# Chapter 5

## **Conclusion and Discussion**

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 location. We selected four provinces for study, two (one mostly Muslim and one mostly non-Muslim) on each side of the peninsula. The number of babies 186,532 were obtained from birth certificates in four southern Thai provinces, aggregated by month of birth, age of mother, and district of registration of birth from January 2002 to December 2005, together with female resident population counts obtained from the 2000 Thai Population and Housing Census. We used graphical and statistical methods to investigate the pattern of fertility in each period and region, and used logistic regression to fit a model for predicting the effects of age group, region and period on the fertility in each 3-month quarter of a year.

### 5.1 Conclusions

This study has shown that the total fertility rates in four southern provinces of Thailand (Pattani, Songkhla, Satun and Trang) have continuously declined to near replacement level or below. The pattern of fertility in each period and region was different. The fertility rate in 2002-2003 was higher than that in 2004-2005. The fertility rates of Muslim majority provinces were higher than those for non-Muslim majority provinces (2.1 versus 1.9 in the west coast and 2.6 versus 1.7 in the east coast). The fertility of women living in non-Muslim majority regions has sharply declined in contrast with that from Muslim majority regions, which have remained steady. The age group with highest fertility rate was 25 to 29 years. Substantial

differences in fertility were found between Muslim and non-Muslim women living on the east coast, but not on the west coast.

#### 5.2 Discussion

This study investigated the pattern of fertility in southern Thailand based on region (percent Muslim), age group and period found that the total fertility rates continuously declined to near replacement level or below (1.94-1.93). The results of this study is similar a study by Prachuabmoh and Mithranon (2003), who reported Thailand's total fertility rate declined from 6.48 in 1960 to 1.82 in 2000. Gubhaju and Moriki-Durand (2003) found that other countries in east and south-east Asia have experienced similar but less dramatic declines in fertility. During the period from 1975 to 2000, China's estimated total fertility rate decreased from 3.57 to 1.80, compared with decreases from 3.23 to 1.48 for South Korea, 2.07 to 1.59 for Singapore, and 1.91 to 1.34 for Japan. Hung (2002) found that Vietnam's total fertility rate declined from 6.4 in 1960 to 2.3 in 2000. Chayovan and Tsuya, 2003 found from the 2001 Economic Crisis, Demographic Dynamics and Family in Thailand (ECODDF) survey that the fertility level continues to decline to below replacement level. Rural fertility remains higher than urban fertility. We also found that the fertility rate of Muslim women was higher than that of non-Muslims (2.47 versus 1.74). This result agrees with a study in India by Mishra (2004) who found similar differences in fertility rates between Muslims and Hindus. In a 1998-99 Indian survey the rate for Muslim residents was 3.58 compared to 2.77 for Hindu residents, 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. Morgan et al (2002) found 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. Knodel et al (1998) found that Thailand's 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. In addition, Thailand 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 interactively with ethnicity, culture and the status of minority groups.

In addition to regional variations in fertility, the National Statistical Office (2003) found that within each region, fertility was, however, relatively low in the provinces where there was 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 along the boarding area had higher fertility than other provinces in the same region.

## 5.3 Finding

A problem with studying regional fertility trend this study is the fact that many women move from their district of residence to give birth in a hospital located in another region where the birth is subsequently registered, so calculating the birth rate

in a region based on the number of fertile women resident in the region yields birth rates that are biased. To counter this bias, we estimated the total number of births to residents of each region in the 5-year period from 2001 to 2005 by improving estimates of the number of births by the mother's residence, by using the populations in the age group 0-4 in the 2000 census.

## 5.4 Recommendation and future research

There are some limitations in this study. The data were obtained from the registration of births that classified the mother's age differently to the census data. In addition, the births were registered at the place of birth but the mother's residence was not recorded. Hospitals should record mother's residence for every baby born in their hospitals, using the standard demographic age groups for recording the mother's age. Future research should look at fertility trends in each region of Thailand and investigate the factors affecting fertility rates.