

## Chapter 2

### Major Findings

#### General Information

The Southern Region area is 70,715 square kilometers, located on Malay Peninsula. It has common boundary with Prachuab Khiri Khan and The Union of Myanmar in the North, Gulf of Thailand in the East, Malaysia in the South and Andaman Sea in the West, most area is a flat land. The Southern Region has heavy rain throughout the year as its landscape is a long narrow Peninsula with surface of water on both East and West sides. The climate is moderate throughout the year.

In the year 2010, the Southern Region had 14 provinces (Changwat), 151 districts (Amphoe), 1,084 sub-districts (Tambon), 7,548 villages (Moo baan), 263 municipalities and 913 non-municipalities (Tambon Administration Organization: TAO).

#### 1. Demographic characteristics

##### 1.1 Number of population and distribution of population

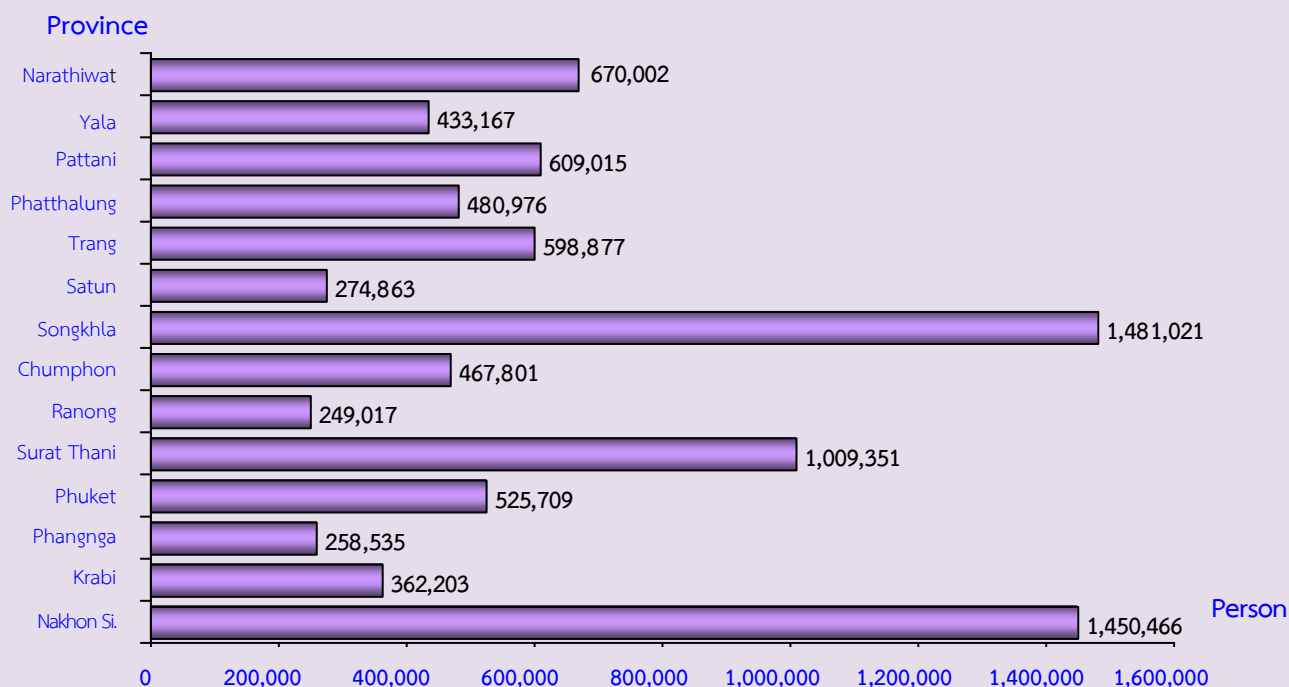
On September 1, 2010, the number of population in the Southern Region was 8,871,002, out of these, 4,391,060 were males and 4,479,942 were females. The sex ratio which is defined as the number of males over 100 females was 98.0. This indicated that the number of females was slightly more than males. This appeared in most of the provinces of the South, except Krabi, Phangnga, Ranong, Chumphon and Satun. The annual population growth rate between 2000 to 2010 was 0.92 percent per year.

Most of the population in this region or about 66.5 percent lived in non-municipal area while only about 33.5 percent lived in municipal area (Table 1). In comparison of population at provincial level, it reveals that Songkhla was the most populous, of 1,481,021 people or 16.7 percent, followed by Nakhon Si Thammarat and Surat Thani (16.4 and 11.4 percent, respectively). Ranong was the least populous, of 249,017 people or 2.8 percent (Figure 1).

**Table 1** Number of population by sex and area

Area	Population			Percent
	Total	Male	Female	
Total	8,871,002	4,391,060	4,479,942	100.0
Municipal area	2,970,176	1,438,797	1,531,379	33.5
Non-municipal area	5,900,826	2,952,263	2,948,563	66.5

Figure 1 Number of population by province in 2010



## 1.2 Population density

The population density of Southern Region was 125.4 people per 1 square kilometer ( $\text{km}^2$ ). The province, with highest density was Phuket with 968.2 people per 1  $\text{km}^2$ , followed by Pattani and Songkhla with of 313.9 and 200.3 people per 1  $\text{km}^2$ , respectively. Phangnga was the lowest density of 62.0 people per 1  $\text{km}^2$ .

Table 2 Average population density by province

Province	Area (Square kilometer)	Number of population (Person)	Population density (Person per 1 $\text{Km}^2$ )
<b>Total</b>	<b>70,715.2</b>	<b>8,871,002</b>	<b>125.4</b>
Nakhon Si Thammarat	9,942.5	1,450,466	145.9
Krabi	4,708.5	362,203	76.9
Phangnga	4,170.9	258,535	62.0
Phuket	543.0	525,709	968.2
Surat Thani	12,891.5	1,009,351	78.3
Ranong	3,298.0	249,017	75.5
Chumphon	6,009.0	467,801	77.9
Songkhla	7,393.9	1,481,021	200.3
Satun	2,479.0	274,863	110.9
Trang	4,917.5	598,877	121.8
Phatthalung	3,424.5	480,976	140.5
Pattani	1,940.4	609,015	313.9
Yala	4,521.1	433,167	95.8
Narathiwat	4,475.4	670,002	149.7

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

There were 2,509,487 households in this region, about 2,493,867 private households, 15,620 collective households (such as institutional household, worker's household). The average size of private households was 3.4 persons per household. The average size of private households in municipal area was smaller than in non-municipal area (3.1 and 3.6 persons, respectively) (Table 3).

Considering provincial differentials, Narathiwat had the biggest average size of private household, of about 4.2 persons, followed by Pattani 4.0 persons. Phangnga and Phuket had the smallest average size of private households (3.0 persons per household) (Statistical table 1).

In private households, there were higher percentage of male headed households than female headed households (68.8 percent compared to 31.2 percent). In municipal area, there was higher proportion of female headed household than in non-municipal area (Table 3).

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

Area	Number of private household	Average size of household	Percentage of household head		
			Total	Male	Female
Total	2,493,867	3.4	100.0	68.8	31.2
Municipal area	902,329	3.1	100.0	66.2	33.8
Non-municipal area	1,591,538	3.6	100.0	70.3	29.7

### 1.4 Population age-sex structure

Considering of population age-sex structure in the Southern Region (Table 4), it was found that young population (0 - 14 years) accounted for 22.1 percent, working age population (15 – 59 years) for 66.1 percent and aging population (60 years and over) was 11.8 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 non-municipal area was lower than that was in the municipal area. When consideration about sex, it showed that proportion of young population group and working-aged group were more male than female, while elderly group was more female than male.

Average age of population (Median age) was about 31.8 years. The population in municipal area had a little higher median age than those in non-municipal area (32.3 and 31.6 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 51.3, it means that 100 persons of working age population have to be responsible to take care of young and elderly population, approximately 51 persons. Age dependency ratio for young population was 33.5 and was 17.9 for elderly population. The young and elderly dependency ratios in non-municipal area were higher than those in municipal area.

**Table 4 Population characteristics by area**

Population characteristics	Total	Area	
		Municipal area	Non-municipal area
<b>Population by aged-group (%)</b>			
<b>Children aged 0-14 years</b>			
Total	22.1	19.4	23.5
Male	22.9	20.4	24.2
Female	21.3	18.5	22.7
<b>Working aged 15-59 years</b>			
Total	66.1	69.5	64.3
Male	66.3	69.5	64.7
Female	65.9	69.6	64.0
<b>Old aged 60 years and over</b>			
Total	11.8	11.0	12.2
Male	10.8	10.1	11.1
Female	12.8	11.9	13.3
<b>Median age (year)</b>	<b>31.8</b>	<b>32.3</b>	<b>31.6</b>
<b>Sex ratio (%)</b>			
Total	98.0	94.0	100.1
Children aged 0-14 years	105.6	103.4	106.6
Working aged 15-59 years	98.5	93.8	101.2
Old aged 60 years and over	82.7	79.9	83.9
<b>Dependency ratio (%)</b>			
Total	51.3	43.8	55.4
Children aged 0-14 years	33.5	28.0	36.4
Old aged 60 years and over	17.9	15.8	19.0

## 1.5 Religion and nationality

Most of the population in the Southern Region were Buddhist (70.8 percent), followed by Islamic (28.6 percent) and Christian (0.4 percent). Population, in non-municipal area were Islamic, which was almost double as much as those in municipal area (34.0 and 17.9 percent, respectively).

The majority of population, of about 95.9 percent was Thais, 3.3 percent was Burmese and the rest were other nationalities, such as, Cambodian, Laotian and Chinese etc. (Table 5).

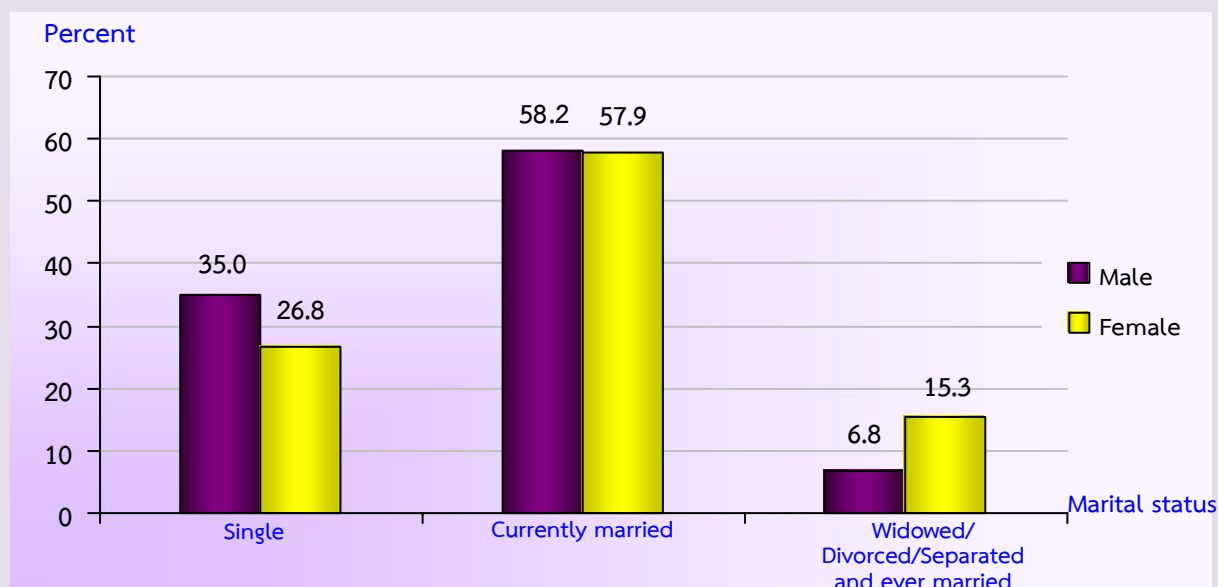
**Table 5 Percentage of population by religion, nationality and area**

Religion and nationality	Total	Area	
		Municipal area	Non-municipal area
<b>Religion</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Buddhism	70.8	81.2	65.6
Islam	28.6	17.9	34.0
Christianity	0.4	0.7	0.2
Others	0.2	0.2	0.2
<b>Nationality</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Thai	95.9	94.2	96.8
Burmese	3.3	4.4	2.8
Cambodian, Laotian, Chinese	0.3	0.3	0.1
Others	0.5	1.1	0.3

## 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 proportions of male and female with currently married status were about the same. The single male was higher than female (35.0 and 26.8 percent, respectively), but ratio of female population who were widowed, divorced, separated and ever married were more than double compared to those of male (15.3 and 6.8 percent, respectively).

Figure 2 Percentage of population aged 13 years and over by marital status 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 79.9 percent of population residing in such province had registered in the house registration, 11.8 percent of them had their names registered in actual place of residence in the provinces, while 4.6 percent had been in other provinces, the rest of 3.5 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 0.2 percent of population, not being in the house registration system in any countries at all. Population, in municipal area had been in the registration system at the actual place of actual residence was lower than those in non-municipal area (67.6 and 86.0 percent, respectively).

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

Name listing in house registration	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	79.9	79.0	80.7	67.6	86.0
Listed in other house					
In this province	11.8	11.9	11.7	18.8	8.3
In other province	4.6	4.6	4.6	8.3	2.7
In other country	3.5	4.3	2.8	5.1	2.8
No where	0.2	0.2	0.2	0.2	0.2

## 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 8,871,002 population in the Southern Region, 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	Total	Sex		Area	
		Male	Female	Municipal area	Non-municipal area
Total	100.0	100.0	100.0	100.0	100.0
No disability	99.2	99.1	99.3	99.3	99.1
With disability	0.8	0.9	0.7	0.7	0.9

## 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 32.2 percent of population aged 6-24 were not attending school. Male, not attending school, was higher proportion than female (34.8 and 29.6 percent, respectively). Population, not attending school, in municipal area was lower proportion than of those in non-municipal area (30.2 and 33.2 percent, respectively).

About 45.4 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 (46.4 and 44.5 percent, respectively). Population in municipal area finished higher than elementary school more than those in non-municipal area (55.3 and 40.2 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 7.8 years of schooling, which was similar to both sexes. (7.8 and 7.7 years, respectively).

**Table 8 Population of education by sex and area**

Education	Total	Sex		Area	
		Male	Female	Municipal area	Non-municipal area
Population aged 6-24 years, not attending school (%)	32.2	34.8	29.6	30.2	33.2
Population aged 15 yrs. and over, with higher than elementary school (%)	45.4	46.4	44.5	55.3	40.2
Average year of schooling, population aged 15 yrs. and over (year)	7.8	7.8	7.7	8.9	7.2

## 2.2 Literacy

Regarding the ability to read and write both Thai and other languages, it was found that more than 90 percent of population aged 15 years and over, in the Southern 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, such as, English, Myanmar and Malay, it showed that population in the municipal area higher literacy rate in other languages than those in non-municipal area (22.5 and 15.2 percent, respectively), since the proportion of foreigners in municipal area was higher than in non-municipal area.

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

Literacy	Total	Sex		Area	
		Male	Female	Municipal area	Non-municipal area
<b>Thai language</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Literate	94.5	94.5	94.6	94.1	94.7
Illiterate	5.5	5.5	5.4	5.9	5.3
<b>Other languages</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Literate	17.7	17.8	17.6	22.5	15.2
Illiterate	82.3	82.2	82.4	77.5	84.8



## 2.3 Last year employment

### 2.3.1 Industry

Out of the total number of 6,809,274 population aged 15 years and over, there were 4,951,045 persons (72.7 percent of population aged 15 years and over) employed as of 1 September 2009 to 31 August 2010, of these, 2,626,576 were males (53.1 percent) and 2,324,469 were females (46.9 percent). There was about 27.3 percent of population of this aged-group were not employed or not working. Considering types of industry or business of the employed population, it was found that there was 52.5 percent of people working inside agricultural sector, and 47.5 percent working outside agricultural sector, 14.0 percent work in wholesale and retail business, vehicle and motorcycle repair, followed by 6.8 percent of accommodation and food service activities.

For those employed in municipal area, mostly worked outside agricultural sector, (76.0 percent), mostly in wholesale, retail, vehicle and motorcycle repair (23.1 percent). Employed population in non-municipal area, mostly (66.0 percent) worked in agricultural sector (Table 10).

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

Employment and industry	Total	Sex		Area	
		Male	Female	Municipal area	Non-municipal area
Total <sup>1/</sup>	6,809,274	3,339,590	3,469,684	2,331,539	4,477,734
Number of employed persons	4,951,045	2,626,576	2,324,469	1,608,632	3,342,413
Percentage of employed persons	72.7	78.6	67.0	69.0	74.6
Industry	100.0	100.0	100.0	100.0	100.0
Agricultural sector (%)	52.5	53.8	51.1	24.0	66.0
1. Agriculture, forestry and fishing	52.5	53.8	51.1	24.0	66.0
Outside agricultural sector (%)	47.5	46.2	48.9	76.0	34.0
1. wholesale and retail business, vehicle and motorcycle repair	14.0	12.1	16.1	23.1	9.6
2. Accommodation and food service activities	6.8	4.8	9.2	12.0	4.4
3. Manufacturing	6.2	5.7	6.7	8.6	5.0
4. Construction	4.2	6.6	1.6	5.8	3.5
5. Public administration and defence; compulsory social security	4.2	5.8	2.3	7.1	2.8
6. Others <sup>2/</sup>	12.1	11.2	13.0	19.4	8.7
Number of unemployed persons	1,858,229	713,014	1,145,215	722,908	1,135,321
Percentage of unemployed persons	27.3	21.4	33.0	31.0	25.4

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 as of the census date, mainly worked as an employee (employee of government, state enterprise and private organizations), or about 40.7 percent, followed by own account worker without employee (37.1 percent). Comparing between sex, higher proportion of female worked as unpaid family workers than male (28.0 and 11.4 percent, respectively), while there was higher proportion of male than female in own account worker (41.6 and 32.1 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 and unpaid family workers higher than in municipal area. In contrast, the proportion of population being employer in municipal area was higher than non-municipal area, (3.6 and 2.6 percent, respectively) and the proportion of employees in municipal area was higher than in non-municipal area (51.4 and 35.5 percent, respectively).

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

Work status <sup>1/</sup>	Total	Sex		Area	
		Male	Female	Municipal area	Non-municipal area
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Employer	2.9	3.5	2.3	3.6	2.6
Own account worker	37.1	41.6	32.1	31.8	39.6
Unpaid family worker	19.2	11.4	28.0	13.0	22.1
Government employee	8.0	8.3	7.6	12.8	5.6
Government enterprise	0.5	0.7	0.4	1.0	0.3
Private employee	32.2	34.4	29.5	37.6	29.6
Member of producer's cooperatives	0.1	0.1	0.1	0.1	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 1.68. Females in municipal area had average number of children ever born lower than those in non-municipal, which was 1.40 and 1.83 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 1.73 children, which was lower than last 10 years (2.17 children) and it was in accordance with single mean age at first marriage, which was higher for both male and female.

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 was 24.4 years old, while single mean age at first marriage of male was 28.2 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	
		Municipal area	Non-municipal area
<b>Average number of children ever born<sup>1/</sup> (person)</b>			
Per women aged 13 years and over	1.68	1.40	1.83
Per women aged 15-49 years	1.17	0.95	1.29
Per ever married women aged 15-49 years	1.73	1.53	1.83
<b>Average number of children still living<sup>1/</sup> (person)</b>			
Per women aged 13 years and over	1.64	1.36	1.78
Per women aged 15-49 years	1.16	0.94	1.28
Per ever married women aged 15-49 years	1.71	1.52	1.81
<b>Single mean age at first marriage (year)</b>			
Total	26.3	27.1	25.9
Male	28.2	28.8	27.9
Female	24.4	25.4	23.9

1/ Not including females with no answer regarding children ever born

## 4. Migration

### 4.1 Place of birth and period of living at the current place

From the 2010 Population and Housing Census, it was found that there are 84.3 percent of population who were born in the Southern Region and currently live in their hometown, mostly were female (84.7 and 83.9 percent, respectively). There was 15.7 percent of population born in other province or population not living in their hometown, mostly lived in municipal area (24.0 and 11.6 percent, respectively).

Population in the South migrated during the year 2005-2010, accounted for 8.5 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 (13.9 and 5.8 percent, respectively). Male and female had a slight difference proportion of migration (8.9 and 8.2 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
<b>Migrated population<sup>1/</sup> (%)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Living in province of birth	84.3	83.9	84.7	76.0	88.4
Not living in province of birth	15.7	16.1	15.3	24.0	11.6
<b>People migrating during 5 yrs. (2005-2010)</b>					
Number of migration	756,099	389,274	366,825	412,820	343,279
Percentage of migration	8.5	8.9	8.2	13.9	5.8
<b>Reasons for moving<sup>2/</sup> (%)</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Looking for a job	26.6	29.6	23.4	24.6	29.0
Job assignment	10.6	12.8	8.3	12.3	8.5
Studying	13.5	9.1	18.2	16.2	10.2
Following persons in the household	22.8	18.3	27.5	18.4	28.2
Returning back home	2.3	2.6	2.1	1.5	3.4
Changing of residence	16.7	16.3	17.0	18.4	14.4
Moving into institution household	6.5	9.8	3.1	7.4	5.5
Others	1.0	1.5	0.4	1.2	0.8

1/ Excluding people with no answer about the period of time of a current stay

2/ Excluding unknown reasons for moving

#### 4.2 Reasons of migration

During the year 2005-2010, the major reasons of population migration were to looking for a job (26.6 percent), following people in the household and changing to new residence (22.8 and 16.7 percent, respectively). Male's reasons in migrating were mostly looking for a job and for job assignment, while female's reasons in migrating were to follow the people in the household and for education. Proportion of population migration in municipal area for education was higher than of which in non-municipal area (16.2 and 10.2 percent, respectively). Proportion of population migration in non-municipal area was to follow people in the household, higher than those in municipal area (28.2 and 18.4 percent, respectively).

## Housing Characteristics

### 1. Type and characteristic of living quarters

Studying types of residence of private households in the Southern Region in 2010, it was found that 78.8 percent of households were detached houses, followed by 14.3 percent of shop house or row house and 4.3 percent of town house, duplex and townhome. In considering type of living quarters according to area, it is similar, that is most of them were detached houses. However, residences which were shop house, row house, flat and apartment mainly located in municipal area.

For characteristics of residence in terms of material used, it was found that mostly, permanent materials, which are brick, wood, and brick and wood (99.1 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; 99.3 and 98.8 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
<b>Type of living quarters</b>	<b>2,493,867</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Detached house	1,966,261	78.8	53.6	93.2
Town house, duplex, townhome	107,676	4.3	9.2	1.5
Condominium, mansion	9,685	0.4	1.0	0.1
Flat, apartment, hostel	47,785	1.9	4.6	0.4
Row house, shop house	355,492	14.3	31.2	4.7
Others <sup>1/</sup>	6,968	0.3	0.4	0.1
<b>Construction materials of dwelling unit</b>	<b>2,486,760</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Cement or brick	1,674,095	67.3	78.1	61.2
Wood	394,495	15.9	9.4	19.5
Brick and wood	394,382	15.9	11.8	18.1
Non-permanent materials, reused materials	12,723	0.5	0.3	0.7
Others	11,064	0.4	0.4	0.5

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 Southern Region about 83.5 percent got their own residence, with higher proportion than the ones in municipal area (93.1 and 66.4 percent, respectively). About 11.6 percent of households rent the houses. Proportion of residence rented by households in municipal area was higher than the ones in non-municipal area (26.2 and 3.4 percent, respectively).

Considering land tenure for residential purposes (only for households that own or hire purchase residence), it was found that more than 90 percent of private households in the Southern 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 and land	Total		Area	
	Number	Percent	Municipal area	Non-municipal area
<b>Ownership of living quarters <sup>1/</sup></b>	<b>2,481,557</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Owner	2,072,128	83.5	66.4	93.1
Hire purchaser	11,207	0.5	0.9	0.2
Rent	288,452	11.6	26.2	3.4
Rent free	103,626	4.2	6.1	3.2
Others	6,144	0.2	0.4	0.1
<b>Land ownership <sup>1/</sup></b>	<b>2,040,641</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Owner	1,932,872	94.7	90.9	96.3
Hire purchaser	33,972	1.7	3.1	1.1
Rent	26,597	1.3	3.2	0.5
Rent free	38,482	1.9	2.1	1.8
Others	8,718	0.4	0.7	0.3

1/ Excluding unknown

### 3. Source of drinking water and water supply

As for source of drinking water in the Southern Region, it was found that 50.4 percent of households drink bottled water or water from vending machine, followed by 16.8 percent of well water and 13.0 percent of rain water. In considering by area, it was found that households in municipal area had higher proportion of drinking bottled water and tap water that has been boiled or filtered than the ones in non-municipal area. But proportion of households drinking rain water in non-municipal area was higher than the ones in municipal area (17.8 and 4.5 percent, respectively).

For water supply, 62.1 percent of households used tap water, followed by 24.9 percent of well water. Proportion of households using tap water in municipal area was higher than the ones in non-municipal area (76.2 and 54.2 percent, respectively).

**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
<b>Drinking water <sup>1/</sup></b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Tap water	9.1	5.5	11.1
Treated tap water (boiled/filtered)	7.0	9.7	5.5
Underground water	2.8	2.8	2.8
Well water	16.8	6.5	22.6
River, stream, canal, waterfall	0.8	0.4	1.0
Rain water	13.0	4.5	17.8
Bottled water, water from vending machine	50.4	70.5	39.1
Others	0.1	0.1	0.1
<b>Water supply <sup>1/</sup></b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Tap water	62.1	76.2	54.2
Treated tap water (boiled/filtered)	0.6	0.6	0.7
Underground water	5.9	7.8	4.9
Well water	24.9	13.2	31.6
River, stream, canal, waterfall	4.0	1.5	5.3
Rain water	2.2	0.6	3.2
Others	0.1	0.1	0.1

1/ Excluding unknown

#### 4. Type of toilet in the household

From table 17 illustrating type of toilet in the households of the South including hygiene and convenience in using toilet, it was found that almost all households had sanitary toilets (99.8 percent). Households residing in municipal area had a high proportion of using a sitting toilet comparing to those in non-municipal area (35.0 and 14.5 percent, respectively). In contrast, the percentage of using a squat toilet was higher in non-municipal area (82.9 and 60.9 percent, respectively).

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

Type of toilet used <sup>1/</sup>	Total	Area	
		Municipal area	Non-municipal area
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Sitting toilet	21.9	35.0	14.5
Squat toilet	74.9	60.9	82.9
Sitting and squat toilet	3.0	4.0	2.4
Others <sup>2/</sup>	0.2	0.1	0.2

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 households in the Southern Region, it was found that 92.6 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 4.3 percent do not cook compared to 0.6 percent 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 <sup>1/</sup>	Total	Area	
		Municipal area	Non-municipal area
<b>Total</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
Gas	92.6	90.2	94.0
Charcoal, firewood, scrap wood	2.4	1.7	2.7
Electricity	3.0	3.7	2.6
Kerosene and others	a	a	a
Not cooking	1.9	4.3	0.6

1/ Excluding unknown

a : Less than 0.1 percent



## 6. Possession of household equipments

As for possession of equipments in the household, it was found that households in municipal area possess VCD/DVD player, mobile phone, computer, microwave/oven, washing machine, air condition, car, pick-up truck, van more than households in non-municipal area, while households in non-municipal area possess television, refrigerator, motorcycle and 4-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 was less than those in non-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 and technology used	Total		Area (percent)	
	Number	Percent	Municipal area	Non-municipal area
<b>Ownership of household appliance</b>	<b>(2,493,867)</b>	<b>(100.0)</b>	<b>(100.0)</b>	<b>(100.0)</b>
Television	2,343,990	94.0	92.7	94.7
VCD/DVD player	1,796,694	72.0	73.6	71.1
Mobile phone	2,225,522	89.2	89.3	89.2
Computer	563,534	22.6	32.9	16.8
Refrigerator/Freezer	2,130,776	85.4	82.8	86.9
Microwave/Oven	343,183	13.8	19.8	10.3
Washing machine	1,588,807	63.7	66.4	62.2
Air condition	290,658	11.7	21.3	6.2
Car/Pick-up truck/Van	918,534	36.8	40.8	34.6
Motorcycle	2,156,754	86.5	82.6	88.7
4-wheels tractor	22,801	0.9	0.7	1.0
2-wheels tractor	61,698	2.5	1.0	3.3
<b>Technology used</b>	<b>(2,493,867)</b>	<b>(100.0)</b>	<b>(100.0)</b>	<b>(100.0)</b>
Cable TV	231,080	9.3	16.0	5.5
Satellite dish	773,226	31.0	23.7	35.2
Internet	221,927	8.9	16.9	4.4