

Chapter 2

Major Findings

General Information

The Bangkok area is 1,568.7 square kilometers. It has common boundary with Nonthaburi and Pathum Thani in the North, Chachonengsao in the East, Samut Prakan in the South, Nakhon Pathom and Samut Sakhon in the West, most area is a flat land. The climate is moderate throughout the year.

In the year 2010, the Bangkok had 50 districts (Amphoe) and 169 sub-districts (Tambon).

1. Demographic characteristics

1.1 Number of population and distribution of population

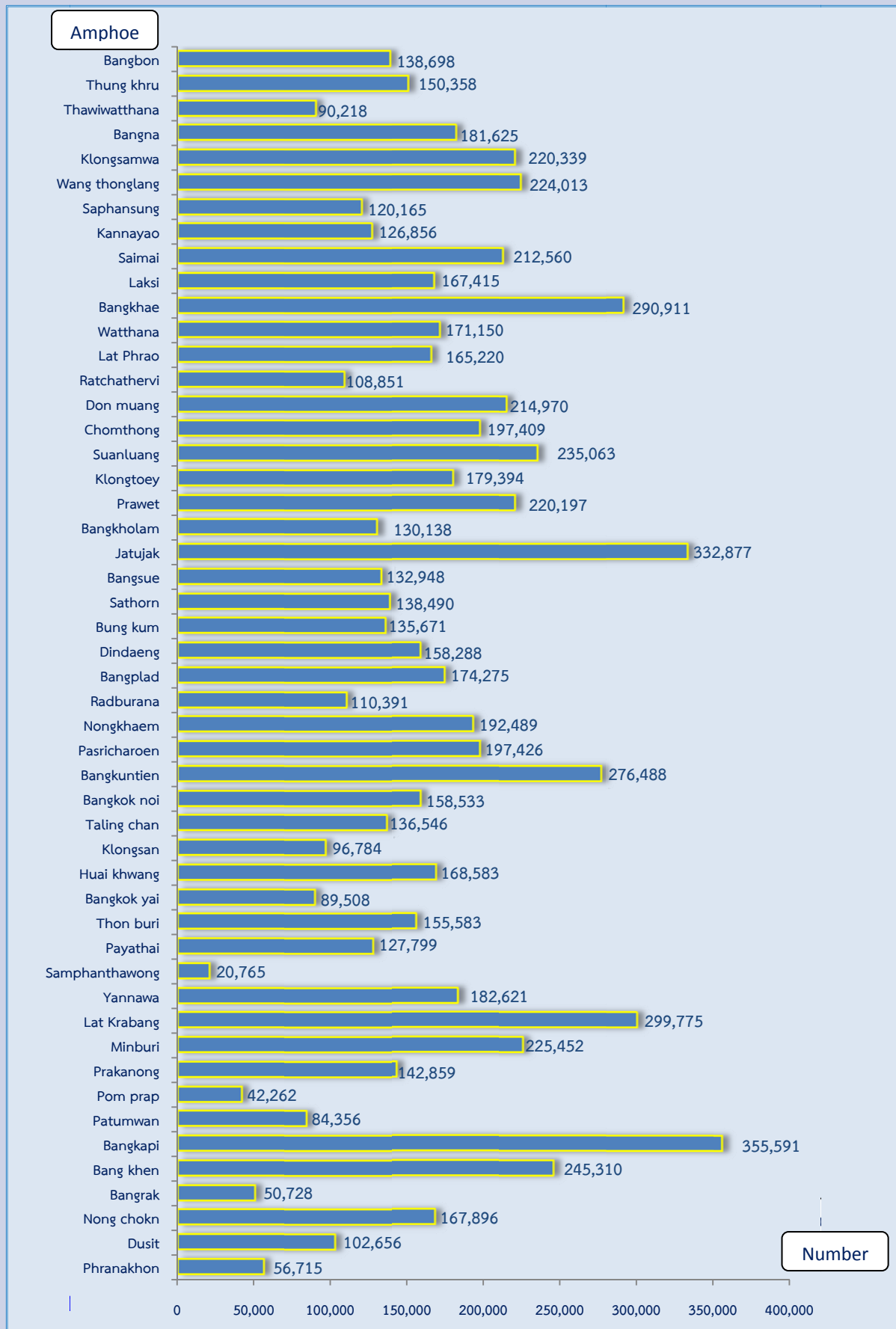
On September 1, 2010, the number of population in the Bangkok was 8,305,218, out of these, 4,032,586 were males and 4,272,632 were females. The sex ratio which is defined as the number of males over 100 females was 94.4. This indicated that the number of females were slightly more than males. This appeared in most of districts of Bangkok, except Lat krabang, Bangbon, Jatujak, Samphanthawong and Don Muang. The annual population growth rate between 2000 to 2010 was 2.68 percent per year.

In comparison of population at district level, it reveals that Bang Kabi was the most populous, of 355,591 people or 4.3 percent, followed by Jatujak and Lat Kabang (4.0 and 3.6 percent, respectively). Samphanthawong was the least populous, of 20,765 people or 0.3 percent (Figure 1).

Table 1 Number and percentage of population by sex

Population	Number	Percent
Total	8,305,218	100.0
Male	4,032,586	48.6
Female	4,272,632	51.4

Figure 1 Number of population by amphoe in 2010



1.2 Population density

The population density of Bangkok was 5,294.3 people per 1 square kilometer (km²). The district, with highest density was Pom Prap with 22,243.2 people per 1 km², followed by Dindaeng and Thon buri with a density of 18,843.8 and 18,091.0 people per 1 km², respectively. Nong Chokn was the lowest density of 710.5 people per 1 km².

Table 2 Average population density by amphoe

Amphoe	Area (Square kilometer)	Number of population (Person)	Population density (Person per 1 Km ²)
Total	1,568.7	8,305,218	5,294.3
Phranakhon	5.5	56,715	10,311.8
Dusit	10.7	102,656	9,594.0
Nong chokn	236.3	167,896	710.5
Bangrak	5.5	50,728	9,223.3
Bang khen	42.1	245,310	5,826.8
Bangkapi	28.5	355,591	12,476.9
Patumwan	8.4	84,356	10,042.4
Pom prap	1.9	42,262	22,243.2
Prakanong	14.0	142,859	10,204.2
Minburi	63.6	225,452	3,544.8
Lat Krabang	123.9	299,775	2,419.5
Yannawa	16.7	182,621	10,935.4
Samphanthawong	1.4	20,765	14,832.1
Payathai	9.6	127,799	13,312.4
Thon buri	8.6	155,583	18,091.0
Bangkok yai	6.2	89,508	14,436.8
Huai khwang	15.0	168,583	11,238.9
Klongsan	6.1	96,784	15,866.2
Taling chan	29.5	136,546	4,628.7
Bangkok noi	11.9	158,533	13,322.1
Bangkuntien	120.7	276,488	2,290.7
Pasricharoen	17.8	197,426	11,091.3
Nongkhaem	35.8	192,489	5,376.8
Radburana	15.8	110,391	6,986.8
Bangplad	11.4	174,275	15,287.3
Dindaeng	8.4	158,288	18,843.8
Bung kum	24.3	135,671	5,583.2
Sathorn	9.3	138,490	14,891.4
Bangsue	11.5	132,948	11,560.7

Table 2 Average population density by amphoe (Contd.)

Amphoe	Area (Square kilometer)	Number of population (Person)	Population density (Person per 1 Km ²)
Jatujak	32.9	332,877	10,117.8
Bangkholam	10.9	130,138	11,939.3
Prawet	52.5	220,197	4,194.2
Klongtoey	13.0	179,394	13,799.5
Suanluang	23.7	235,063	9,918.3
Chomthong	26.3	197,409	7,506.0
Don muang	36.8	214,970	5,841.6
Ratchathervi	7.1	108,851	15,331.1
Lat Phrao	21.5	165,220	7,684.7
Watthana	12.6	171,150	13,583.3
Bangkhae	44.5	290,911	6,537.3
Laksi	22.8	167,415	7,342.8
Saimai	44.6	212,560	4,765.9
Kannayao	26.0	126,856	4,879.1
Saphansung	28.1	120,165	4,276.3
Wang thonglang	19.9	224,013	11,256.9
Klongsamwa	110.7	220,339	1,990.4
Bangna	18.8	181,625	9,660.9
Thawiwatthana	50.2	90,218	1,797.2
Thung khru	30.7	150,358	4,897.7
Bangbon	34.7	138,698	3,997.1

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

There were 2,881,752 households in Bangkok, about 2,869,224 private households, 12,528 collective households (Such as institutional household, worker's household). The average size of private households was 2.7 persons per household. (Table 3).

Considering district differentials, Bangkholam and Talingchan had the biggest average size of private household, of about 3.6 persons, followed by Chomthong 3.4 persons. Bangrak had the smallest average size of private households (2.1 persons per household) (Statistical table 1).

In private households, There were higher percentage of male headed households than female headed households (63.4 percent compared to 36.6 percent) (Table 3).

Table 3 Number of household and household characteristics

Household characteristics	Number
Number of private household	2,869,224
Average size of household	2.7
Percentage of household head	
Total	100.0
Male	63.4
Female	36.6

1.4 Population age-sex structure

Considering of population age-sex structure in the Bangkok (Table 4), it was found that young population (0 - 14 years) accounted for 12.8 percent, working age population (15 – 59 years) for 77.6 percent and aging population (60 years and over) was 9.6 percent. 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 33.6 years.

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 28.9, it means that 100 persons of working age population have to be responsible to take care of young and elderly population, approximately 29 persons. Age dependency ratio for young population is 16.4 and is 12.4 for elderly population.

Table 4 Population characteristics

Population characteristics	Percent
Population by aged-group (%)	
Children aged 0-14 years	
Total	12.8
Male	13.5
Female	12.1
Working aged 15-59 years	
Total	77.6
Male	77.8
Female	77.4
Old aged 60 years and over	
Total	9.6
Male	8.7
Female	10.5

Table 4 Population characteristics (Contd.)

Population characteristics	Percent
Median age (year)	33.6
Sex ratio (%)	
Total	94.4
Children aged 0-14 years	105.9
Working aged 15-59 years	94.8
Old aged 60 years and over	77.8
Dependency ratio (%)	
Total	28.9
Children aged 0-14 years	16.4
Old aged 60 years and over	12.4

1.5 Religion and nationality

Most of the population in the Bangkok were Buddhist (92.5 percent), followed by Islamic (4.6 percent) and Christian (19.0 percent).

The majority of opulation, of about 91.4 percent were Thais, 2.6 percent was Burmese and the rest were other nationalities such as Cambodian, Chinese and Japanese etc.

Table 5 Percentage of population by religion and nationality

Religion and nationality	Percent
Religion	100.0
Buddhism	92.5
Islam	4.6
Christianity	1.9
Hindus	0.3
Confucius	0.1
Sikh	0.1
Others	0.3
No religion	0.2

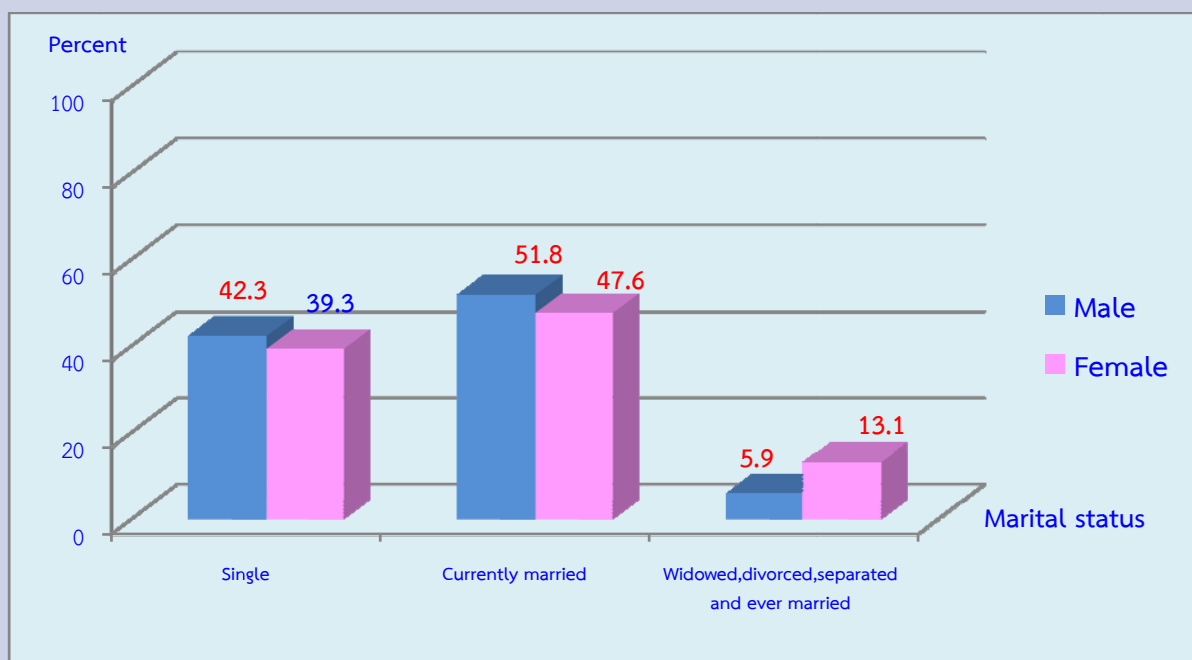
Table 5 Percentage of population by religion and nationality (Contd.)

Religion and nationality	Percent
Nationality	100.0
Thai	91.4
Burmese	2.6
Cambodian	0.9
Chinese	0.9
Japanese	0.8
Laotian	0.6
Others	2.8

1.6 Marital status

Figure 2 shows marital status of population aged 13 years and over, it was found that currently married male was higher than female (51.8 and 47.6 percent, respectively). The single male was higher than female (42.3 and 39.3 percent, respectively), but ratio of female population who were widowed, divorced, separated and ever married were more than double compared to those of male (13.1 and 5.9 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 51.4 percent of population residing in the house actual living and have their names in that house registration, 11.7 percent of them had their names registered in the Bangkok, while 29.9 percent had been in other provinces, the rest of 6.9 percent had their names in the house registration in other countries, most of them were foreigners or non-Thais living in Thailand, but there was about 0.1 percent of population, not being in the house registration system in any countries at all.

Table 6 Percentage of population by house family registration system and sex

Name listing in house registration	Total	Sex	
		Male	Female
Total	100.0	100.0	100.0
Listed in the house actual living	51.4	49.1	53.6
Listed in other house			
In the Bangkok	11.7	11.4	12.0
In other province	29.9	31.7	28.2
In other country	6.9	7.7	6.1
No where	0.1	0.1	0.1

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 8,305,218 population in the Bangkok, 99.4 percent of them, were not disable, only 0.6 percent were disable (Table 7).

Table 7 Percentage of population by disability condition and sex

Disability condition ^{1/}	Total	Sex	
		Male	Female
Total	100.0	100.0	100.0
No disability	99.4	99.3	99.5
With disability	0.6	0.7	0.5

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 36.3 percent of population, aged-group 6-24, were not attending school. Male, not attending school, was higher proportion than female (38.3 and 34.4 percent, respectively).

About 70.8 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 (72.5 and 69.2 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 10.8 years of schooling, which was similar to both sexes. (10.9 and 10.8 years, respectively).

Table 8 Population of education by sex

Education	Total	Sex	
		Male	Female
Population aged 6-24 years, not attending school (%)	36.3	38.3	34.4
Population aged 15 yrs. and over, with higher than elementary school (%)	70.8	72.5	69.2
Average year of schooling, population aged 15 yrs. and over (year)	10.8	10.9	10.8

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 Bangkok can read and write Thai. Moreover, the Thai literacy rate was not significantly different in terms of sex (Table 9).

For literacy rate of other languages, such as, English, Myanmar and Japanese, comparing between sex, it showed that female population higher literacy rate in other languages than male (33.8 and 31.9 percent, respectively).

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

Literacy ^{1/}	Total	Sex	
		Male	Female
Thai language	100.0	100.0	100.0
Literate	98.5	98.6	98.3
Illiterate	1.5	1.4	1.7
Other languages	100.0	100.0	100.0
Literate	32.9	31.9	33.8
Illiterate	67.1	68.1	66.2

1/ Excluding unknown

2.3 Last year employment

2.3.1 Industry

Out of the total number of 6,918,129 population aged 15 years and over, there were 4,828,957 persons (69.8 percent of population aged 15 years and over) employed as of 1 September 2009 to 31 August 2010, of these 2,539,949 were males (52.6 percent) and 2,289,007 were females (47.4 percent). There was about 30.2 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 only 0.6 percent of people working inside agricultural sector, and 99.4 percent working outside agricultural sector, 19.2 percent work in wholesale and retail business, vehicle and motorcycle repair, followed by 16.2 percent of manufacturing (Table 10).

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

Employment and Industry	Total	Sex	
		Male	Female
Total ^{1/}	6,918,129	3,330,880	3,587,248
Number of employed persons	4,828,957	2,539,949	2,289,007
Percentage of employed persons	69.8	76.3	63.8
Industry	100.0	100.0	100.0
Agricultural sector (%)			
1. Agriculture, forestry and fishing	0.6	0.7	0.5
Outside agricultural sector (%)			
1. wholesale and retail business, vehicle and motorcycle repair	19.2	18.5	20.1
2. Manufacturing	16.2	16.0	16.5
3. Public administration and defenses; compulsory social security	8.8	10.7	6.8
4. Accommodation and food service activities	8.8	6.8	11.0
5. Transportation and storage	6.6	10.3	2.6
6. Others ^{2/}	39.8	37.0	42.5
Number of unemployed persons	2,089,172	790,931	1,298,241
Percentage of unemployed persons	30.2	23.7	36.2

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 70.0 percent, followed by own account worker without employee (19.9 percent). Comparing between sex, higher proportion of female worked as unpaid family workers than male (7.5 and 3.3 percent, respectively), while there was higher proportion of male than female in own account worker (21.4 and 18.2 percent, respectively).

Table 11 Percentage of employed persons by work status and sex

Work status ^{1/}	Total	Sex	
		Male	Female
Total	100.0	100.0	100.0
Employer	4.2	5.3	3.0
Own account worker	19.9	21.4	18.2
Unpaid family worker	5.2	3.3	7.5
Government employee	13.1	13.5	12.6
Government enterprise	3.0	3.2	2.6
Private employee	53.9	52.1	55.9
Member of producer's cooperatives	0.7	1.2	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 0.93. Considering only ever married females, with reproductive aged 15-49 years old, it was found that the average of children ever born was 1.22 children, which was lower than last 10 years (1.51 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 was 27.1 years old, while single mean age at first marriage of male was 29.9 years old and it was in accordance with single mean age at first marriage, which was higher for both male and female. (Table 12).

Table 12 Fertility and single mean age at first marriage

Fertility	Total
Average number of children ever born^{1/} (person)	
Per women aged 13 years and over	0.93
Per women aged 15-49 years	0.65
Per ever married women aged 15-49 years	1.22
Average number of children still living^{1/} (person)	
Per women aged 13 years and over	0.92
Per women aged 15-49 years	0.65
Per ever married women aged 15-49 years	1.21
Single mean age at first marriage (year)	
Total	28.5
Male	29.9
Female	27.1

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 57.0 percent of population who were born in the Bangkok and currently live in their hometown, mostly were males (57.6 and 56.4 percent, respectively). There was 43.0 percent of population born in other province or population not living in their hometown, mostly were females (43.6 and 42.4 percent, respectively).

Population in the Bangkok migrated during the year 2005-2010, approximately 955,366 persons or 11.5 percent of total population in the Bangkok (excluding people with no answer of the period of staying at the current place). Male and female had a slight difference proportion of migration (11.6 and 11.4 percent, respectively).

Table 13 Percentage of migration by reasons for moving and sex

Migration and reasons for moving	Total	Sex	
		Male	Female
Migrated population^{1/} (%)	100.0	100.0	100.0
Living in province of birth	57.0	57.6	56.4
Not living in province of birth	43.0	42.4	43.6
People migrating during 5 yrs. (2005-2010)			
Number of migration	955,366	466,841	488,525
Percentage of migration	11.5	11.6	11.4
Reasons for moving^{2/} (%)	100.0	100.0	100.0
Looking for a job	27.9	31.8	24.3
Job assignment	28.6	31.0	26.4
Studying	18.1	14.3	21.7
Following persons in the household	10.4	7.0	13.5
Returning back home	4.4	4.1	4.6
Changing of residence	7.3	7.3	7.4
Moving into institution household	1.9	2.6	1.1
Others	1.4	1.9	1.0

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

The reasons of population migration during the year 2005-2010, 28.6 percent was for job assignment, looking for a job and education (27.9 and 18.1 percent, respectively). Male's reasons in migration were mostly looking for a job and for job assignment, while female's reasons in migration were for education and follow the people in the household.

Housing Characteristics

1. Type and characteristic of living quarters

Studying types of residence of private households in the Bangkok in 2010, it was found that 31.1 percent of households were detached houses, followed by 22.7 percent of Flat, apartment, hostel and 19.9 percent of Row house, shop house.

For characteristics of residence in terms of material used, it was found that mostly, permanent materials, which are brick, wood, and brick and wood (99.8 percent) were used in constructing residences. (Table 14).

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

Type of living quarters and construction materials of dwelling unit ^{1/}	Number	Percent
Type of living quarters	2,787,638	100.0
Detached house	867,302	31.1
Town house, duplex, townhome	428,382	15.4
Condominium, mansion	266,959	9.6
Flat, apartment, hostel	632,497	22.7
Row house, shop house	554,868	19.9
Others ^{2/}	37,631	1.3
Construction materials of dwelling unit	2,746,698	100.0
Cement or brick	2,212,996	80.5
Wood	309,914	11.3
Brick and wood	219,508	8.0
Non-permanent materials, reused materials	2,179	0.1
Others	2,100	0.1

1/ Excluding unknown

2/ Including rooms, inside a house or office, boat, raft and car used as living quarter

2. Ownership of living quarters and land

In considering ownership of residence, households in the Bangkok about 52.8 percent got their own residence (Owner, Hire purchaser), About 38.5 percent of households rent the houses, and 8.0 percent of rent free.

Considering land tenure for residential purposes (only for households that own or hire purchase residence), it was found that about 80.5 percent of private households in the Bangkok own the lands of their current residences. (Table 15).

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

Ownership of living quarters and land	Number	Percent
Ownership of living quarters ^{1/}	2,784,082	100.0
Owner	1,420,837	51.0
Hire purchaser	50,359	1.8
Rent	1,070,923	38.5
Rent free	221,729	8.0
Others	20,232	0.7
Land ownership ^{1/}	1,437,962	100.0
Owner	1,157,711	80.5
Hire purchaser	86,714	6.0
Rent	112,222	7.8
Rent free	65,696	4.6
Others	15,620	1.1

1/ Excluding unknown

3. Source of drinking water and water supply

As for source of drinking water in the Bangkok, it was found that 56.7 percent of households drink tap water that has been boiled or filtered, followed by 38.8 percent of bottled water, water from vending machine.

For water supply, almost all households used tap water (99.3 percent) (Table 16).

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

Source of drinking water and water supply	Percent
Drinking water ^{1/}	100.0
Tap water	3.8
Treated tap water (boiled/filtered)	56.7
Underground water	a
Well water	a
River, stream, canal and waterfall	a
Rain water	0.4
Bottled water, water from vending machine	38.8
Others	0.1
Water supply ^{1/}	100.0
Tap water	99.3
Treated tap water (boiled/filtered)	0.2
Underground water	0.2
Well water	0.1
River, stream, canal and waterfall	0.1
Rain water	0.1
Others	a

1/ Excluding unknown

a : Less than 0.1 percent

4. Type of toilet in the household

From table 17 illustrating type of toilet in the households of the Bangkok including hygiene and convenience in using toilet, it was found that almost all households had sanitary toilets (sitting toilet and squat toilet).

Table 17 Percentage of private households by type of toilet used

Type of toilet used ^{1/}	Percent
Total	100.0
Sitting toilet	65.6
Squat toilet	29.7
Sitting and squat toilet	4.7
Others ^{2/}	a

1/ Excluding unknown

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

a : Less than 0.1 percent

5. Use of cooking fuel

Regarding the use of cooking fuel by households in the Bangkok, it was found that 78.4 percent of them used gas (LPG) for cooking, followed by electricity to cook (11.8 percent) and 9.2 percent do not cooking.

Table 18 Percentage of private households by type of cooking fuel

Type of cooking fuel ^{1/}	Percent
Total	100.0
Gas	78.4
Charcoal, firewood, scrap wood	0.5
Electricity	11.8
Kerosene and others	a
Not cooking	9.2

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 more than 90 percent of private households in Bangkok possess Television, mobile phone. With respect to households possessed refrigerator (83.7 percent), VCD/DVD player (81.5 percent), washing machine (59.9 percent), computer (52.7 percent). Less than half of private households possessed microwave, air-condition, car pick-up truck van and motorcycle.

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 Bangkok used internet was 37.3 percent, followed by cable TV and satellite dish. (34.1 and 18.5 respectively).

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

Ownership of household appliance and technology used	Number	Percent
Ownership of household appliance	(2,869,224)	(100.0)
Television	2,727,794	95.1
VCD/DVD player	2,336,743	81.5
Mobile phone	2,699,132	94.1
Computer	1,511,176	52.7
Refrigerator/Freezer	2,398,846	83.7
Microwave/Oven	1,206,045	42.1
Washing machine	1,716,675	59.9
Air condition	1,301,163	45.4
Car/Pick-up truck/Van	1,298,952	45.3
Motorcycle	1,142,801	39.9
4-wheels tractor	13,140	0.5
2-wheels tractor	13,604	0.5
Technology used	(2,869,224)	(100.0)
Cable TV	976,848	34.1
Satellite dish	530,914	18.5
Internet	1,068,613	37.3