	100.0	100.0	100.0	100.0
Literate	95.1	94.5	95.8	94.6	95.6
Illiterate	4.9	5.5	4.2	5.4	4.4
Other languages	100.0	100.0	100.0	100.0	100.0
Literate	19.1	19.6	18.7	23.5	15.3
Illiterate	80.9	80.4	81.3	76.5	84.7

^{1/} Excluding unknown

2.3 Last year employment

2.3.1 Industry

Out of the total number of 14,932,262 population aged 15 years and over, there were 10,971,219 persons (73.5 percent of population aged 15 years and over) employed as of 1 September 2009 to 31 August 2010, of these, 5,703,469 were males (52.0 percent) and 5,267,750 were females (48.0 percent). There was about 26.5 percent of population of this aged-group were unemployed. Considering types of industry or business of the employed population, it was found that there was 24.0 percent of people working in agricultural sector, and 76.0 percent working in non-agricultural sector, 29.6 percent work in manufacturing, followed by 14.7 percent of wholesale and retail business, vehicle and motorcycle repair.

For those employed in municipal area and non-municipal area, mostly worked in non-agricultural sectors were 89.3 and 64.8 percent, respectively, and mostly worked in manufacturing were 33.6 and 26.1 percent, respectively (Table 10).

Table 10 Number and percentage of population aged 15 years and over by employment, industry, sex and area

Free land and the design	Tetal	Se	ex	Area	
Employment and industry	Total -	Male	Female	Municipal area	Non-municipal area
Total ^{1/}	14,932,262	7,268,902	7,663,359	6,929,741	8,002,521
Number of employed persons	10,971,219	5,703,469	5,267,750	5,000,598	5,970,620
Percentage of employed persons	73.5	78.5	68.7	72.2	74.6
Industry	100.0	100.0	100.0	100.0	100.0
Agricultural sector (%)	24.0	24.5	23.4	10.7	35.2
1. Agriculture, forestry and fishing	24.0	24.5	23.4	10.7	35.2
Outside agricultural sector (%)	76.0	75.5	76.6	89.3	64.8
1. Manufacturing	29.6	29.2	29.9	33.6	26.1
wholesale and retail business, vehicle and motorcycle repair	14.7	13.3	16.2	17.9	11.9
3. Accommodation and food service activities	6.5	4.5	8.6	8.7	4.7
 Public administration and defence; compulsory social security 	4.7	6.4	2.8	5.7	3.8
5. Construction	4.1	6.0	2.1	4.2	4.0
6. Others ^{2/}	16.4	16.1	17.0	19.2	14.3
Number of unemployed persons	3,961,043	1,565,433	2,395,610	1,929,143	2,031,900
Percentage of unemployed persons	26.5	21.5	31.3	27.8	25.4

^{1/} Excluding person not know whether they worked or not

2.3.2 Work status

Employed persons as of the census data, mainly worked as an employee (employee of government, state enterprise and private employee) or about 60.3 percent, followed by own account worker without employee (26.1 percent). Comparing between sex, higher proportion of female worked as unpaid family workers than male (15.3 and 7.6 percent, respectively), while there was higher proportion of male than female in own account worker (27.3 and 24.8 percent, respectively).

The work status pattern of employed persons in municipal area, and non-municipal area is different. Most employed persons in non-municipal area worked as own account worker higher than in municipal area (28.7 and 23.0 percent, respective). In contrast, the proportion of population being unpaid family workers in non-municipal area was higher than in municipal area, (14.0 and 8.1 percent, respectively) and the proportion of employees in municipal area was higher than in non-municipal area; 66.3 and 55.2 percent, respectively (Table 11).

^{2/} Other industries (detail in statistical table 16)

Table 11 Percentage of employed persons by work status, sex and area

Work status 1/	Total	Sex			Area		
work status	Total ·	Male	Female	Municipal area	Non-municipal area		
Total	100.0	100.0	100.0	100.0	100.0		
Employer	2.1	2.5	1.7	2.4	1.9		
Own account worker	26.1	27.3	24.8	23.0	28.7		
Unpaid family worker	11.3	7.6	15.3	8.1	14.0		
Government employee	7.8	8.4	7.0	9.4	6.4		
Government enterprise	0.9	1.1	0.7	1.1	0.7		
Private employee	51.6	52.8	50.3	55.8	48.1		
Member of producer's cooperatives	0.2	0.3	0.2	0.2	0.2		

^{1/} Excluding unknown

3. Fertility

3.1 Children ever born and children still living

The average of own children ever born of female aged 13 years and over was 1.27. Female in municipal area had average number of children ever born lower than those in non-municipal, which was 1.11 and 1.40 children, respectively. Considering only ever married females, with reproductive aged 15-49 years old, it was found that the average of children ever born was 1.31 children, which was lower than last 10 years (1.66 children) and the average number of children still living was 1.30 children.

Considering single mean age at first marriage (SMAM), it was found that female got married earlier than male, of which the single mean age at first marriage of female was 24.7 years old, while single mean age at first marriage of male was 28.1 years old. Both male and female in municipal area got married later than those in non-municipal area (Table 12).

Table 12 Fertility and single mean age at first marriage by area

Fertility	Total	Area			
refutity		Municipal area No	on-municipal area		
Average number of children ever born (person	n)				
Per women aged 13 years and over	1.27	1.11	1.40		
Per women aged 15-49 years	0.85	0.75	0.95		
Per ever married women aged 15-49 years	1.31	1.22	1.40		
Average number of children still living 1/ (person)					
Per women aged 13 years and over	1.23	1.08	1.35		
Per women aged 15-49 years	0.85	0.75	0.94		
Per ever married women aged 15-49 years	1.30	1.21	1.38		
Single mean age at first marriage (year)					
Total	26.4	26.8	26.0		
Male	28.1	28.3	27.9		
Female	24.7	25.3	24.1		

^{1/} Excluding females with no answer regarding children ever born

4. Migration

4.1 Place of birth and period of living in current place

From the 2010 Population and Housing Census, it was found that there are 67.5 percent of population who were born in the Central Region and currently live in their hometown, mostly were female than male (68.2 and 66.7 percent, respectively). And the proportion of population live in their hometown in non-municipal area was higher than the municipal area (74.5 and 59.1 percent, respectively). There was 32.5 percent of population born in other province or population not living in their hometown, mostly lives in municipal area more than in non-municipal area (40.9 and 25.5 percent, respectively).

Population in the Central migrated during the year 2005-2010, there are about 2,616,148 persons, accounted for 14.4 percent of total population in the region (excluding people with no answer of the period of staying at the current place). Migration proportion in municipal area was higher than of which in non-municipal area (18.3 and 11.1 percent, respectively). While male have a proportion of migration higher than female (15.3 and 13.5 percent, respectively).

Table 13 Percentage of migration by reasons for moving, sex and area

Migration	Sex			Area		
and reasons for moving	Total	Male	Female	•	Non-municipal	
1/(2)				area	area	
Migrated population (%)	100.0	100.0	100.0	100.0	100.0	
Living in province of birth	67.5	66.7	68.2	59.1	74.5	
Not living in province of birth	32.5	33.3	31.8	40.9	25.5	
People migrating during 5 yrs. (2005-2010))					
Number of migration	2,616,148	1,369,159	1,246,989	1,516,035	1,100,113	
Percentage of migration	14.4	15.3	13.5	18.3	11.1	
Reasons for moving ^{2/} (%)	100.0	100.0	100.0	100.0	100.0	
Looking for a job	39.1	40.5	37.6	39.4	38.8	
Job assignment	10.6	11.9	9.3	10.8	10.4	
Studying	7.4	5.6	9.3	8.8	5.4	
Following persons in the household	13.8	10.4	17.5	12.9	15.0	
Returning bank home	0.6	0.6	0.7	0.4	1.0	
Changing of residence	22.1	20.7	23.6	21.2	23.4	
Moving into institution household	6.0	9.9	1.7	6.1	5.7	
Others	0.4	0.4	0.3	0.4	0.3	

^{1/} Excluding people who with no answer about the period of time of a current stay

4.2 Reasons of migration

During the year 2005-2010, the major reasons of population migration were to looking for a job (39.1 percent), changing to new residence and following people in the household (22.1 and 13.8 percent, respectively). Male's reasons in migration were mostly looking for a job and for job assignment, while female's reasons in migration were to follow the people in the household and for education. Proportion of population migration in municipal area, and non-municipal area not difference. Proportion of population migration in municipal area for education, higher than those in non-municipal area (8.8 and 5.4 percent, respectively). And proportion of population migration in non-municipal area was to follow people in the household had higher than those in municipal area (15.0 and 12.9 percent, respectively).

^{2/} Excluding unknown reasons for moving

Housing Characteristics

1. Type and characteristic of living quarters

Studying types of residence of private households in the Central Region in 2010, it was found that 61.1 percent of households were detached houses, followed by 16.4 percent of shop house or row house and 11.1 percent of town house, duplex and townhome. In considering type of living quarters according to area, most of them were detached houses, which in non-municipal area higher than in municipal area (74.1 and 47.2 percent, respectively). The other residences which located in municipal area more than in non-municipal area.

For characteristic residence in terms of material used, it was found that mostly, permanent materials, which are brick, wood, and brick and wood (99.2 percent) were used in constructing residences. Households in municipal area had the residence made of permanent materials with a little higher proportion than the ones in non-municipal area; 99.5 and 98.9 percent, respectively (Table 14).

Table 14 Number and percentage of private households by type and construction materials of dwelling unit and area

Type of living quarters	Total			Area		
and construction materials	Number	Percent	Municipal	Non-municipal		
of dwelling unit			area	area		
Type of living quarters	5,920,172	100.0	100.0	100.0		
Detached house	3,617,004	61.1	47.2	74.1		
Town house, duplex, townhome	657,002	11.1	13.1	9.3		
Condominium, mansion	190,421	3.2	4.9	1.6		
Flat, apartment, hostel	448,715	7.6	11.2	4.2		
Row house, shop house	970,572	16.4	23.0	10.2		
Others ^{1/}	36,459	0.6	0.6	0.6		
Construction materials of dwelling unit	5,883,713	100.0	100.0	100.0		
Cement or brick	3,793,625	64.5	73.3	56.2		
Wood	1,226,563	20.8	14.4	26.9		
Brick and wood	816,561	13.9	11.8	15.8		
Non-permanent materials, reused materials	29,136	0.5	0.3	0.7		
Others	17,828	0.3	0.2	0.4		

^{1/} Including rooms, inside a house, office, boat, raft and car used as living quarter

2. Ownership of living quarters and land

In considering ownership of residence, households in the Central Region, about 70.4 percent (include hire purchaser residence) got their own residence, with proportion got their own residence in non-municipal area is higher than the ones in municipal area (80.6 and 59.6 percent, respectively). About 24.2 percent of households rent the houses. Proportion of residence rented by households in municipal area was higher than the ones in non-municipal area (34.2 and 14.8 percent, respectively).

Considering land tenure for residential purposes (only for households that own or hire purchase residence), it was found that more than 87.1 percent of private households in the Central Region own the lands of their current residences. Proportion of the land belonged to the households in non-municipal area was higher than the ones in municipal area (Table 15).

Table 15 Number and percentage of private households by ownership of living quarters, land and area

Ownership of living quarters	Total			Area		
and land	Number	Percent	Municipal area	Non-municipal area		
Ownership of living quarters 1/	5,874,455	100.0	100.0	100.0		
Owner	4,059,976	69.1	57.9	79.6		
Hire purchaser	77,680	1.3	1.7	1.0		
Rent	1,420,704	24.2	34.2	14.8		
Rent free	289,018	4.9	5.6	4.2		
Others	27,078	0.5	0.6	0.4		
Land ownership 1/	4,125,599	100.0	100.0	100.0		
Owner	3,593,351	87.1	84.1	89.2		
Hire purchaser	187,878	4.5	5.9	3.7		
Rent	160,526	3.9	5.4	2.8		
Rent free	152,137	3.7	3.6	3.7		
Others	31,707	0.8	1.0	0.6		

^{1/} Excluding unknown

3. Source of drinking water and water supply

As for source of drinking water in the Central Region, it was found that 50.5 percent of households drink bottled water or water from vending machine, followed by 23.7 percent of treated tap water (boiled/filtered) and 19.6 percent of rain water. In considering by area, it was found that households in municipal area had higher proportion of drinking bottled water and treated tap water (boiled/filtered) that has been boiled or filtered than the ones in non-municipal area. But proportion of drinking rain water of households in non-municipal area was higher than the ones in municipal area (31.5 and 6.8 percent, respectively).

For water supply, 83.9 percent of households used tap water, followed by 8.5 percent of Underground water. Proportion of households using tap water in municipal area was higher than the ones non-municipal area; 91.4 and 76.8 percent, respectively (Table 16).

Table 16 Percentage of private households by source of drinking water, water supply and area

Source of drinking water	Total -	Area		
and water supply	Totat	Municipal area	Non-municipal area	
Drinking water ^{1/}	100.0	100.0	100.0	
Tap water	4.4	3.4	5.4	
Treated tap water (boiled/filtered)	23.7	27.9	19.7	
Underground water	0.4	0.2	0.6	
Well water	1.3	0.6	2.1	
River, stream, canal, waterfall	a	a	a	
Rain water	19.6	6.8	31.5	
Bottled water, water from vending machine	50.5	61.0	40.6	
Others	0.1	0.1	0.1	
Water supply 1/	100.0	100.0	100.0	
Tap water	83.9	91.4	76.8	
Treated tap water (boiled/filtered)	0.7	0.3	1.0	
Underground water	8.5	4.3	12.4	
Well water	4.5	3.0	6.0	
River, stream, canal, waterfall	1.0	0.4	1.6	
Rain water	1.3	0.6	2.1	
Others	0.1	a	0.1	

^{1/} Excluding unknown

a Less than 0.1

4. Type of toilet in the household

From table 17 with illustrating type of toilet used in private households in the Central including hygiene and convenience in using toilet, it was found that almost all households had sanitary toilets (99.9 percent), it was found that 53.5 percent of households use a squat toilet, followed by 42.3 percent of using sitting toilet. Households residing in municipal area had a high proportion of using a sitting toilet comparing to those in non-municipal area (52.1 and 33.2 percent, respectively). In contrast, households in non-municipal area using a squat toilet were higher than in municipal area (62.8 and 43.5 percent, respectively).

Table 17 Percentage of private households by type of toilet used and area

Type of toilet used 1/	Total -	Area		
		Municipal area	Non-municipal area	
Total	100.0	100.0	100.0	
Sitting toilet	42.3	52.1	33.2	
Squat toilet	53.5	43.5	62.8	
Sitting and squat toilet	4.1	4.3	3.8	
Others ^{2/}	0.1	0.1	0.2	

^{1/} Excluding unknown

5. Use of cooking fuel

Regarding the use of cooking fuel by households in the Central Region, it was found that 85.4 percent of them used gas (LPG) for cooking. Households in municipal area and non-municipal area had different way of using fuel which is higher proportion of households in municipal area use electricity to cook than the ones in non-municipal area, and do not cook more than in non-municipal area, while households in non-municipal area use charcoal, firewood, scrap wood, with higher proportion than those in municipal area (Table 18).

Table 18 Percentage of private households by type of cooking fuel and area

Type of cooking fuel ^{1/}	Total _	Area		
		Municipal area	Non-municipal area	
Total	100.0	100.0	100.0	
Gas	85.4	83.3	87.4	
Charcoal, firewood, scrap wood	4.2	2.0	6.2	
Electricity	6.1	8.3	4.0	
Kerosene and others	a	a	а	
Not cooking	4.3	6.4	2.4	

^{1/} Excluding unknown

^{2/} Including pit toilet, defecate into river or canal and no toilet

a Less than 0.1

6. Possession of household equipments

As for possession of equipments in the household, it was found that households in municipal area and non-municipal area possess own appliances not different. Except computer, microwave/oven, air-conditioner that households in municipal area possess more than households in non-municipal area, while households in non-municipal area possess motorcycle, 4-wheels tractor and 2-wheels tractor for agricultural more than the ones in municipal area.

Besides, they were interviewed whether they had the following instruments and use of technology devices such as cable TV, satellite dish and use of internet in the households. It was found that percentage of households in municipal area had cable TV and used internet was higher than those in non-municipal area, while the use of satellite dish in non-municipal area was higher than in municipal area (Table 19).

Table 19 Number and percentage of private households by ownership of household appliance, technology used and area

Ownership of household appliance	Total		Area (percent)		
and technology used	Number	Percent	Municipal area	Non-municipal area	
Ownership of household appliance	(5,920,172)	(100.0)	(100.0)	(100.0)	
Television	5,588,673	94.4	92.9	95.8	
VCD/DVD player	4,383,428	74.0	73.9	74.2	
Mobile phone	5,377,818	90.8	90.6	91.1	
Computer	1,762,784	29.8	33.8	26.0	
Refrigerator/Freezer	4,954,796	83.7	80.4	86.8	
Microwave/Oven	1,265,209	21.4	25.0	18.0	
Washing machine	3,443,900	58.2	56.6	59.7	
Air condition	1,443,612	24.4	30.4	18.8	
Car/Pick-up truck/Van	2,412,958	40.8	41.0	40.5	
Motorcycle	4,123,249	69.6	63.9	75.0	
4-wheels tractor	132,764	2.2	1.2	3.2	
2-wheels tractor	332,347	5.6	2.2	8.8	
Technology used	(5,920,172)	(100.0)	(100.0)	(100.0)	
Cable TV	1,237,067	20.9	30.0	12.3	
Satellite dish	1,561,144	26.4	21.5	30.9	
Internet	851,355	14.4	18.4	10.6	