

EXECUTIVE SUMMARY
SURVEY OF POPULATION CHANGE PROJECT
2005-2006

The National Statistical Office of Thailand has conducted the routine survey of population change in every 10 years interval during the mid year of the intercensal period. This report presents the seventh survey which is divided into 5 consecutive rounds, having 3 months interval period between each round. Round 1 was conducted in order to collect data on base population, while round 2-5 gathered information regarding birth, death and the change in demographic characteristics which had been previously interviewed during round 1.

The objectives of the 2005-2006 survey of population change were as follows :

1. To obtain estimates of birth and death rates, the rate of population growth and fertility rate.
2. To obtain other information data on population with regard to fertility, mortality family planning and expectation of life at birth.
3. To provide current and accurate data on demographic characteristics such as number of population by age group and sex, marital status, education and occupation, etc.
4. To evaluate the population growth rate at the end of the Ninth National Economic and Social Development Plan (2002-2006) and to provide reliable data essential for population projection.
5. To provide data on changes in demographic characteristics in the mid-decade period.

This report only presents data on population change in relation to birth and death. While basic information related to population characteristics and structure and trend of population change during mid year of the intercensal period has been separately presented in the report on Population Characteristics based on Survey of Population Change, 2005-2006 which has already been published.

The Survey of Population Change, 2005-2006 is the survey using samples for both municipal and non-municipal areas in all provinces of the country. In the enumeration areas of

the municipality, sample district were chosen. While in the non-municipal areas, sample enumeration villages were also selected. The survey of population change 2005-2006 covered 2,050 samples. The household located within the survey target include private household, and special household altogether forming the sample household within the enumeration district/village. Approximately, there are 82,000 sample households for the private household.

The period of the survey was divided into 5 rounds, having the interval of 3 months between each round. Round 1 covered 10-24 July 2005, Round 2 covered 10-24 October 2005; Round 3 covered 10-24 January 2006 ; Round 4 covered 10-24 April 2006 and Round 5 covered 10-24 July 2006. The result of this study can be used to estimate the characteristics structure and trend of population in order to plan for a given policy and direction in population social and economic development. Moreover, this information can be used to evaluate the population growth rate during the later part of the National Economic and Social Development Plan (2002-2006) and also can be used to improve the population projection of the whole country. It can also be used to study, analyze and conduct further researches for different division, learning institutes and for other walks of life including students, academic and other who are interested.

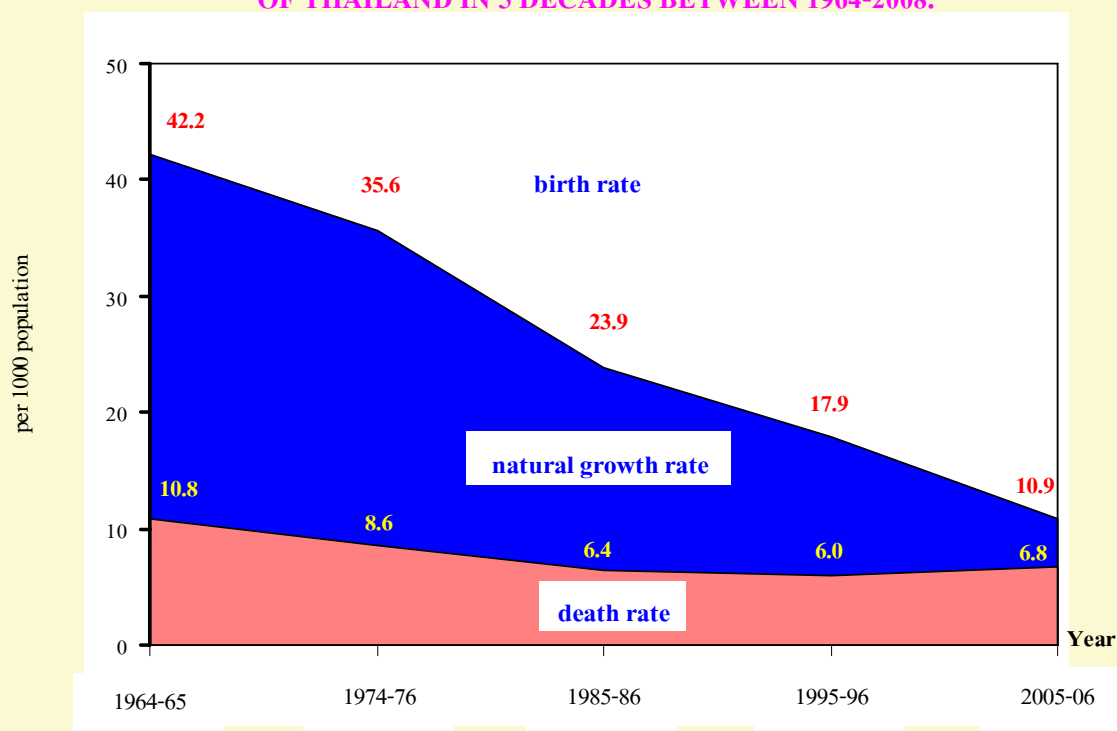
This study present data obtained from the five rounds survey in relation to the change on birth and death of population, inwhich the result of this study can be briefly described as follows :

1. Birth, death and population increase

The trend in birth rate of Thailand has been decreased rapidly and continuously in every 10 years of the survey of population change. It was found that in the year 1974-76, there was the birth rate of 35.6 per 1000 population. Further, in 1985-86 the birth rate decreased down to 23.9 per 1000 population and further reduced to 17.9 and 10.9 in the year 1995-96 and 2005-2006 respectively. It was also showed that the death rate of the country was also decreased, however, such decreased has been slowed compared to the birth rate. As it was found that in the year 1974-76, death rate was 8.6 per 1000 population, reduced down to 6.4 per 1000 population in 1985-86 and further reduced to 6.0 in 1995-1996. But the death rate increased abruptly in the year 2005-2006.

From the difference in birth and death rate, the natural growth rate can be further calculated. It was found that the natural growth rate in the year 1974-76 was 2.70 percent per year. The natural growth rate decreased further from 1974-1976 to 2005-2006 as the natural growth rate in 1985-86, 1995-96 and 2005-2006 were 1.75, 1.19 and 0.41 respectively (see Figure 1)

FIGURE 1 BIRTH RATE, DEATH RATE AND NATURAL GROWTH RATE OF THAILAND IN 5 DECADES BETWEEN 1964-2008.



2. Birth in different regions

During the survey between July 2005-July 2006, there were approximately 705,000 births in the country with 364,000 male and 341,000 female and the birth rate at this time was 10.85 per 1000 population. It was found that the birth rate was slightly lower in the municipality compared to the non-municipal area (9.11 vs 11.59 per 1000 population).

When compared between different regions, it was found that Bangkok Metropolis had the lower birth rate of 8.63 per 1000 population, while the northeastern region had the highest birth rate of 12.24. The central and the northern regions had similar birth rate of 10.13 and 9.78 respectively and the southern region had the birth rate of 11.78 per 1000 population.

3. Birth at different mother aged group

When considering birth at different aged group of mother, it was found that the majority of infants were born from mother in the reproductive age (15-49 years). Only 0.5 percent were born from mother at the 10-14 aged group, 0.06 percent were born from older mother of 50-60 aged group. While the highest amount of infants were born from mother of 20-34 aged group which are the aged group suitable for pregnancy and child bearing.

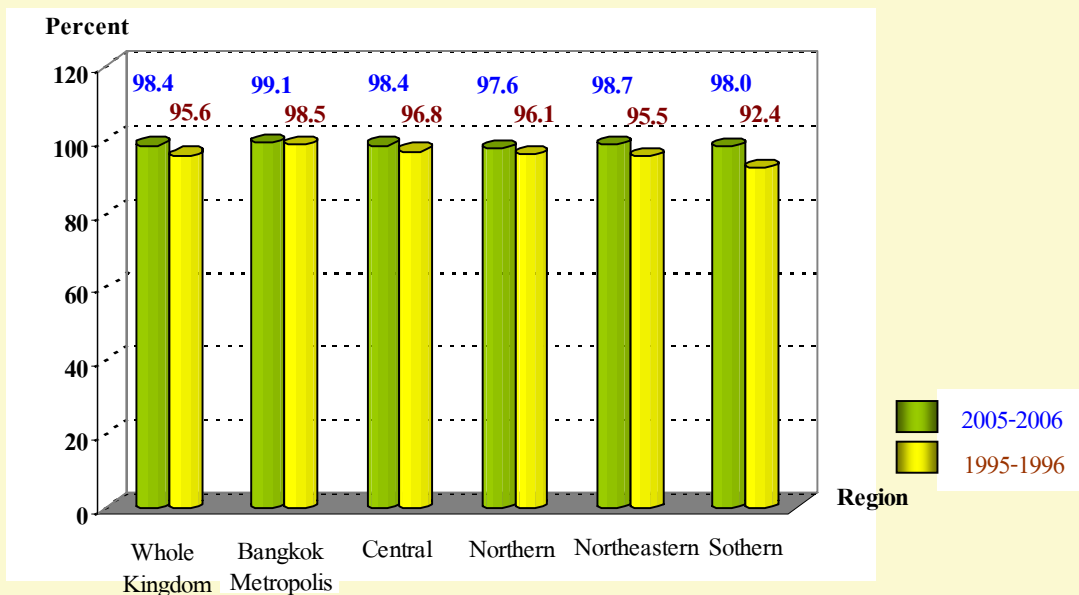
4. Place of birth and birth registration.

Most of the infants approximately 96.2 percent were born at the hospital which can be further classified as public hospital (89.5%), private hospital (6.7%), the rest were born at either health station/public welfare service center or the community health center (1.2%), at the mother and child health center (1.2%) and only 0.7% were born at home, 0.1% were born on the transporting vehicles such as automobile, train and boat. In general, the percentage of infant which were born at the hospital in the municipal areas was higher than those at the non-municipal areas. (97.6% vs 95.8%). The percentage of infants who were born at the private hospital in the municipal area was three times much higher than those of the non-municipal area. The percentage of baby born at home in the non-municipal area was 90 times much higher than that of the municipal area. However, it was also found that 96.0 percent of infants regardless of sex were born at the hospital.

From all the infants born, 98.4 percent had properly registered, 96.7 percent received already the birth certificate and only 1.7 percent did not. The percentage of infants born in the non-municipal area properly registered this birth higher than those infants born at the municipal area (97.2 vs 95.1) while female infants registered their birth at the slightly higher percentage than the male infants (96.8 vs 96.5).

When considering the completeness of birth registration at the different regions, it was found that Bangkok Metropolis has the highest birth registration (99.1%) while the northern region had the lowest birth registration (97.6%) There was the trend that birth registration would increase in every region of the country.

FIGURE 2 PERCENTAGE COMPLETENESS OF THE OFFICIAL BIRTH REGISTRATION



5. Death in different region

From the survey of population change 2005-2006 it was found that number of death in the country was 440,000 with 243,000 being male and 197,000 being female which is equivalent to 6.76 death rate per 1000 population. It was also found that the death rate at the municipal area was lower than the non-municipal area (5.09 and 7.48 per 1000 population respectively). When comparing the death rate between different regions, it was found that Bangkok Metropolis had the lowest death rate of 4.23 per 1000 population, while the north had the highest death rate of 10.28, the central and the south had similar death rate of 5.57 and 5.52 per 1000 population respectively and the northeastern region had the death rate of 6.95 per thousand people.

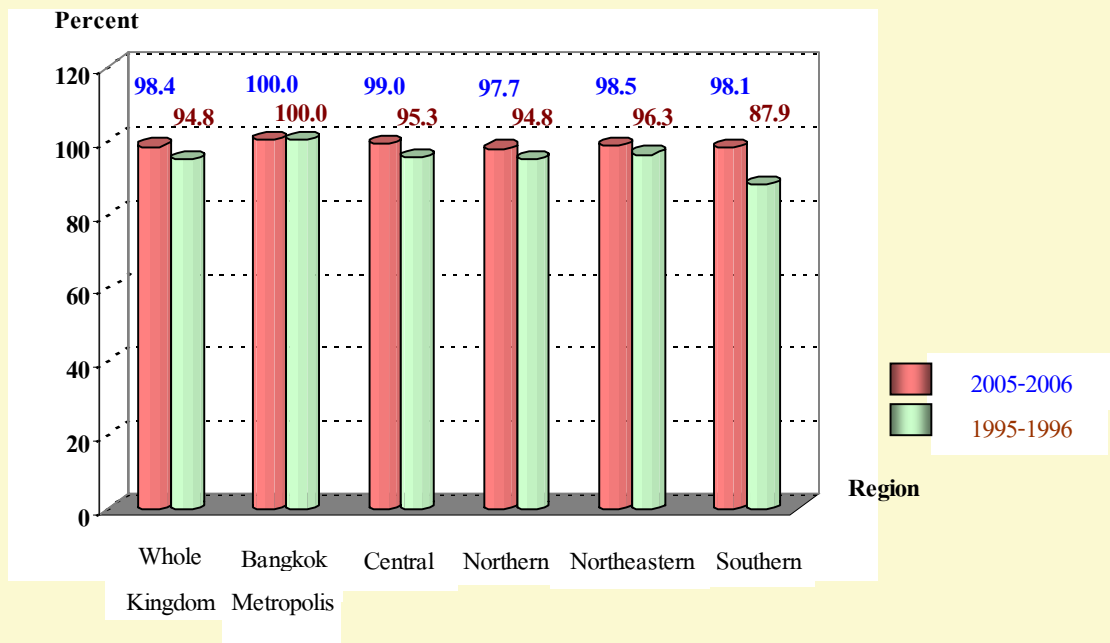
6. Place of death and death registration

It was found in the survey that death occurred approximately 51.7 percent at home, 35.6 percent at the public hospital, 3.9 at the private hospital, 4.0 along the way to the hospital, 1.1 percent drown and 3.4 percent at other several places. It can be noted that death which occurred at home were from old person and also the children aged 5-9 years old, the percentage of death by drown in the water was more than death at the hospital, at home and along the way to the hospital. It was also found that children at the age of 5-9 die because of drowning which occurred at much higher percentage than the children of other age group.

From all the death recorded, 98.4 percent registered the death, 95.2 percent received death certificate and the rest (3.2%) did not. Furthermore, it was found that death registered at the municipal area was similar to the non-municipal area (98.5% and 98.4% respectively). The ratio between the death registration of male and female are similar when considered the whole country and non-municipal area. However, in the municipal area, death registration for male were slightly higher than the female (99.1 and 97.6 percent respectively).

According to the survey of population change in 1995-1996 and 2005-2006, it was found that the trend in death registration in different regions had increased. For the south in particular, death registration had increased at the rate of much higher than other regions, from 87.9% in 1995-96 to 98.1 percent in 2005-2006. Moreover, it can be seen that the percentage of completeness in death registration for Bangkok Metropolis was highest as it was 100 percent (see Figure 3)

FIGURE 3 PERCENT COMPLETENESS OF THE OFFICIAL DEATH REGISTRATION



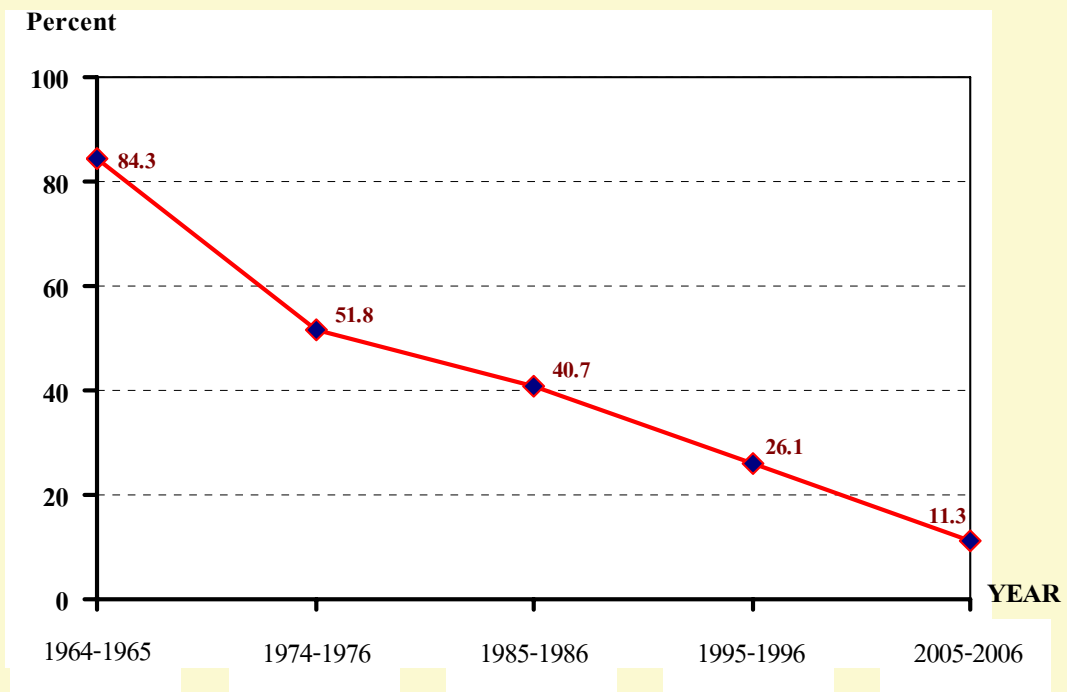
7. Cause of death

In general, most of death occurred from non-infectious diseases such as cancer which is the highest cause of death (excluding senility without psychosis 23.5%), but not quite differed from heart and blood vessel diseases which are ranked second (16.19%) Other cause of death are from the injury caused by accident (7.9%) and from infectious diseases (7.7%)

8. The trend of death in infants and children.

In the past, progress in medical science and public health of Thailand had not been much developed resulted into the highest death rate of infants and children. From the survey of population change in every 10 years interval, it was found that the death rate of infants was 84.3 percent per 1000 live births in the year 1964-1965 which mean that among 1000 born babies, there would be 84 babies who die. Subsequent survey of population change showed the decrease in death rate of infants of 51.8, 40.7 and 26.1 in the year 1974-76, 1985-86, and 1995-96 respectively. In the year 2005-2006 which was the latest year of survey of population change, it was found that the death rate of infants had dropped to 11.3 per 1000 live births. It was also found that death rate of infants was lower in the municipal area than the non-municipal area (7.9 and 12.4 per 1000 live births respectively). The survey also recorded the death rate of children younger than 5 years old which showed the decreasing trend as the death rate of children lower than 5 years old was 15.7 per 1000 live births.

FIGURE 4 TREND OF INFANT MORTALITY RATES BY YEAR OF SURVEY



Conclusion

In general, the 2005-2006 survey of population change had provided information on the birth, death of the Thai population. In this particular period the country had 10.9 birth rate per 1000 population and 6.8 death rate per 1000 population as well which make the natural growth rate equal to 0.41 percent per year. There was the trend at which the birth rate would be rapidly decreased in particular to the period at which there were birth control campaign between 1974-1976 and 1985-1986. Similarly, the death rate decreased at the slower rate when compared to the birth rate particularly in between 1985-1986 to 1995-1996 but increased abruptly in 2005-2006. As from the infant birth rate which showed the trend of declining, it had affected to the total fertility rate to be lower than the replacement level. This condition would affect the population structure of the country which bend towards the old aged structure and would apparently results into the higher ratio of old age group population which would be more in number when compared to other aged group. Moreover, the survey of population change, 2005-2006 had found that the infant mortality rate was 11.3 which is considered lowest. This has reflected to the rapid progress in medical and public health development not only in the urban areas but also very well evenly distributed. Pregnant mother received prenatal care from the doctor more than before and majority of infants were born from mother of the reproductive age (15-49 years).

Most of the babies were born from the hospital which have been fully equipped with the medical teams and facilities, this has made the born babies healthy and strong and has made the survival rate to be very high. The survey also showed that the system of birth and death registration are completed up to 98.4 percent. The information obtained from the survey of population change are most beneficial and can be further used in policy planning in relation to population growth and the development of human resource for the benefit of the country.