# Chapter 1

# Introduction

## 1.1 Background and rationale

Thailand population policy

Thailand's birth rate has declined quickly since the Thai government established its first population policy in 1970. This policy was implemented to organize the population size to fit with the economy, society and resources.

As of July 2005, Thailand's population was estimated at 65 million with the population growth rate at 0.87 percent, making it the nineteenth most populous country in the world. According to estimates of Thailand's age structure for 2005, 24 percent of inhabitants were less than 15 years of age, 69 percent were 15-64 years of age and 7 percent were 65 and older. The crude birth rate was 15.7 births per 1,000 populations (Country Profile: Thailand, 2005).

Fertility trend in Thailand

Thailand is one of developing countries where the fertility declined substantially during the last two decades. At the same time that fertility was declining in Thailand, family size preferences fell more or less steadily (Knodel *et al*, 1996). Fertility has already fallen slightly below the replacement level. Thailand will face negative effects of low fertility similar to those in European and other developed countries (Figure 1.1); extremist adherents of this view even equate declining fertility with the extinction of the Thai race. Another view is that fertility in Thailand will fluctuate around the replacement level unless there is a major change in marriage trends and

patterns. This view is based on assessments from empirical evidence of trends in family size preferences (Prachuabmoh and Mithranon, 2003).

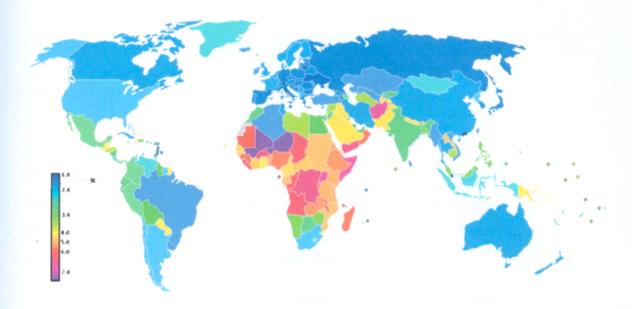


Figure 1.1: World fertility rate

(Source: Wikipedia, the free encyclopedia, June 2006)

### Fertility transition in Thailand

Among Southeast Asian countries, Thailand has experienced the most rapid fertility decline. In the early 1960s, the country had a high fertility level facilitated by a pronatalist government policy, which included bonuses for large families and incentives for early marriage. The total fertility rate (TFR) began to decline sharply over a decade to reach 5.4 in the period 1970-1974 and 3.9 in the period 1975-1979. The replacement fertility level in Thailand was reached in the late 1980s and early 1990s, and the rate has been below replacement level since 1999, standing at about 1.8. The government's concern about the high population growth surfaced around 1960 but it wasn't until 1970 that an official population policy and the National

Family Planning Program (NFPP) were adopted. (Prachuabmoh and Mithranon, 2003). The fertility transition is detailed in Table 1.1

period	Whole Kingdom	Bangkok* Metropolis	Central (excluding Bangkok)	North	North east	South
1960 – 1964	6.48	-	6.06	6.36	6.97	6.52
1965 – 1969	6.19	-	5.32	5.71	7.20	6.48
1970 – 1974	5.41	3.15	4.75	4.74	6.78	5.95
1975 – 1979,	3.88	2.40	3.43	3.23	4.88	4.59
1989	2.28	1.30	2.02	1.98	2.78	2.85
2000	1.82	1.17	1.53	1.76	2.15	2.25

<sup>\*</sup> During 1960-1969, Bangkok was included in the central region

Table 1.1: Total fertility rate by region, Thailand 1960-2000

While the fertility rate in Thailand has now dipped below the replacement level, there are regional variations. From the 1990 and 2000 censuses, the TFR was highest in the South, followed by Northeast, Central, North and Bangkok.

In the southern region of Thailand (Figure 1.2), most provinces have a fertility rate above 2. Only three provinces have fertility rate below the replacement level, namely Phuket, Songkla and Surat Thani. Fertility rates are relatively high in provinces with a high Muslim concentration, particularly Pattani, Narathiwat and Yala (National Statistical Office, 2003).

Other countries in east and south-east Asia have experienced similar but less dramatic declines in fertility rate. During the period from 1975 to 2000, China's estimated total fertility rate decreased from 3.57 to 1.80, compared with decreases of 3.23 to 1.48 for South Korea, 2.07 to 1.59 for Singapore, and 1.91 to 1.34 for Japan (Gubhaju and Moriki-Durand, 2003).

#### Southern Thailand



Figure 1.2: Fourteen provinces in Southern Thailand

In southern Thailand, where four of the 14 provinces have Muslim majorities, there is also evidence of substantial differences in fertility within the Muslim population. The 2000 Population and Housing Census of Thailand recorded substantial differences in growth rates between the Muslim and non-Muslim populations in the southern provinces (National Statistical Office, 2002). For example, in Pattani province the Muslim population (78% in 1990) increased by 19% in the decade from 1990 to 2000

while at the same time the non-Muslim population increased by only 3%. In contrast the Muslim population of Krabi (36% in 1990) also increased by 19% during the decade but the non-Muslim population increased by 23%. Although these population changes are influenced to some extent by migration, they are mainly determined by differences in fertility rates and consequent differences in age structures in the resident populations.

# 1.2 Objectives

In this study, we investigate the pattern of fertility in southern Thailand and attempt to account for variations in these patterns based on religion and east-west coasts. We selected four provinces for study, two (one mostly Muslim and one mostly non-Muslim) on each side of the Thai-Malay peninsula. Most Muslim province is Pattani and Satun and most non-Muslim province is Songkhla and Trang. The specific objectives of this study are as follows.

- 1.2.1 To study the pattern of fertility in southern Thailand.
- 1.2.2 To compare the pattern of fertility between Muslims and non-Muslims.
- 1.2.3 To compare the pattern of fertility between the residents of the east and the west coasts of southern Thailand.

## Research hypothesis

- (a) The patterns of fertility between Muslims and non-Muslims are different.
- (b) The patterns of fertility between residents of the east and the west coasts of southern Thailand are different.

## 1.3 Definition of terms

Fertility rate is the total number of live births per 1,000 women aged 15-49 years.

Age-specific fertility rate (ASFR) is the number of births per year to 1,000 women of a particular age. It can be computed for each single year of age from age 15 to 49. Seven age-specific fertility rate (ASFR) are normally calculated, one for each 5-age group between ages 15-49 (15-19, 20-24, ....45-49). Single year rates may also be computed.

Total fertility rate (TFR) is the average number of children who would be born alive to a woman during her lifetime, if she were to bear children at each age in accordance with the prevailing age-specific fertility rates.

Crude birth rate (CBR) is the number of childbirths per 1,000 persons per year.

Live birth occurs when a fetus, whatever its gestational age, exits the maternal body and subsequently shows any sign of life, such as voluntary movement, heartbeat, or pulsation of the umbilical cord, for however brief a time and regardless of whether the umbilical cord or placenta are intact.

Reproductive age is the total number of women between the ages of 15 and 49 currently inhabiting a country, territory or geographic area at a specific point in time.

Replacement level is the total fertility rate at which women would have only enough children to replace themselves and their partner. The replacement fertility rate is roughly 2.1 births per woman.

## 1.4 Literature Review

Estimates of total fertility for Thailand in the year 2000 vary markedly by region, being lowest (1.17) in the Bangkok metropolitan area and highest (2.25) in the southern region, which comprises 14 provinces (Prachuabmoh and Mithranon 2003). Using data from two large national family health surveys in India, Mishra (2004) found that the total fertility rate declined from 3.39 in 1992-93 to 2.85 in 1998-99, with a significant difference between Muslim and Hindu total fertility rates. In the 1998-99 Indian survey the rate for Muslim residents was 3.58 compared to 2.77 for the Hindu population, and the author concluded that socioeconomic factors did not explain lower use of family planning and higher fertility among Muslims. One reason may be heavy reliance of India's family planning program on sterilization and Muslims' preference for temporary methods over sterilization. Another reason may be greater opposition to family planning among Muslims, which is indicated in surveys as their main reason for not currently using and not intending to use family planning in the future. Similar differences between Muslim and non-Muslim fertility in India, Malaysia, Philippines and Thailand were reported by Morgan et al (2002), finding that compared to non-Muslim women, Muslim women have more children, are more likely to desire additional children and are less likely to be using contraception when they desire no more children.

Based on a study of religion and reproduction in southern Thailand, the National Statistical Office (1998) found that Islam exerts an important pronatalist influence on the attitudes and behavior of Thai Muslims. However, the relationship between religion and reproduction is complex, and the different increases in population growth

between Muslim populations in different provinces are a reflection of this complexity.

Religion influences reproduction in interaction with ethnicity, culture and the status of minority groups.

The National Statistical Office (2003) studied the level and trend of fertility and examined the fertility level at the national, regional and provincial level. This study found that the fertility decline occurred throughout the country during 1989-1999. Fertility in Thailand was 1.82 in 1999. The fertility was lowest in Bangkok, followed by the Central, the North, the Northeast and the South regions.

In each region, fertility was, however, relatively low in the provinces where there is more economic development, such as ChiangMai in the north and Phuket in the south. In contrast, the provinces with either ethnic minorities (Muslims, hill tribe) or locations along the boarding area had higher fertility rates than other provinces in the same region.

Knodel et al (1998) examined the contrast between Muslim reproductive attitudes and behavior in Thailand and those of Buddhists, focusing on the southern region and interpreting Muslim reproductive patterns from the perspectives of hypotheses invoked in the social demographic literature to explain links between religion and fertility. This study found that fertility among Buddhists had reached the replacement level with contraceptive use virtually universal, whereas Muslims in both the south and central regions had higher fertility levels and preferred to have more children than Buddhists.

Chayovan and Tsuya (2003) presented the specific demographic phenomena in Thailand. In the past, Thailand underwent a demographic transition from high to low

levels of mortality and fertility. The finding from the 2001 Economics Crisis,

Demographic Dynamics and Family in Thailand (ECODDF) survey reflected the

recent trends in demography that the fertility level continues to decline to below the

replacement level. Rural fertility remains higher than urban fertility. Increase in the

age at first marriage has been a major factor accounting for the fertility decline.

During 1970-2000, the mean age at marriage rose from 24.4 to 27.2 for men and 22.0

to 24.2 for women. Urban males and females married at a later age than those in rural

area. Bangkok has the highest age at first marriage while the northeast has the lowest.