## Chapter 2

## Major Findings

## General Information

Thailand is located on the Indo-China Peninsula in Southeast Asia. The total area is approximately 513,120 square kilometers. The territory is next to Myanmar and the Lao People's Democratic Republic (Lao PDR) in the north, Cambodia, Lao PDR in the east, Myanmar and the Indian Ocean in the west and Malaysia in the south. Thailand is located in a tropical zone where its temperature is rather hot in summer; and rainfall is widespread throughout the year. Thailand has three seasons: Hot, rainy and cool.

As of 2010, Thailand was divided into four regions with 76 provinces (Changwat), 878 districts (Amphoe), 7,255 sub-districts (Tambon), 74,956 villages (Moo Baan), 2,082 municipalities and 5,693 non-municipalities (Tambon Administrative Organizations (TAO)). Special administrative units include Bangkok and Pattaya City. Bangkok is classified as a province with 50 districts (Khet).

## 1. Demographic Characteristics

### 1.1 Number and distribution of the population

As of the census date ( $1^{\text {st }}$ September, 2010) there were $65,981,659$ persons residing in Thailand: 32,355,032 were males and $33,626,627$ were females. The sex ratio is 96.2, or 96 males per 100 females. Every region has more females than males. The annual population growth rate during the years 2000 - 2010 was 0.8 percent per year.

In considering population distribution, it was found that 55.8 percent of the population resides in non-municipal areas and 44.2 percent resides in municipal areas. Among regions, it the Northeast was the most populous with $18,966,090$ persons or 28.7 percent of the national total, followed by the Central region with 27.6 percent, the Northern region with 17.7 percent, the Southern region with 13.4 percent and Bangkok with 12.6 percent (Figure 1).

Table 1 Number of population by sex and area

| Area | Population |  |  | Percent |
| :---: | ---: | ---: | ---: | ---: |
|  | Total | Male | Female |  |
| Total | $65,981,659$ | $32,355,032$ | $33,626,627$ | 100.0 |
| Municipal area | $29,133,829$ | $14,120,842$ | $15,012,987$ | 44.2 |
| Non-municipal area | $36,847,830$ | $18,234,190$ | $18,613,640$ | 55.8 |

Figure 1 Number of population by region in 2010


### 1.2 Population density

Thailand has an average population density of 128.6 persons per 1 square kilometer. The most densely populated area is Bangkok which has $5,294.3$ persons per 1 square kilometer, followed by the Central, Southern, Northeastern and Northern regions as follows: 177.7, 125.4, 112.3 and 68.7 persons per 1 square kilometer, respectively.

Table 2 Average population density by region

| Region | Area <br> (square kilometer) | Number of population <br> (person) | Population density <br> (person per $1 \mathrm{~km}^{2}$.) |
| :--- | :---: | :---: | :---: |
| Total | $513,119.5$ | $65,981,659$ | 128.6 |
| Bangkok | $1,568.7$ | $8,305,218$ | $5,294.3$ |
| Central | $102,336.0$ | $18,183,309$ | 177.7 |
| Northern | $169,644.3$ | $11,656,040$ | 68.7 |
| Northeastern | $168,855.4$ | $18,966,090$ | 112.3 |
| Southern | $70,715.2$ | $8,871,002$ | 125.4 |

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

The number of all households in Thailand was 20,523,470. Of these, 20,364,332 households were private households and 159,138 were collective households (such as institutional households, worker's households). The average size of a private household was 3.1 persons per household which was smaller than the average size of household in the Year 2000 ( 3.8 persons per household). The average size of private households in municipal areas was smaller than in non-municipal areas ( 2.9 and 3.4 persons, respectively). When comparing among regions, the Northeastern region had the largest average size of private household, about 3.5 persons, followed by the Southern region with 3.4 persons, the Northern region with 3.0 persons and the Central region with 2.9 persons. Bangkok has the smallest average size of household with 2.7 persons per household (Table 3).

In private households, there was a higher percentage of male-headed households than female-headed households (65.3 and 34.7 percent, respectively (Table 3).

One-person households were approximately 18.4 percent, which was twice as high as the proportion in 2000 (9.4 percent) (Housing Table 3).

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

| Region and area | Number of private household | Average size of household | Percentage of household head |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Total | Male | Female |
| Total | 20,364,332 | 3.1 | 100.0 | 65.3 | 34.7 |
| Municipal area | 9,685,386 | 2.9 | 100.0 | 63.8 | 36.2 |
| Non-municipal area | 10,678,946 | 3.4 | 100.0 | 66.6 | 33.4 |
| Region |  |  |  |  |  |
| Bangkok | 2,869,224 | 2.7 | 100.0 | 63.4 | 36.6 |
| Central | 5,920,172 | 2.9 | 100.0 | 62.8 | 37.2 |
| Northern | 3,741,291 | 3.0 | 100.0 | 67.7 | 32.3 |
| Northeastern | 5,339,779 | 3.5 | 100.0 | 65.7 | 34.3 |
| Southern | 2,493,867 | 3.4 | 100.0 | 68.8 | 31.2 |

### 1.4 Population age-sex structure

Figure 2 displays the distribution of the population by age group and sex. In the year 2010, the population structure had aged, which is reflected by the more narrow base and a wider top of the pyramid. Among the older age groups, the female population tends to increase whereas among child and youth, the ratio of males is higher than females.

Figure 2 Population Pyramids in the Whole Kingdom, 2010


In considering age groups in 2010 (Table 4), 19.2 percent is young (0-14 years old), 67.9 percent is working age (15-59 years old) and 12.9 percent is elderly ( 60 years or over). The proportion of young and elderly in non-municipal areas is higher than those in municipal areas, while the working age population is lower than in municipal areas. By sex, it was found that for child and youth, the proportion of males is higher than females (20.1 and 18.4 percent, respectively). But for the elderly, the proportion of females is higher than males (13.9 and 11.9 percent, respectively). As for the working-age population, the proportion of males and females is almost the same ( 68.0 and 67.8 percent, respectively).

The population average age (median age) is approximately 34.7 years. Nonmunicipal areas have a higher average age than in municipal areas, 35.1 years and 34.2 years, respectively. Median age is the age that divides the population into two groups of the same size, half of which is younger than median age, and the other half is older than median age. Thailand has become an aging population with a median age of about 34.7 years (defined by a median age of more than 30 years).

In considering the dependency ratio, which is defined as the working age population as a proportion of the younger and older age groups, it was found that total dependency ratio is equal to 47.3 which means that 100 persons of working age are responsible for 47 children and elderly. The child dependency ratio is 28.3 and old-age dependency ratio is 19.0. Both dependency ratios in non-municipal areas are higher than in municipal areas.

Table 4 Population characteristics by area

| Population characteristics | Total | Area |  |
| :---: | :---: | :---: | :---: |
|  |  | Municipal area | Non-municipal area |
| Population by aged-group (\%) |  |  |  |
| Children age: 0-14 years |  |  |  |
| Total | 19.2 | 16.0 | 21.8 |
| Male | 20.1 | 16.8 | 22.7 |
| Female | 18.4 | 15.2 | 20.9 |
| Working age: 15-59 years |  |  |  |
| Total | 67.9 | 72.3 | 64.4 |
| Male | 68.0 | 72.5 | 64.5 |
| Female | 67.8 | 72.2 | 64.2 |
| Old age 60 years or over |  |  |  |
| Total | 12.9 | 11.7 | 13.8 |
| Male | 11.9 | 10.8 | 12.8 |
| Female | 13.9 | 12.6 | 14.9 |
| Median age (year) | 34.7 | 34.2 | 35.1 |
| Sex ratio (\%) |  |  |  |
| Total | 96.2 | 94.1 | 98.0 |
| Children age 0-14 years | 105.5 | 103.9 | 106.4 |
| Working age 15-59 years | 96.5 | 94.4 | 98.4 |
| Old age 60 years or over | 82.6 | 80.3 | 84.2 |
| Dependency ratio (\%) |  |  |  |
| Total | 47.3 | 38.3 | 55.4 |
| Children age 0-14 years | 28.3 | 22.1 | 33.9 |
| Old age 60 years or over | 19.0 | 16.2 | 21.5 |

### 1.5 Religion and nationality

In Thailand, 63,279,495 persons (95.9\%) are of Thai nationality and 2,702,155 persons (4.1\%) have other nationalities including Burmese, Lao, Cambodian, Chinese and others.

Most of the population is Buddhist (93.6 percent), followed by Islamic (4.9 percent) and who are mostly in the lower Southern region including Yala, Pattani and Narathiwat Provinces. Christians account for 1.2\%, while other religions include Hindu, Sikh and Confucian or atheist.

Table 5 Percentage of population by religion, nationality and area

| Religion and nationality | Total | Area |  |
| :---: | :---: | :---: | :---: |
|  |  | Municipal area | Non-municipal area |
| Religion ${ }^{1 /}$ | 100.0 | 100.0 | 100.0 |
| Buddhism | 93.6 | 94.5 | 92.8 |
| Islam | 4.9 | 3.6 | 6.0 |
| Christianity | 1.2 | 1.4 | 1.0 |
| Others and no religion | 0.3 | 0.5 | 0.2 |
| Nationality ${ }^{1 /}$ | 100.0 | 100.0 | 100.0 |
| Thai | 95.9 | 94.2 | 97.3 |
| Burmese | 2.0 | 2.5 | 1.5 |
| Cambodian, Laotian, Chinese | 1.0 | 1.4 | 0.6 |
| Others and unknown nationality | 1.1 | 1.9 | 0.6 | 1/ Excluding unknown

### 1.6 Marital status

Figure 3 shows that, among 55,380,017 persons age 13 years or over, more than half are married ( $31,555,594$ or 57.4 percent), $16,957,651$ persons are single ( 30.9 percent), and the rest are widowed, divorced, separated or ever-married (11.7 percent). The proportion of single and currently-married males is higher than for females, and females have a higher proportion of being widowed, divorced, separated or ever-married than males.

Figure 3 Percentage of population age 13 years or over by marital status ${ }^{1 /}$ and sex


1/ Excluding unknown

### 1.7 House registration

As a reference, the 2010 Population and Housing Census accessed the name of the persons registered in the house that are actually living there on the Census date (1 September 2010). It was found that number of population in a residential household was $51,820,890$ persons ( 78.6 percent of the total registered to the household). The number of persons whose name is registered in other households but is actually living in the same province is $5,916,371$ persons ( 9.0 percent). The number of persons registered to the household but living in other provinces is $6,104,270$ persons ( 9.2 percent). The number who are residents of foreign countries is $1,973,266$ persons ( 3.0 percent). The number of the population who does not have a name registered in any household is 147,358 persons ( 0.2 percent).

According to administrative area, the population in municipal areas with their name listed in the household registration as the actual place of residence was lower than those in non-municipal areas ( 66.9 and 87.8 percent, respectively) (Table 6).

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

| Name listing in house registration ${ }^{1 /}$ | Total | Sex |  | Area |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female | Municipal area | Non-municipal area |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Listed in the house actual living | 78.6 | 77.4 | 79.7 | 66.9 | 87.8 |
| Listed in other house |  |  |  |  |  |
| In this province | 9.0 | 9.3 | 8.7 | 12.2 | 6.4 |
| In other province | 9.2 | 9.6 | 8.9 | 16.2 | 3.8 |
| In other country | 3.0 | 3.5 | 2.5 | 4.5 | 1.8 |
| No where | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |

1/ Excluding unknown

### 1.8 Disability

Questions on disability, which refer to visible disability or a disability which can be obviously seen based on the definition of the Ministry of Social Development and Human Security, were asked of every person, whether they had a disability or not. It was found that about $65,387,824$ persons or 99.1 percent of the population does not have a disability. Only 0.9 percent of population had an obviously-visible disability such as an amputated arm/leg from the wrist/ankle of at least 1 inch length, or slow brain development/retardation, cannot talk/dumb, complete blindness, or pathological psychological symptoms (Table 7 and Statistical Table 14).

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

| Disability condition ${ }^{1 /}$ | Total | Sex |  |  | Area |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female |  | Municipal area | Non-municipal area |
| Total | 100.0 | 100.0 | 100.0 |  | 100.0 | 100.0 |
| No disability | 99.1 | 99.0 | 99.2 |  | 99.2 | 99.0 |
| With disability | 0.9 | 1.0 | 0.8 |  | 0.8 | 1.0 |

1/ Excluding unknown

## 2. Social and Economic Characteristics

### 2.1 Education

Normally, the population age 6-24 years should be enrolled in school at any educational level. However, Table 8 indicates that approximately 29.4 percent of the population in this age group was not attending school; males had a higher proportion than females ( 31.3 and 27.5 percent, respectively).

In considering the level of educational attainment of the population age 15 years or over, it was found that about 46.5 percent finished some level of schooling higher than the elementary level. More males completed elementary school than females (48.5 and 44.6 percent, respectively). More people in municipal areas completed more than elementary school than those in non-municipal areas (58.0 and 36.7 percent, respectively). The population in Bangkok had the highest proportion finishing higher than elementary school (70.8 percent).

The 2010 census found that the average number of years of schooling of the population age 15 years or over was 8.1 years, with males higher than female ( 8.2 and 8.0 years, respectively). Comparing regions and administrative areas, it was found that Bangkok has the highest average year of schooling (10.8 years), followed by the Central, Southern, Northeastern and Northern regions (8.3, 7.8, 7.2 and 7.1 years, respectively). Average years of schooling in municipal areas was higher than for those in non-municipal areas (9.3 and 7.0 years, respectively).

Table 8 Population of education by sex, area and region

| Sex, area and region | Population age 6-24 years, not attending school (\%) | Population age 15 years or over, with higher than elementary school (\%) | Average year of schooling, population age 15 years or over (year) |
| :---: | :---: | :---: | :---: |
| Total | 29.4 | 46.5 | 8.1 |
| Male | 31.3 | 48.5 | 8.2 |
| Female | 27.5 | 44.6 | 8.0 |
| Municipal area | 30.9 | 58.0 | 9.3 |
| Non-municipal area | 28.3 | 36.7 | 7.0 |
| Region |  |  |  |
| Bangkok | 36.3 | 70.8 | 10.8 |
| Central | 35.5 | 50.6 | 8.3 |
| Northern | 25.8 | 37.4 | 7.1 |
| Northeastern | 22.1 | 36.5 | 7.2 |
| Southern | 32.2 | 45.4 | 7.8 |

### 2.2 Literacy

A literate person is someone who can read and write in any language. Thailand has a literacy rate of the population age 15 years or over of about 98.2 percent. Thai literacy of the population age 15 years or over is 96.4 percent. The Thai literacy rate was not significantly different in terms of sex and area of residence (Table 9 and Key indicators table).

As for literacy in other languages such as English, Burmese, Chinese and Khmer, it was found that 16.7 percent of the population can read and write other languages. The population in municipal areas was more literate in non-Thai languages than those in nonmunicipal areas (23.9 and 10.7 percent, respectively).

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

| Literacy ${ }^{1 /}$ | Total | Sex |  | Area |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female | Municipal area | Non-municipal area |
| Thai language | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Literate | 96.4 | 96.4 | 96.4 | 96.6 | 96.3 |
| Illiterate | 3.6 | 3.6 | 3.6 | 3.4 | 3.7 |
| Other languages | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Literate | 16.7 | 16.7 | 16.8 | 23.9 | 10.7 |
| Illiterate | 83.3 | 83.3 | 83.2 | 76.1 | 89.3 |

1/ Excluding unknown

### 2.3 Employment in the previous year

### 2.3.1 Industry

Among the 53,295,867 persons age 15 years or over, 38,641,607 persons were employed in the previous year (1 September 2009 - 31 August 2010). Of these, $19,903,775$ were males ( 51.5 percent) and $18,737,832$ were females ( 48.5 percent). There were $13,914,204$ unemployed persons ( 26.5 percent), among whom were $5,584,054$ males (40.1 percent) and 8,330,150 females (59.9 percent).

When considering type of industry or business of the employed population, it was found that 43.6 percent of employed persons were working in agriculture, and 56.4 percent were working in non-agricultural occupations. Most of the latter were working in manufacturing ( 13.5 percent), followed by of wholesale and retail business, repair of motor vehicles, motorcycles, and repair of personal and household goods (12.3 percent).

For those employed in municipal areas, most worked outside agricultural (80.4 percent), commonly working in manufacturing, wholesale and retail business, repair of motor vehicles, motorcycles, or repair of personal and household goods (17.8 percent). Those employed population in non-municipal areas mostly worked in the agricultural sector (62.2 percent) (Table 10).

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

| Employment and industry | Total | Sex |  | Area |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female | Municipal area | Non-municipal area |
| Total ${ }^{1 /}$ | 52,555,811 | 25,487,829 | 27,067,982 | 23,917,719 | 28,641,092 |
| Number of employed persons | 38,641,607 | 19,903,775 | 18,737,832 | 16,839,160 | 21,802,447 |
| Percentage of employed persons | 73.5 | 78.1 | 69.2 | 70.4 | 76.1 |
| Industry | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Agricultural sector (\%) | 43.6 | 43.4 | 43.8 | 19.6 | 62.2 |
| 1. Agriculture, forestry and fishing | 43.6 | 43.4 | 43.8 | 19.6 | 62.2 |
| Outside agricultural sector (\%) | 56.4 | 56.6 | 56.2 | 80.4 | 37.8 |
| 1. Manufacturing | 13.5 | 13.1 | 13.9 | 17.8 | 10.1 |
| 2. wholesale and retail business, vehicle and motorcycle repair | 12.3 | 11.3 | 13.3 | 17.8 | 8.0 |
| 3. Accommodation and food service activities | 5.1 | 3.7 | 6.7 | 8.0 | 2.9 |
| 4. Public administration and defence; compulsory social security | 4.6 | 6.2 | 2.8 | 6.7 | 3.0 |
| 5. Construction | 3.7 | 5.5 | 1.8 | 4.4 | 3.1 |
| 6. Others ${ }^{2 /}$ | 17.2 | 16.8 | 17.7 | 25.7 | 10.7 |
| Number of unemployed persons | 13,914,204 | 5,584,054 | 8,330,150 | 7,075,559 | 6,838,645 |
| Percentage of unemployed | 26.5 | 21.9 | 30.8 | 29.6 | 23.9 |

1/ Excluding person not know whether they worked or not
2/ Other industries (detail in statistical table 16)

### 2.3.2 Work status

Employed persons in the year prior to the date of the census mainly worked as an employee (employee of the government, state enterprise or private organization) (42.3 percent), followed by self-employed ( 33.2 percent) and unpaid family worker ( 22.2 percent). Comparing by sex, it was found that the proportion of males who were self-employed was higher than for females ( 38.7 and 27.3 percent, respectively). By contrast, twice as many females as males worked as an unsalaried domestic helper (30.8 and 14.0 percent, respectively).

The work status pattern of employed persons in municipal areas, and nonmunicipal areas are different. Most employed persons in municipal areas worked as an employee (56.0 percent); non-municipal residents were more likely to be self-employed with no assistants ( 37.7 percent). The proportion of employers in municipal areas was twice that of employers in non-municipal area; 2.8 and 1.4 percent, respectively (Table 11).

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

| Work status ${ }^{1 /}$ | Total | Sex |  | Area |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female | Municipal area | Non-municipal area |
| Total | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Employer | 2.0 | 2.5 | 1.5 | 2.8 | 1.4 |
| Own account worker | 33.2 | 38.7 | 27.3 | 27.3 | 37.7 |
| Unpaid family worker | 22.2 | 14.0 | 30.8 | 13.5 | 28.8 |
| Government employee | 8.3 | 8.9 | 7.6 | 11.7 | 5.7 |
| Government enterprise | 0.9 | 1.1 | 0.7 | 1.5 | 0.4 |
| Private employee | 33.1 | 34.4 | 31.8 | 42.8 | 25.8 |
| Member of producer's cooperatives | 0.3 | 0.4 | 0.3 | 0.4 | 0.2 |

1/ Excluding unknown

## 3. Fertility

### 3.1 Children ever born and children still living

The average of own children ever born to females age 13 years or over was 1.50. Females in non-municipal areas had a higher average number of children ever born than those in municipal areas; 1.74 and 1.22 children, respectively.

Considering only ever-married females of reproductive age 15-49 years old, it was found that the average number of children ever born was approximately 1.52 children, which is lower than the replacement level and lower than for the last ten years (1.88 children). Ever-married females in municipal areas have a lower average number of children ever born than ever-married females in non-municipal areas (1.35 and 1.64 children, respectively). The average number of children still living was 1.50 children per 1 ever married woman.

In considering singulate mean age at first marriage (SMAM), it was found that females are getting married earlier than males, for whom the average age is 23.7 years; males get married at an average age of 28.3 years. Both males and females in municipal areas get married later than those in non-municipal areas (Table 12).

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

| Fertility | Total | Area |  |
| :---: | :---: | :---: | :---: |
|  |  | Municipal area | Non-municipal area |
| Average number of children ever born ${ }^{1 /}$ (person) |  |  |  |
| Per women age 13 years or over | 1.50 | 1.22 | 1.74 |
| Per women age 15-49 years | 1.01 | 0.81 | 1.20 |
| Per ever married women age 15-49 years | 1.52 | 1.35 | 1.64 |
| Average number of children still living ${ }^{1 /}$ (person) |  |  |  |
| Per women age 13 years or over | 1.45 | 1.19 | 1.67 |
| Per women age 15-49 years | 1.00 | 0.81 | 1.18 |
| Per ever married women age 15-49 years | 1.50 | 1.34 | 1.63 |
| Singulate mean age at first marriage (year) |  |  |  |
| Total | 28.4 | 27.1 | 25.3 |
| Male | 28.3 | 29.1 | 27.9 |
| Female | 23.7 | 25.2 | 22.8 |

1/ Excluding females with no answer regarding children ever born

## 4. Migration

### 4.1 Place of birth and duration of living in current residence

In carrying out the 2010 Population and Housing Census, enumerators asked questions about place of birth, duration of living in the current residence, the last residence before moving, and reasons for moving. Based on the response, the sample was classified as follows: 1) lifetime migration or migration from the place of birth or moving from place of birth, which means inter-provincial migration and for whom province of birth is not the same province of current residence on the Census date; and 2) Migrated within 5 years which denotes people who move to new residences across villages or municipalities within 5 years before the Census date.

Data in Table 13 show that, in 2010, 21.8 percent of the population were born in a different province; conversely, 78.2 percent of the population are currently living in their province of birth.

There were approximately $6,227,495$ persons or 9.4 percent of the total population, who migrated during the years 2005-2010, (excluding persons who did not know the duration of current residence). Proportion of migrated population in municipal areas was higher than those in non-municipal areas; 13.4 and 6.3 percent, respectively. The proportion of male migrants was higher than females ( 9.9 and 9.0 percent, respectively).

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

| Migration and reasons for moving | Total | Sex |  | Area |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Male | Female | Municipal area | Non-municipal area |
| Migrated population ${ }^{1 /}$ (\%) | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Living in province of birth | 78.2 | 77.8 | 78.5 | 68.9 | 85.4 |
| Not living in province of birth | 21.8 | 22.2 | 21.5 | 31.1 | 14.6 |
| People migrating during 5 yrs. (2005-2010) |  |  |  |  |  |
| Number of migration | 6,227,495 | 3,205,534 | 3,021,961 | 3,896,845 | 2,330,650 |
| Percentage of migration | 9.4 | 9.9 | 9.0 | 13.4 | 6.3 |
| Reasons for moving ${ }^{\text {2/ }}$ (\%) | 100.0 | 100.0 | 100.0 | 100.0 | 100.0 |
| Looking for a job | 28.0 | 29.6 | 26.3 | 28.3 | 27.5 |
| Job assignment | 13.6 | 14.9 | 12.3 | 16.0 | 9.6 |
| Studying | 13.4 | 10.3 | 16.7 | 16.3 | 8.4 |
| Following persons in the household | 16.9 | 13.7 | 20.4 | 13.8 | 22.2 |
| Returning back home | 2.2 | 2.0 | 2.3 | 1.9 | 2.6 |
| Changing of residence | 18.4 | 17.7 | 19.1 | 16.6 | 21.5 |
| Moving into institution household | 6.6 | 10.6 | 2.4 | 6.0 | 7.7 |
| Others | 0.9 | 1.2 | 0.5 | 1.1 | 0.6 |

[^0]
### 4.2 Reasons for migration

During the Years 2005-2010, the major reasons of population migration were to look for a job ( 28.0 percent), changing residence and following people in the household (18.4 and 16.9 percent, respectively). More males migrated for employment than females, many of females whom migrated to follow relatives or seek continuing education more than males. The proportion of reasons for migration of municipal area residents for education was nearly double than for non-municipal areas (16.3 and 8.4 percent, respectively). In nonmunicipal areas, the proportion of persons migrating to follow household members was higher than those in municipal areas (22.2 and 13.8 percent, respectively).

## Housing Characteristics

## 1. Type and characteristic of living quarters

Living conditions of the population in 2010 were studied in terms of quality of dwelling, occupy status of dwelling, and land on which dwellings and facilities are located. It was found that 72.6 percent of all private households are detached houses, followed by 11.1 percent which are shop houses or row houses. The pattern of living quarters is similar, in that most are detached houses ( 53.5 and 89.8 percent, respectively). However, residences which are shop houses, row houses, flats and apartments are mainly located in municipal areas.

For characteristics of residence in terms of materials used, it was found that, most construction materials for dwellings are permanent construction materials, including brick and wood in different combinations (99.1 percent). Households in municipal areas have a higher proportion use of permanent construction materials than in non-municipal areas: 99.5 and 98.7 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 and construction materials of dwelling unit | Total |  | Area |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Municipal area | Non-municipal area |
| Type of living quarters ${ }^{1 /}$ | 20,282,743 | 100.0 | 100.0 | 100.0 |
| Detached house | 14,728,702 | 72.6 | 53.5 | 89.8 |
| Town house, duplex, townhome | 1,297,664 | 6.4 | 9.9 | 3.2 |
| Condominium, mansion | 492,368 | 2.4 | 4.6 | 0.5 |
| Flat, apartment, hostel | 1,408,741 | 7.0 | 12.8 | 1.7 |
| Row house, shop house | 2,256,145 | 11.1 | 18.5 | 4.5 |
| Others ${ }^{2 /}$ | 99,123 | 0.5 | 0.7 | 0.3 |
| Construction materials of dwelling unit ${ }^{1 /}$ | 20,179,350 | 100.0 | 100.0 | 100.0 |
| Cement or brick | 10,976,748 | 54.4 | 67.9 | 42.3 |
| Wood | 4,631,836 | 23.0 | 15.2 | 29.9 |
| Brick and wood | 4,382,377 | 21.7 | 16.4 | 26.5 |
| Non-permanent materials, reused materials | 136,387 | 0.7 | 0.3 | 1.0 |
| Others | 52,002 | 0.2 | 0.2 | 0.3 |

[^1]
## 2. Ownership of living quarters and land

In considering ownership of residence (including hire-purchase residences), about 78.9 percent have their own residence. The proportion who own their residence in nonmunicipal areas is higher than those in municipal areas ( 91.2 and 65.1 percent, respectively). About 16.5 percent of households rent the houses. The proportion of residences rented in municipal areas is higher than those in non-municipal areas (28.5 and 5.8 percent, respectively).

Considering land tenure for residential purposes (only for households that own or have hire-purchase residences), it was found that 91.8 percent of private households own the land of their current residence. The proportion of land belonging to households in nonmunicipal areas was higher than those in municipal areas; 94.2 and 88.0 percent, respectively (Table 15).

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

| Ownership of living quarters and land | Total |  | Area |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Municipal area | Non-municipal area |
| Ownership of living quarters ${ }^{1 /}$ | 20,217,202 | 100.0 | 100.0 | 100.0 |
| Owner | 15,767,262 | 78.0 | 63.8 | 90.8 |
| Hire purchaser | 170,825 | 0.9 | 1.3 | 0.4 |
| Rent | 3,345,477 | 16.5 | 28.5 | 5.8 |
| Rent free | 861,933 | 4.3 | 5.9 | 2.8 |
| Others | 71,705 | 0.3 | 0.5 | 0.2 |
| Land ownership ${ }^{1 /}$ | 15,838,245 | 100.0 | 100.0 | 100.0 |
| Owner | 14,542,635 | 91.8 | 88.0 | 94.2 |
| Hire purchaser | 429,339 | 2.7 | 4.2 | 1.8 |
| Rent | 352,466 | 2.2 | 4.2 | 1.0 |
| Rent free | 419,257 | 2.7 | 2.9 | 2.5 |
| Others | 94,548 | 0.6 | 0.7 | 0.5 |

1/ Excluding unknown

## 3. Source of drinking water and water supply

Approximately 94.1 percent of households have clean drinking water, which means tap water, treated tap water (bottled/filtered), bottled water, water from vending machine, rain water. Households in municipal areas have a higher proportion having clean drinking-water than those in non-municipal areas: 97.4 and 91.1 percent, respectively. Most of households in municipal areas drink bottled water or water from vending machines (50.6 percent), while most households in non-municipal areas drink rain water (43.1 percent).

As for water supply, 81.2 percent of households used tap water, followed by 7.5 percent who use well water, and 7.3 percent who use underground water. The proportion of households using tap water in municipal areas was higher than those in non-municipal areas; 89.6 and 73.6 percent, respectively (Table 16).

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

| Source of drinking water and water supply | Total | Area |  |
| :---: | :---: | :---: | :---: |
|  |  | Municipal area | Non-municipal area |
| Drinking water ${ }^{1 /}$ | 100.0 | 100.0 | 100.0 |
| Tap water | 8.0 | 5.1 | 10.6 |
| Treated tap water (boiled/filtered) | 20.3 | 30.4 | 11.2 |
| Underground water | 1.3 | 0.8 | 1.7 |
| Well water | 3.9 | 1.5 | 6.1 |
| River, stream, canal, waterfall | 0.6 | 0.2 | 1.0 |
| Rain water | 28.0 | 11.3 | 43.1 |
| Bottled water, water from vending machine | 37.8 | 50.6 | 26.2 |
| Others | 0.1 | 0.1 | 0.1 |
| Water supply ${ }^{1 /}$ | 100.0 | 100.0 | 100.0 |
| Tap water | 81.2 | 89.6 | 73.6 |
| Treated tap water (boiled/filtered) | 0.7 | 0.5 | 1.0 |
| Underground water | 7.3 | 4.6 | 9.7 |
| Well water | 7.5 | 4.1 | 10.6 |
| River, stream, canal, waterfall | 1.8 | 0.6 | 2.9 |
| Rain water | 1.4 | 0.6 | 2.1 |
| Others | 0.1 | 0.1 | 0.1 |

[^2]
## 4. Type of toilet in the household

Table 17 illustrates the type of toilet used in private households, including hygiene and convenience in using the toilet. The Census found that almost all households had sanitary toilets ( 99.8 percent). Households residing in municipal areas had a high proportion of using a sitting toilet compared to those in non-municipal areas (46.6 and 17.6 percent, respectively). In contrast, the percentage using a squat toilet was higher in nonmunicipal areas than in municipal areas (79.1 and 48.6 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 | 31.3 | 46.6 | 17.6 |
| Squat toilet | 64.7 | 48.6 | 79.1 |
| Sitting and squat toilet | 3.8 | 4.7 | 2.9 |
| Others $^{2 /}$ | 0.2 | 0.1 | 0.4 |

1/ Excluding unknown
2/ Including pit toilet, defecate into river or canal and no toilet

## 5. Use of cooking fuel

Regarding the use of cooking fuel by household, approximately 75.3 percent of households use gas (LPG) or electricity as a fuel in cooking, which is considered as the most clean and convenient way of cooking. A higher proportion of households in municipal areas use gas or electricity to cook than those in non-municipal areas ( 84.2 and 67.4 percent, respectively). Households in municipal areas used electricity to cook more than households in non-municipal areas by more than three-fold ( 8.3 and 2.3 percent, respectively), while households in non-municipal areas used charcoal, firewood, or scrap wood at a higher proportion than those in municipal areas ( 31.3 and 9.5 percent, respectively). Besides, it was found that 6.3 percent of households in municipal areas do not cook compared to 1.2 percent in non-municipal area households (Table 18).

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

| Type of cooking fuel ${ }^{1 /}$ | Table | Area |  |
| :--- | ---: | ---: | ---: |
|  |  | Municipal area | Non-municipal area |
| Total | 100.0 | 100.0 | 100.0 |
| Gas | 70.2 | 75.9 | 65.1 |
| Charcoal, firewood, scrap wood | 21.0 | 9.5 | 31.3 |
| Electricity | 5.1 | 8.3 | 2.3 |
| Kerosene and others | a | a | a |
| Not cooking | 3.6 | 6.3 | 1.2 |
| 1/ Excluding unknown | a : Less than 0.1 |  |  |

1/ Excluding unknown
a : Less than 0.1

## 6. Possession of household appliances

More households in municipal areas possess a VCD/DVD player, mobile phone, computer, microwave/oven, washing machine, air-condition, car/pick-up truck/van than in non-municipal areas. More households in non-municipal areas posses television, refrigerator, motorcycle, 4-wheel tractor and 2-wheel tractor for agricultural than those in municipal areas.

Respondents were asked whether they had the following technology such as cable TV, satellite dish and Internet access in the household. It was found that more households in municipal areas had cable TV and used internet than those in non-municipal areas, while the use of the satellite dish was less for those in non-municipal areas (Table 19).

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

| Ownership of household appliance and technology used | Total |  | Area (percent) |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Number | Percent | Municipal area | Non-municipal area |
| Ownership of household appliance | (20,364,331) | (100.0) | (100.0) | (100.0) |
| Television | 19,326,131 | 94.9 | 94.5 | 95.3 |
| VCD/DVD player | 15,010,739 | 73.7 | 75.8 | 71.8 |
| Mobile phone | 18,381,659 | 90.3 | 91.7 | 89.0 |
| Computer | 5,929,095 | 29.1 | 39.5 | 19.7 |
| Refrigerator/Freezer | 17,204,185 | 84.5 | 83.1 | 85.7 |
| Microwave/Oven | 3,962,365 | 19.5 | 28.1 | 11.6 |
| Washing machine | 11,684,758 | 57.4 | 59.9 | 55.1 |
| Air condition | 4,025,089 | 19.8 | 30.7 | 9.8 |
| Car/Pick-up truck/Van | 7,422,192 | 36.4 | 41.5 | 31.9 |
| Motorcycle | 15,066,209 | 74.0 | 65.3 | 81.9 |
| 4-wheel tractor | 512,319 | 2.5 | 1.3 | 3.6 |
| 2-wheel tractor | 3,091,724 | 15.2 | 6.4 | 23.2 |
| Technology used | (20,364,331) | (100.0) | (100.0) | (100.0) |
| Cable TV | 3,294,873 | 16.2 | 26.1 | 7.2 |
| Satellite dish | 5,776,565 | 28.4 | 23.7 | 32.6 |
| Internet | 2,804,967 | 13.8 | 22.3 | 6.1 |


[^0]:    1/ Excluding people who with no answer about the period of time of a current stay
    2/ Excluding unknown reasons for moving

[^1]:    1/ Excluding unknown type of living quarters and construction materials of dwelling unit
    2/ Including rooms, inside a house, office, boat, raft and car used as living quarter

[^2]:    1/ Excluding unknown

