

## FERTILITY DECLINE IN ASIAN COUNTRIES

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*It is evident that fertility has continued to decline in every part of the world and it has reached the replacement level especially in Europe, the Americas, Most of Asia and the Middle East. Although there are regions in Africa that have reached this level, many countries in Sub-Sahara Africa have not reached the replacement level.*

*Fertility decline in Asian countries started to be evident towards the latter part of the last century. In the 1960's fertility began to decline in some countries and regions, such as Hong Kong, the Republic of Korea and Taiwan together with Singapore. The speed with which the fertility decline occurred was different among Asian countries.*

*Declines in most countries have generally been concomitant with the rise in the pace of industrialisation and relative economic prosperity. One of the important factors explaining the fertility difference in Asian countries is government intervention. In developed countries fertility transition from high to low birth rates was achieved without government intervention.*

### Introduction

Fertility has been declining very fast in most countries of the world over the past 30/40 years, and it continues to decline almost everywhere. As a result, it has reached quite unexpectedly low levels in many countries. Currently, about half of the world's population is living in countries with fertility at, or below replacement level.

Fertility decline in Asian countries started to be evident towards the later part of the last century. Beginning with the initiation of Japan's transition in the 1930s, fertility decline in other Asian countries soon followed, with levels in Hong Kong, Taiwan and Singapore beginning to fall by the 1960s. The latter part of the 1960s and the 1970s heralded the beginning of transitions in the major Chinese and South Korean cities, as well as the Chinese populations in Southeast Asia.

A number of reasons have been suggested for the Asian fertility decline. Declines in most countries have generally been concomitant with the rise in the pace of industrialisation and relative economic prosperity. Socio-economic factors such as the spread of education particularly among women have been cited as vital to bringing down fertility to below-replacement levels in several Asian countries.

The diffusion of contraceptive use arguably plays an important role as well. Many studies have also considered anti-natalist policies by relatively strong-handed governments in many Asian nations as playing a significant role in bringing about the rapid pace of decline.

### Levels and Trends of Fertility

According to the Table 1, between 1995-2000 the total fertility rate (TFR) was estimated to be 2.8 births per women in the world, 3.1 and 1.6 respectively, for the developing and developed world.

Out of the five sub-regions of Africa, three still have average total fertility rates around or above six children per woman. At the other extreme, in Asia, East Asia has already reached below replacement fertility. The three sub-regions of Latin America and South East Asia had in the late 90s averaged fertility rates of between 2.5 and three children per women. Western and South-central Asia, North and Southern Africa were somewhere in between with average total fertility rates between 3 and 4 children per woman.

From Table 1 it is interesting to see that the declines by periods are different among the sub-regions. In the 60s, East Asia, the Caribbean, South America and to a certain extent South-east Asia, already had lower fertility levels (6 children per woman or less) than the other less developed sub-regions.

**Table 1: Estimated Total Fertility Rates from 1950-55 to 1995-00, and relative variations**

| Sub-region                | Total Fertility Rate |            |            |            |            |            | Variations in Total Fertility Rates |                    |                    |
|---------------------------|----------------------|------------|------------|------------|------------|------------|-------------------------------------|--------------------|--------------------|
|                           | 1950-55              | 1960-65    | 1970-75    | 1980-85    | 1990-95    | 1995-00    | 1950-55<br>1995-00                  | 1960-65<br>1995-00 | 1980-85<br>1995-00 |
| <b>World</b>              | <b>5.0</b>           | <b>5.0</b> | <b>4.5</b> | <b>3.6</b> | <b>3.0</b> | <b>2.8</b> | <b>-2.2</b>                         | <b>-2.2</b>        | <b>-0.7</b>        |
| More developed regions    | <b>2.8</b>           | 2.7        | 2.1        | 1.8        | 1.7        | 1.6        | -1.3                                | -1.1               | -0.3               |
| Less developed regions    | <b>6.2</b>           | 6.0        | 5.4        | 4.1        | 3.4        | 3.1        | -3.1                                | -2.9               | -1.0               |
| East Africa               | 6.9                  | <b>7.0</b> | <b>7.0</b> | 6.9        | 6.3        | 6.1        | -0.8                                | -0.9               | -0.8               |
| Middle Africa             | 5.9                  | 6.0        | 6.3        | <b>6.6</b> | 6.5        | 6.5        | 0.5                                 | 0.4                | -0.2               |
| Northern Africa           | 6.8                  | <b>7.1</b> | 6.3        | 5.5        | 4.1        | 3.6        | -3.2                                | -3.5               | -2.0               |
| Southern Africa           | 6.4                  | <b>6.5</b> | 5.5        | 4.7        | 3.5        | 3.3        | -3.2                                | -3.2               | -1.4               |
| West Africa               | 6.8                  | <b>7.0</b> | 7.0        | 7.0        | 6.4        | 5.9        | -0.9                                | -1.0               | -1.0               |
| East Asia                 | <b>5.7</b>           | 5.2        | 4.5        | 2.5        | 1.9        | 1.8        | -3.9                                | -3.4               | -0.7               |
| South-central Asia        | <b>6.1</b>           | 6.0        | 5.6        | 4.8        | 4.0        | 3.6        | -2.5                                | -2.4               | -1.2               |
| South-eastern Asia        | 6.0                  | <b>6.1</b> | 5.5        | 4.2        | 3.2        | 2.8        | -3.1                                | -3.3               | -1.4               |
| Western Asia              | <b>6.4</b>           | 6.2        | 5.6        | 5.0        | 4.2        | 3.9        | -2.5                                | -2.4               | -1.1               |
| Caribbean                 | 5.2                  | <b>5.5</b> | 4.4        | 3.4        | 2.7        | 2.5        | -2.7                                | -3.0               | -0.9               |
| Central America           | <b>6.9</b>           | 6.8        | 6.4        | 4.5        | 3.4        | 3.0        | -3.8                                | -3.8               | -1.5               |
| South America             | 5.7                  | <b>5.8</b> | 4.7        | 3.7        | 2.8        | 2.6        | -3.1                                | -3.2               | -1.1               |
| Eastern Europe            | <b>2.8</b>           | 2.4        | 2.2        | 2.1        | 1.6        | 1.3        | -1.6                                | -1.1               | -0.8               |
| Northern Europe           | 2.3                  | <b>2.7</b> | 2.1        | 1.8        | 1.8        | 1.7        | -0.7                                | -1.1               | -0.1               |
| Southern Europe           | <b>2.7</b>           | <b>2.7</b> | 2.5        | 1.8        | 1.4        | 1.3        | -1.3                                | -1.4               | -0.5               |
| Western Europe            | 2.4                  | <b>2.7</b> | 1.9        | 1.6        | 1.6        | 1.5        | -0.9                                | -1.2               | -0.1               |
| Northern America          | <b>3.5</b>           | 3.3        | 2.0        | 1.8        | 2.0        | 2.0        | -1.5                                | -1.3               | 0.2                |
| Australia/<br>New Zealand | 3.3                  | <b>3.4</b> | 2.6        | 1.9        | 1.9        | 1.8        | -1.5                                | -1.6               | -0.1               |

Source: United Nations, 2001: World Population Prospects: The 2000 Revision

The large fertility declines –minus 3 children and more –that these sub-regions experienced between 1960-65 and 1995-00. For the other sub-regions which had similar large fertility declines: Northern Africa, Southern Africa and Central America – respectively 3.5, 3.2 and 3.8 children during the same period- but higher fertility in the 60s, their 1995-2000 average fertility rates are higher, i.e between 3.3 and 4 children per women. Western Asia and South-central Asia had a different experience. In fact, their higher 1995-2000 average fertility rates: 3.9 children per woman in Western Asia, and 3.6 in South-central Asia, are the both moderately high fertility in the 60s – 6.2 and 6.1 children per women in 1960-65 respectively, and more modest fertility declines: minus 2.4 children per woman for both sub-regions.

### **Fertility decline in Asian countries**

In the 1950's most of the Asian developing countries had very high levels of fertility. In the 1960's fertility began to decline in some countries and regions, such as Hong Kong, the Republic of Korea and Taiwan, together with Singapore. Fertility in these countries continued to decline. In the 1970's and this trend has to the below replacement levels (2.1 births per woman) in all the populations of East and North-East Asia with the exception of Mongolia, where the total fertility rate is 2.3 births per woman. .

Below-replacement level has been reached in Singapore and Thailand in Southeast Asia, while Sri Lanka is the only country in South and South-West Asia exhibiting below-replacement fertility. Armenia, Azerbaijan, Cyprus, Georgia and Kazakhstan in North and Central Asia have also experienced below-replacement fertility. (Bhakta Gubhaju, K.S. Seetheram and Jerold W.Huguet, Asia Pacific Population Journal, Vol 16, No1, 2001)

The speed with which the fertility decline occurred was different among Asian countries. Table 2 shows the classification of countries and areas in Asian countries by total fertility rate in the periods 1970-1975 and 1995-2000. It is interesting to note that a large number of countries and areas experienced marked declines in fertility, from a very high level (5 or more children per woman) to a moderate level (2.11 to 3.49) during those years, whereas in countries such as Afghanistan, Bhutan, the Lao People's Democratic Republic, Maldives and Pakistan, fertility remained at a high level. However, a sustained decline in fertility was observed in countries where total fertility rates had been high or moderate in the period 1970-1975. Of particular importance are Azerbaijan, China, the Republic of Korea, Sri Lanka and Thailand, which exhibited remarkable declines in fertility, going from high to below-replacement levels.

### **Policy with Respect to Fertility**

As I mentioned earlier, that a number of factors, both economic and socioeconomic, have been suggested as responsible for the Asian fertility declines. Asian countries experience and respond differently to fertility decline. One of the important factors explaining the fertility difference in Asian countries is government intervention. In developed countries fertility transition from high to low birth rates was achieved without government intervention. In Asia, which experienced a rapid population growth in the 1950's and 1960's, governments began to adopt family planning programs to curb population explosion.

**Table 2: Classification of Asian countries by total fertility rate, 1970-1975 and 1995-2000**

| Total fertility rate in 1970-1975  | Total fertility rate in 1995-2000   |  |   |   |
|------------------------------------|---|--|---|---|
|                                    | Very high<br>Low<br>(5.00 or higher)<br>or lower)   | High<br>(3.50-4.99)  | Moderate<br>(2.11 to 3.49)  | (2.10   |
| <b>Very high</b><br>5.00 or higher | Afghanistan<br><br>Bhutan<br>Maldives<br>Pakistan<br>Lao People's<br>Democratic<br>Republic | Nepal<br><br>Tajikistan<br>Turkmenistan<br>Cambodia<br>Philippines<br>Papua<br>Guinea<br>Samoa<br>Solomon Islands<br>Vanuatu | Democratic<br>People's Republic<br>of Korea<br>Mongolia<br>Bangladesh<br>India<br>Iran<br><br>New<br><br>Uzbekistan<br>Turkey<br>Indonesia<br>Malaysia<br>Myanmar<br>Viet Nam |   |
| <b>High</b><br>3.50-4.99           |   |  | Kyrgyzstan<br>Fiji<br>Guam<br>New Caledonia   | China<br>Republic of Korea<br>Thailand<br>Sri-Lanka<br>Azerbaijan |
| <b>Moderate</b><br>2.11-3.49       |   |  | Kazakhstan  | Hong Kong<br>Japan<br>Macao<br>Singapore<br>Armenia<br>Georgia    |

Source: United Nations (1999). *World Population Prospects: The 1998 Revision, Volume 1: Comprehensive Tables* (New York, Department of Social and Economic Affairs).

Soon after the ending of the Second World War, a baby boom period appeared in many countries. The high population growth rate prevailed until the late 1960s. Total fertility rate in China and Republic of Korea were 5.8 and 4.5 in 1970 respectively. In Thailand, TFR reached 6.1, ranking third in Southeast Asian countries next to Cambodia and the Lao People's Democratic Republic. Even in an urbanized country such as Singapore, the TFR was above 4 in the late 1960s. These extremely high fertility and growth rates shocked the Governments in Asian countries (United Nations, 1999). In 1976, two years after the adoption of the World Population Plan of Action, over one third of Governments in the world and 41 percent in the less developed regions perceived their growth rates to be high.

**Table 3: Levels and Trends, Total Fertility Rates in some Asian countries, 1965-1998**

| Country           | 1965 | 1970 | 1975 | 1980 | 1985 | 1990 | 1998 |
|-------------------|------|------|------|------|------|------|------|
| Hong Kong         | 4.93 | 3.31 | 2.74 | 2.06 | 1.47 | 1.19 | 1.2  |
| China             | *    | 5.80 | 3.57 | 2.31 | 2.20 | 2.31 | 1.8  |
| Japan             | 2.15 | 2.10 | 1.93 | 1.74 | 1.74 | 1.51 | 1.4  |
| Republic of Korea | 4.67 | 4.50 | 3.23 | 2.70 | 1.68 | 1.58 | 1.6  |

|           |      |      |      |      |      |      |     |
|-----------|------|------|------|------|------|------|-----|
| Singapore | 4.62 | 3.10 | 2.11 | 1.74 | 1.62 | 1.72 | 1.8 |
| Thailand  | *    |      |      |      |      |      |     |
|           | 6.1  | 4.5  | 3.7  | 3.2  | 2.2  | 1.9  |     |

*Source: Patterns of Fertility in Low Fertility Settings, 1992, United Nations*

An interesting case is China in which the government policy played a major role in the decline of fertility. There was an unprecedented drop in fertility from 5.8 in 1970 to 2.3 in 1980 after the Chinese Government launched a comprehensive and strong family planning programme during the late 1970s.

Within ten years, the total fertility rate of Singapore dropped from 4.6 percent in 1965-1970 to 2.1 percent in 1970-1975. The fertility of the people of Singapore went down to below replacement level after mid 1970s and has been at a low level since then. Republic of Korea and Thailand all started their family planning programs around 1970. The fertility of the Republic of Korea decreased to below replacement level in the mid 1980s. China and Thailand both reached below replacement level in the early 1990s. Political intervention has played a great role in fertility reduction especially where an effective program was designed to provide knowledge and access to family planning.

In the case of Japan, fertility remained almost constant at near replacement level between 1960-75, however it began to decline since 1975 and plummeted to 1.5 in 1990. Underlying economic and social changes primarily drove this resumption of fertility decline in Japan. (Retherfold, Ogowa and Sakomoto, 1996). The Government of Japan is now very much concerned with this low fertility and is taking measures to lower age at marriage to increase fertility.

In Singapore, the pro-natalist policy adopted by the Government has led to a leveling off of the total fertility rate at 1.8 (Kirk, 1996). In Hong Kong, Japan and the Republic of Korea, fertility seems to have reached a plateau.

In 2001, all the countries that have taken action to reduce their rate of population growth pursued their objective through programs aimed at lowering their fertility level. The proportion of Governments with a policy to lower fertility rose from 47 percent in 1976 to 63 percent in 2001. While in 1976, nine countries viewing fertility as too high did not have any policy to modify it and in 2001 there were only two such countries. Countries with TFR of between 3.5 and 5 children per woman are more likely to have a policy to lower fertility (69 percent) than those with TFR between 2.1 and 3.5 children per woman (60 percent). (Population Division, UN, 2002)

Many countries have had a policy to lower fertility throughout the entire post-Bucharest period: 9 of 13 countries in Africa (70 percent), and one third of countries in Asia and Oceania and 64 percent in Latin America and Caribbean.

In the 1990s, all Governments in Africa and almost all in Asia reported that their policies in regard to fertility were adopted both to modify population growth and to improve family well-being.

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