Low fertility trends:
Causes, Consequences and Policy Options

Tashya de Silva

IHP
INSTITUTE FOR HEALTH POLICY

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Abbreviations

ASFR	Age Specific Fertility Rate
DHS	Demographic and Health Survey
GDP	Gross Domestic Product
IHP	Institute for Health Policy
OECD	Organization for Economic Cooperation and Development
SMAM	Singulate Mean Age at Marriage
TFR	Total Fertility Rate
WB	World Bank
WHO	World Health Organization

Preface

This paper was prepared by Tashya de Silva, during her internship at the Institute for Health Policy from November 2006 to January 2007. Tashya was a post-graduate student pursuing studies for her MPH degree at the University of Sydney. During the period of internship at the IHP she worked under the guidance of Dr. A. T. P. L. Abeykoon, Senior Fellow.

Acknowledgement

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Introduction

In recent decades, there have been significant reductions in Total Fertility Rates (TFR) throughout the world. A transition from high to low fertility first commenced in the developed world about two centuries ago. Over this period, some countries in Europe, which had TFRs as high as 7.5 children per woman, have gradually progressed along the fertility transition, to end up with TFRs as low as close to 1. This declining trend in fertility from high levels to replacement level and below is generally described as the fertility transition.

For much of the developing world, the beginnings of the fertility transition came later. In Asia, for example, the process first began occurring in eastern parts of the region in the late 1950s but was initially restricted to Japan and, subsequently, spread to Singapore, Taiwan and Korea. Even by the 1970s, 20 out of the 28 countries in Asia still belonged to the high fertility category. Even among today's low and lowest-low fertility countries, fertility remained fairly high until the 1970s. However, during the early 1970s, several Asian countries began the transition. Thereafter, many of these countries, such as Thailand and Sri Lanka, experienced steady declines in fertility. Singapore and Korea are two examples of countries that experienced precipitous declines in their TFR. For instance, the TFR in Singapore declined dramatically from 6.4 in the 1950s to 2.6 in 1975. Japan was the only country which had completed the fertility transition and achieved below replacement fertility by 1975 (Gubhaju, 2006).

In this way, a large number of Asian countries progressed along the fertility transition, from high levels (5 or more) to transitional and near-replacement levels (4.9-2.2) during the period 1970-1975 and 1990-1995. Bangladesh, Brunei, Indonesia, Mongolia, Turkey and Viet Nam belong to this category. The next wave of the fertility transition took place in the 10 years between 1990-1995 and 2000-2005. The Islamic Republic of Iran showed tremendous declines in TFR by more than half, from 4.3 in the mid 1990s to 2.1 by 2005. The TFR of Macao, China, which was already low at 1.5 in 1995 declined further to 0.8 by 2005. Unlike Macao, the rate of decline at other near replacement fertility countries was much slower. This was particularly true in countries like Lao People's Democratic Republic, Malaysia and Turkey. As of 2006, all countries in Asia have begun the fertility transition except Timor-Leste and Afghanistan.

Even though the total fertility rate for Asia as a whole is 2.3, it is clear that there are considerable regional variations to this figure. For instance, in 2006, the TFR for the East and North-East Asian region was well below replacement level at 1.7 births per woman. In sharp contrast, the TFR for South and South-West Asia is 3 births per woman, while in South-East Asia, the total fertility rate is 2.3 births per woman (Gubhaju, 2006).

A similar pattern can be seen in other major regions of the world. Once again, there are considerable variations in total fertility rates. For the world as a whole, the TFR is estimated at 2.7. Much of North America, Northern and Western Europe, as well as Australia, are at below-replacement fertility (a TFR of less than 2.1). Eastern and Southern Europe are considered very low fertility regions with TFRs averaging at 1.3. In stark contrast, fertility levels in countries like Somalia are 7.0. For Eastern Africa as a whole, TFR lies at 5.7. Western Africa (5.9) and Middle Africa (6.3) have

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comparably high TFRs. On the other hand, countries in Northern and Southern Africa have progressed along the fertility transition and have TFRs of 3.3 and 2.9 respectively. Many of the Latin American countries have also experienced fertility declines and, therefore, have an average TFR of 2.6 for the region as a whole.

Figure 1: Fertility Trends by Major Region of the World, 1950-2005
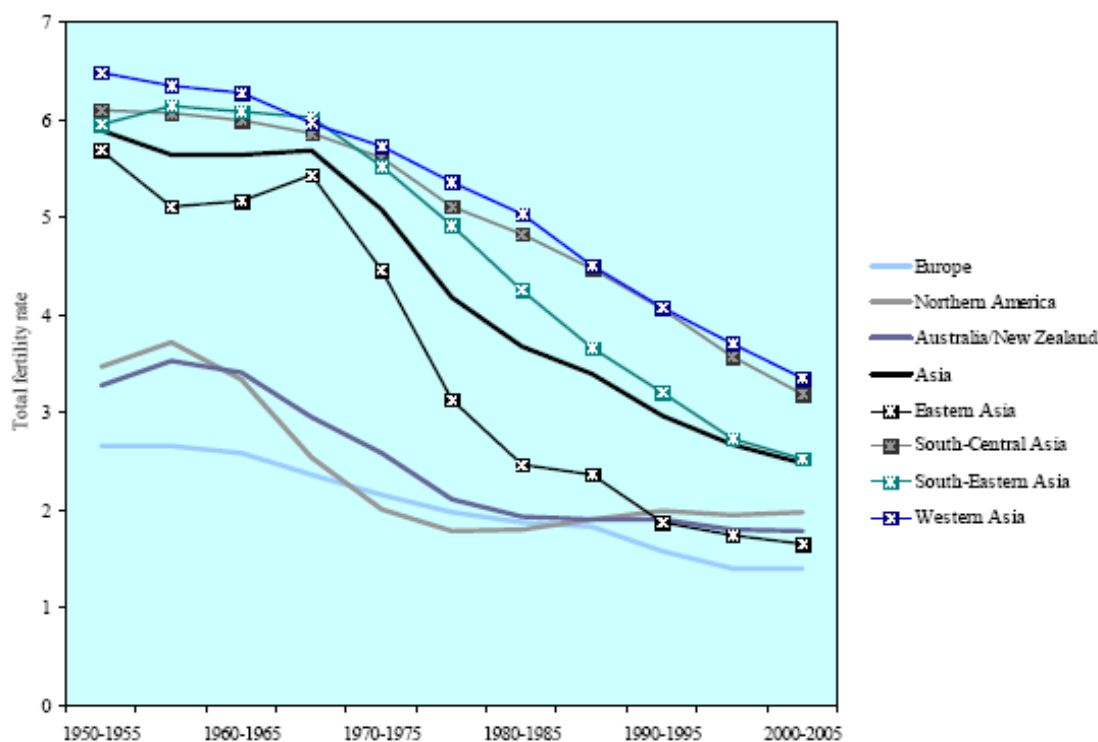
Source: Bhakta Gubhaju (2006)

Key Drivers of the Fertility Decline

It is now evident that low fertility trends are widespread and, according to some experts, are unlikely to be a temporary phenomenon. A number of factors are thought to have contributed to this decline in fertility. According to classical theories of the fertility transition, one of the preconditions of a fertility decline is the changing economic value of children. In traditional societies, children were a source of income for the family and, therefore, had great economic value. This provided an incentive for parents to have many children. However, over the years, it became necessary for children to receive an education, thus increasing costs associated with raising children. As a result of lower economic gains from having many children, parents began to have fewer children.

Studies show that improvement in human development measured by factors, such as increased female education and labor force participation, as well as increased life expectancy, play a major role in reducing fertility. Furthermore, recent trends in traditional, predominantly male-dominated societies for women to remain unmarried, have also contributed towards declining fertility rates. According to the diffusion model, the spread of new ideas and behaviors is also responsible for fertility decline. It is possible that with social interactions and the consequent transmission of

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information, new ideas, such as regulating fertility and use of modern contraceptive methods, becomes accepted as a 'social norm'. It has also been argued that mass education and economic attainment are key determinants of fertility decline. Studies show that the spread of education among the population and the resulting improved socio-economic conditions have been of central importance in driving the transition from high to low fertility.

In addition, it is difficult to ignore the crucial role played by governments at reducing fertility. In many countries, national family planning programs have had a powerful impact on fertility levels. Many of these programs have successfully distributed new contraceptives for free to the general population, while popularizing the notion of small families and legitimizing the use of contraceptives, thus having a significant impact on lowering fertility (Gubhaju, 2006). In developing countries, country experiences reveal that a combination of factors have contributed to the decline in fertility. In some countries, socio-economic development has been the key contributing factor, while in others, family planning programs have caused reductions in fertility. However, studies show that sustained declines in fertility have occurred in countries where both these factors have been in operation.

Fertility Trends in Sri Lanka

Unlike in other Asian countries, Sri Lanka's fertility levels began to decline even before policy decisions were made to introduce family planning at the national level. The fertility transition began in Sri Lanka during the early 1960s. The next four decades witnessed a steady decline in crude birth rates and TFR in the country. The crude birth rate declined from 36.6 per thousand of the population in 1960 to 18.4 in 2004 (Table 1). Similarly, the total fertility rate also fell from 5.32 children per woman in 1953 to 3.45 in 1981, dropping further to 2.26 during the 1988-93 period and to a further 1.96 in 1995-2000 (De Silva, 2001).

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Table 1: Crude Birth Rate, 1946-2005

Period	Birth Rate (per 1000 population)	Percentage Change
1946-50	38.9	-
1951-55	38.1	-2.1
1956-60	36.5	-4.2
1961-65	34.3	-6.0
1966-70	31.1	-9.3
1971-75	28.7	-7.7
1976-80	28.1	-2.1
1981-85	26.2	-6.8
1986-90	21.3	-18.7
1991-95	20.0	-5.7
1996-00	17.7	-11.5
2001-05	18.8	+6.2

Source: Abeykoon, 2006.

Table 2: Age-Specific Fertility Rates (ASFR), 1963-2000

Age Group	1963	1974	1981	1982-1987*	1988-1993*	1995-2000*	% Change 1963- 2000
15-19	52	31	34	38	35	27	-48.0
20-24	228	146	172	147	110	83	-63.6
25-29	278	161	222	161	134	118	-57.6
30-34	240	158	177	122	104	98	-59.2
35-39	157	126	99	71	54	40	-74.5
40-44	46	43	37	23	14	8	-82.6
45-49	7	6	0	3	4	1	-85.7
TFR	5.0	3.4	3.7	2.8	2.3	1.9	-62.0

Source: Abeykoon, 2006.

Four factors have been identified as the most important determinants of Sri Lanka's falling fertility rate, which include proportion married, contraception, post partum infecundability, and induced abortions. Studies show that over the last forty years, the mean age at marriage has increased by approximately 15 percent, thus contributing to a lowering of the TFR (Table 3). The reason for this is increased educational attainment of women (Table 4). A higher education translates into increased value of women's time and greater labor market opportunities, thereby increasing the opportunity cost of their time spent raising children (Grant et al, 2004). In this way, late marriages have had an overall fertility-inhibiting effect on the population.

Table 3: Proportion of Ever-married Women and Singulate Mean Age at Marriage (SMAM) 1963-2000

Age Group	1963	1971	1981	1987	1993	2000	% Change 1963-2000
15-19	14.8	10.6	9.9	7.3	7.1	8.6	-41.9
20-24	57.6	46.8	44.7	42.9	38.8	37.1	-35.6
25-29	81.0	75.4	69.6	70.0	66.3	66.7	-17.7
30-34	88.6	89.1	84.2	85.8	82.3	84.2	-5.0
35-39	89.8	94.2	91.1	90.9	88.9	89.3	-0.5
40-44	86.1	95.3	94.1	93.8	90.8	92.4	+7.3
45-49	81.6	95.9	95.5	96.5	94.8	93.5	+14.6
SMAM	22.1	23.5	24.4	24.8	25.5	24.6	+15.4

Source: Abeykoon, 2006.

Table 4: Median Age at Marriage and Singulate Mean Age at Marriage by Education Level of Women, 2000

Educational Level	Median Age at marriage (25-49 years)	Singulate Mean age at Marriage (15-49years)
No Schooling	20.7	23.9
Primary	20.3	24.2
Secondary	21.9	25.4
GCE(O/L)	24.4	27.0
GCE(A/L) & higher	26.3	29.0
Total	22.9	24.6

Source: Abeykoon, 2006.

In 1965, the Sri Lankan government took a policy decision to introduce a national family planning program as part of the existing maternal and child health care services. Since then, due to increases in contraceptive use, TFR have decreased. Table 5 below shows contraceptive prevalence rates by method. Surveys show that in 1975, only 34 percent of the population used contraceptives. By 2000, this figure had increased to 70 percent, thus allowing women to avoid unwanted pregnancies (Abeykoon, 2006).

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Table 5: Contraceptive Prevalence Rates by Method, 1975-2000

Method	1975	1982	1987	1993	2000
Any Modern Method	20.2	31.9	40.6	43.7	49.5
Modern Temporary	9.6	9.9	10.8	16.5	26.4
Sterilization	10.6	22.0	29.8	27.2	23.1
Any Traditional Method	14.2	26.0	21.1	22.4	20.5
Any Method	34.4	57.8	61.7	66.1	70.0

Source: Abeykoon, 2006.

The third factor influencing Sri Lanka's fertility trend is an increase in the duration of breastfeeding among mothers. The Mean Duration of Breastfeeding has increased over time from 22.7 months in 1987 to 27.5 months in 2000. Similarly, the Mean Duration of Exclusive Breastfeeding rose from 1.2 months in 1993 to 3.7 months in 2000 as evident from Table 6 (Abeykoon, 2000). The Duration of Breastfeeding by Education Level shows that at higher levels of education, the mean duration for 'any breastfeeding' actually declines. On the other hand, higher the education level, the greater the duration of exclusive breastfeeding (Table 7).

Table 6: Mean Duration of Breastfeeding in Months 1987-2000

Year	Any Breastfeeding	Exclusive Breastfeeding
1987	22.7	-
1993	23.2	1.2
2000	27.5	3.7

Source: Abeykoon, 2006.

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Table 7: Mean Duration of Breast-feeding in Months by Educational Attainment, 2000

| Educational Level	Any Breastfeeding	Exclusive Breastfeeding
No Schooling	24.8	1.2
Primary	27.2	3.7
Secondary	28.5	3.8
GCE(O/L)	27.1	3.1
GCE(A/L) & higher	26.1	4.5

Source: Abeykoon, 2006.

While the effect of induced abortions on reducing fertility rates is not as great, it is still thought to play a role in Sri Lanka's fertility trends. As induced abortions are considered illegal in Sri Lanka, reliable data on rates and trends are not currently available. However, it is believed that the incidence of abortion increased in the period 1975-1993, and declined thereafter. Induced abortions are largely concentrated among married women with low educational levels (Abeykoon, 2006).

When comparing the effect of each variable, it is likely that around 33 percent of the fertility inhibiting effect is due to late marriages. Similarly, the fertility inhibiting effect of contraception is also around 33 percent, although recent data show an increase in that figure. The effect of lactational infecundability on fertility, although much lower, has been showing an increasing trend from 28.5 percent in 1993 to 31.5 percent in 2000. On the other hand, induced abortion has been having a diminishing effect of fertility, reducing from 2.7 percent in 1993 to 1.5 percent in 2000. In general it is thought that marriage, contraception and breastfeeding have contributed approximately one-third each to inhibit the total fertility rate to 1.96 (Abeykoon, 2006).

Future Fertility in Sri Lanka

According to the standard projections made by De Silva (2001) regarding the future course of fertility, it is likely that Sri Lanka's TFR will continue to fall to about 1.49 children per woman by 2030, only to increase to around 1.7 by 2050 (Figure 2). Researchers such as De Silva (2001) argue that like many developed countries, Sri Lanka will also experience declines in TFR well below replacement level, until a fertility rate of about 1.3 is reached, according to his low projections. Thereafter, it is likely that fertility rates will increase up to about 1.7 children per woman in 2050. This trend is considered the desirable option for Sri Lanka so that Sri Lanka will not fall into the high old-age-dependency trap that countries like Japan and Korea are in now. To ensure that this path will become realistic in Sri Lanka, several policies that have been pursued with reasonable success in many European countries can be implemented in Sri Lanka as well. This will be described in the subsequent section on policy measures.

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Figure 2: Assumed Total Fertility Rates
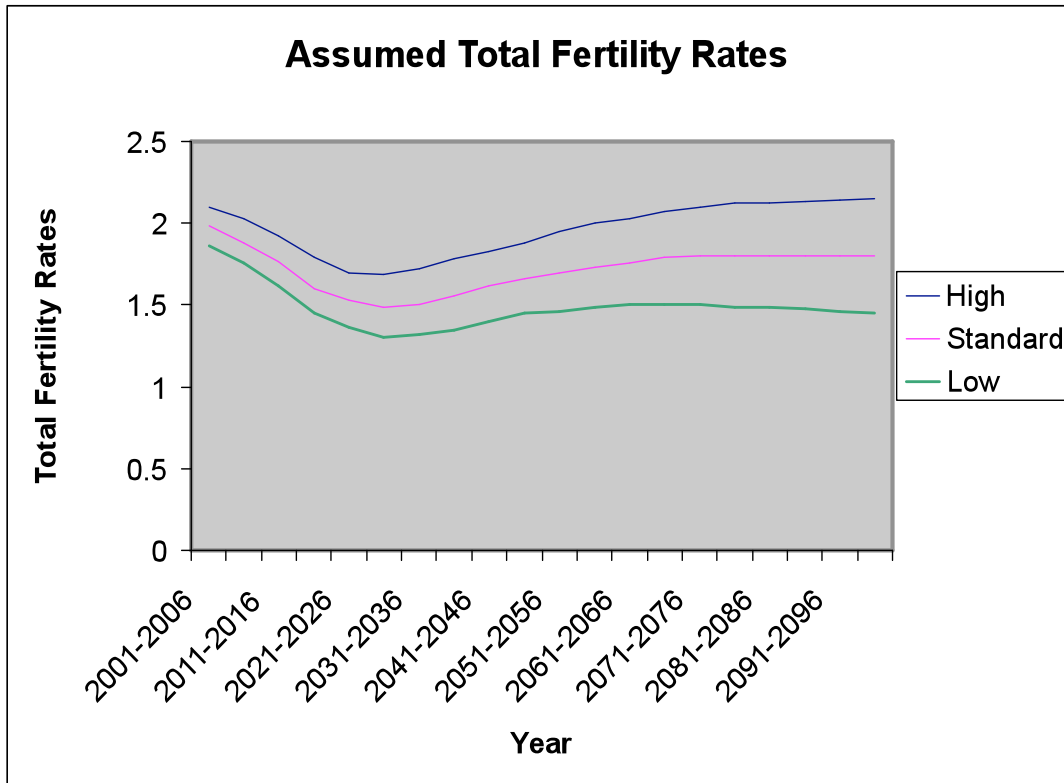
Source: De Silva, 2001.

Implications of Low Fertility

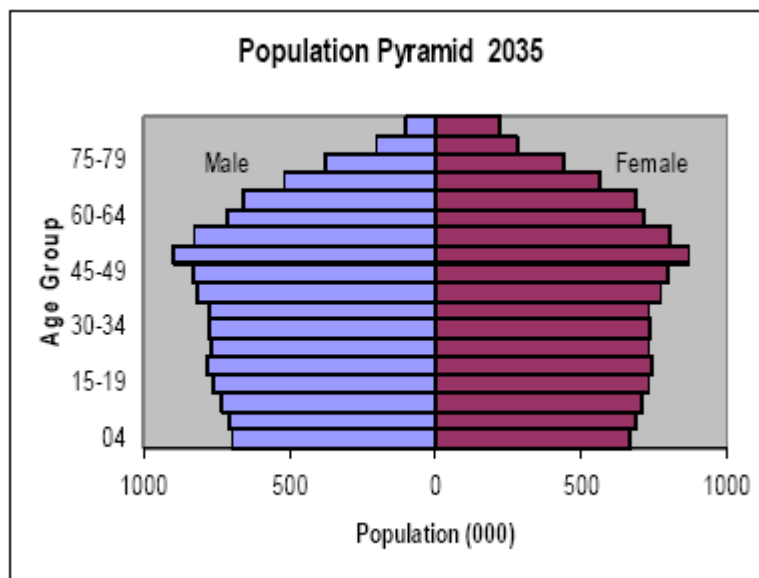There are likely to be substantial long term implications associated with declining fertility. One of the major consequences of low fertility is changes in the age structure of the population (Figure 3), which will undoubtedly have an impact on Sri Lanka's socio-economic and development activities.
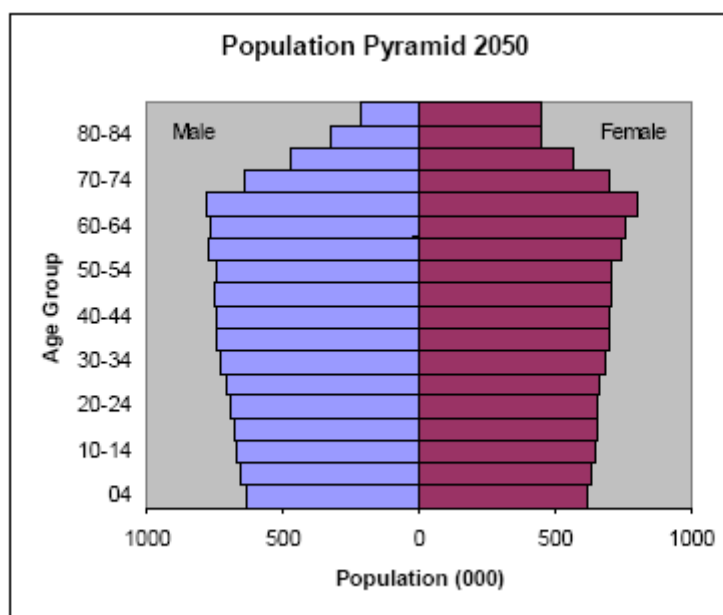
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Figure 3: Population Pyramid, 2005
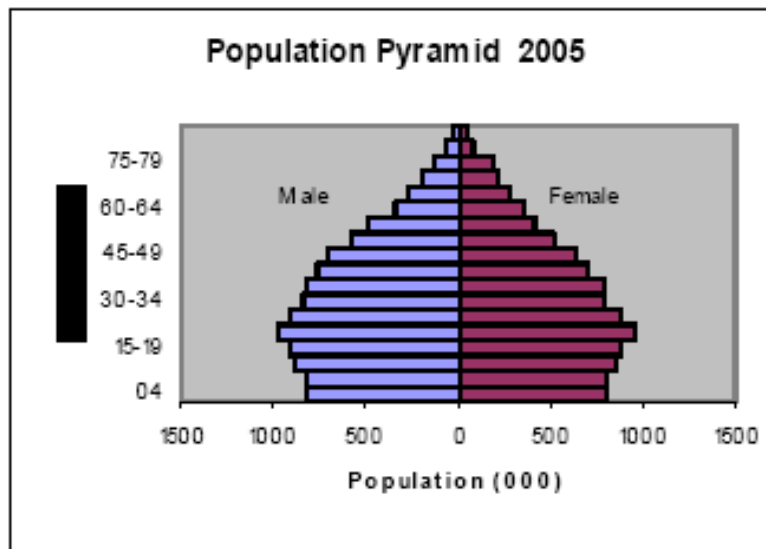
Source: Abeykoon, 2006.

Source: Abeykoon, 2006

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Population Pyramid 2050

Source: Abeykoon, 2006.

One of the indicators used to measure changing population age structures is the dependency ratio. This ratio can be defined as the number of dependents to the number of persons between 15 and 59 years. Three dependency ratios (i.e. child, old age and total dependency) are presented in the table below. In 2006, the total dependency ratio was 53.6 dependent persons for every 100 working age persons, of which 37 were child dependents and 16 were old age dependents. By 2051, according to De Silva's (2001) projections, child dependency will decrease to 26.5 but old age dependency will increase dramatically to 51.2. As a result of rapid increases in old age dependency (despite declines in young age dependency) the overall dependency rate is expected to increase to 77.7 in 2051 (Table 8). It is extremely likely that the age 60+ population will increase in absolute and relative terms in the future (Table 9). It is even anticipated that by 2050, about one-fourth of the population will comprise of the elderly.

Table 8: Projected Dependency Ratios, 2001-2051

Projected Dependency Ratio 2001-2051			
Year	Child Dependency (<15 yrs)	Old Age Dependency (60+ yrs)	Total Dependency
2001	40.7	14.3	55.0
2006	37.4	16.2	53.6
2011	35.3	19.3	54.6
2016	33.3	22.6	55.9
2021	30.4	26.2	56.6
2026	27.6	29.7	57.3
2031	25.5	32.8	58.3
2036	24.7	36.0	60.7
2041	25.3	41.4	66.7
2046	26.2	47.1	73.3
2051	26.5	51.2	77.7
Source – Indralal de Silva (2001)			

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Table 9: Population by Older Age Categories

Population by older age categories

Age	2005	2025	2035	2050
60+				
No.	2,215	4,293	5,479	6,918
%	10.7	18.4	23.0	29.4
70+				
No.	957	1,872	2,706	3,185
%	4.6	8.0	11.4	16.2
80+				
No.	235	513	804	1,436
%	1.1	2.2	3.4	6.1

Source: Abeykoon, 2001; *Numbers in thousands

Table 10: Composition of Population by Broad Age Groups

Number and Percentage Distribution of Population						
Year	Children (<15 yrs)		Working Ages (15-59 yrs)		Elderly (60+ yrs)	
	Number	%	Number	%	Number	%
2001	4,922.40	26.3	12,080.50	64.5	1,731.40	9.2
2006	4,807.40	24.4	12,836.70	65.1	2,075.70	10.5
2011	4,692.40	22.8	13,294.80	64.7	2,570.40	12.5
2016	4,523.60	21.4	13,591.90	64.2	3,070.20	14.5
2021	4,196.10	19.4	13,778.80	63.8	3,605.10	16.7
2026	3,825.30	17.5	13,863.20	63.6	4,115.00	18.9
2031	3,520.30	16.1	13,826.20	63.2	4,536.10	20.7
2036	3,363.20	15.4	13,589.30	62.3	4,888.80	22.4
2041	3,299.00	15.2	13,026.70	60.0	5,386.70	24.8
2046	3,244.70	15.1	12,389.50	57.7	5,831.20	27.2
2051	3,149.30	14.9	11,874.00	56.2	6,080.60	28.8

Source: De Silva (2001); *Numbers in thousands

Table 11:Age Composition of Projected Population (Standard Projection)

Population by age and sex. Standard Projection (in 000s)

2006

Age	Male	Female	Total
Under 15	2,424.90	2,382.50	4,807.40
15-49	5,333.70	5,415	10,748.70
50-59	1,012.70	1,075.10	2,087.80
60+	948.5	1,127.20	2,075.70

2036

Age	Male	Female	Total
Under 15	1,690.50	1,672.70	3,363.20
15-49	5,177.90	5,144.70	10,322.60
50-59	1,591.60	1,674.90	3,266.50
60+	2,125.70	2,763.10	4,888.80

2051

Age	Male	Female	Total
Under 15	1,585.00	1,564.30	3,149.30
15-49	4,471.60	4,480.00	8,951.60
50-59	1,444.00	1,478.60	2,922.60
60+	2,675.50	3,405.10	6,080.60

Source: De Silva, 2001.

It is inevitable that over the coming decades, Sri Lanka will have to face the challenge of successfully responding to new demands placed on the health system due to the growing elderly population. There are likely to be consequent economic, social, health and psychological requirements needed by this segment of the population which will have to be provided. For instance, it is important that there be a welfare system for the elderly, including social health care services. In addition, it will be necessary for certain infrastructural and institutional requirements to be met, including elderly homes.

Given current life expectancy, a person reaching 60 years of age can be expected to live more than 20 years. A majority of them would desire to remain in the workforce for at least another 10 years. This would mean that economic opportunities will need to be created for this segment of the labor force between the ages of 60 and 70 years. Another consequence of higher life expectancy for females is that there will be a sharp drop in the sex ratios of the 80 years and over population (Table 12). This will result in more widowed women in the older ages. However, due to declining fertility, there will be fewer children to care for these women. This means it will be the responsibility of the government to ensure that the health and social welfare services of these elderly women are met. This will be particularly relevant for women of low income households (Abeykoon, 2006).

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Table 12: Sex Ratios at Old Ages, 1980-2035

| Age Group	1980	2005	2035
70-74	119.3	86.7	92.2
75-79	98.3	75.8	84.7
80-84	121.7	61.7	71.4
85-89	87.5	69.6	57.3
90-94	50.0	42.9	30.0

Source: Abeykoon, 2006

Policies in Low Fertility Countries to Influence Fertility

In order to avoid any adverse consequences, governments are sometimes forced to enact public policies to stimulate fertility. Most often, the reproductive decisions of women depend on institutional, social and cultural factors which are shaped by these public policies. Policies to affect fertility can be divided into two broad groups. There are policies that influence fertility directly by offering financial incentives to families with children. Then there are those that change the environment in which decisions are made by parents regarding the number of children they have.

The first category describes the various instruments that are used to reduce the direct costs of children through financial incentives. One such mechanism is child-related cash payments. These are usually regular payments made to parents for each child. This policy option is considered particularly effective as the payment is made directly to the primary caregiver, instead of in the form of a tax cut for the father. On the other hand, cash payments are made to families on the assumption that income is shared equitably between families. If this is not the case, such cash payments may not be used for the child's benefit and will fail to support childrearing. Studies show that in OECD countries, the level of family cash benefits is positively correlated with total fertility rates, but the relation is weak, as evident in Figure 4 (Sleebos, 2003). Financial incentives are also provided in the form of tax exemptions. These may take the form of tax reductions or tax credits based on the presence of a child. Several OECD countries have introduced tax reforms which are either directly aimed at fertility, or increase mothers' return to work after child birth. Although it is less likely that tax expenditures will be spent on children than cash payments, the tax approach is considered more politically acceptable than cash payments. Finally, housing subsidies are provided as a special support for families with children. They may take the form of periodic cash payments, lump sum payments, interest rate reductions, tax rebates for housing costs, or subsidies for housing-related services. In addition, governments may also provide subsidized services in education, medical and dental services as well as public transport. The effect of such subsidies is often difficult to quantify. However, they do significantly reduce the financial costs of raising children (Sleebos, 2003).

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Figure 4: Total Fertility Rates and Family Cash Benefits
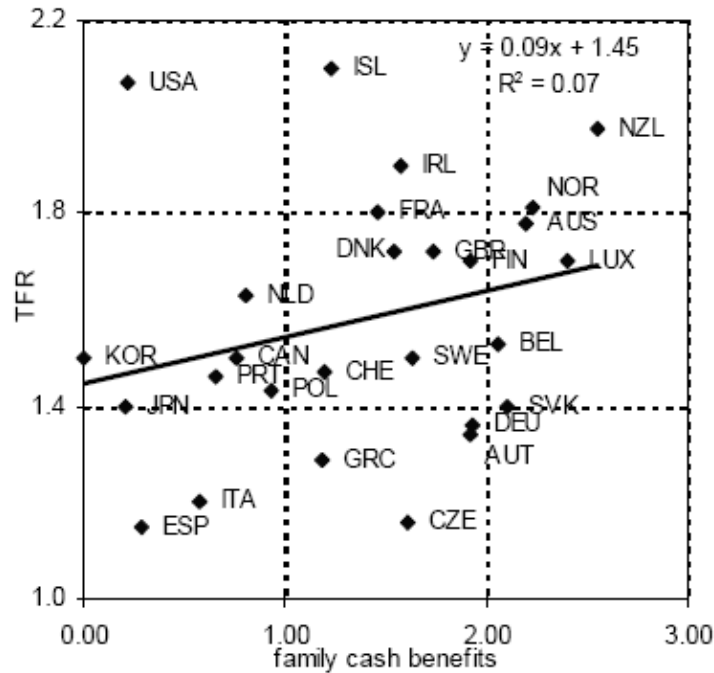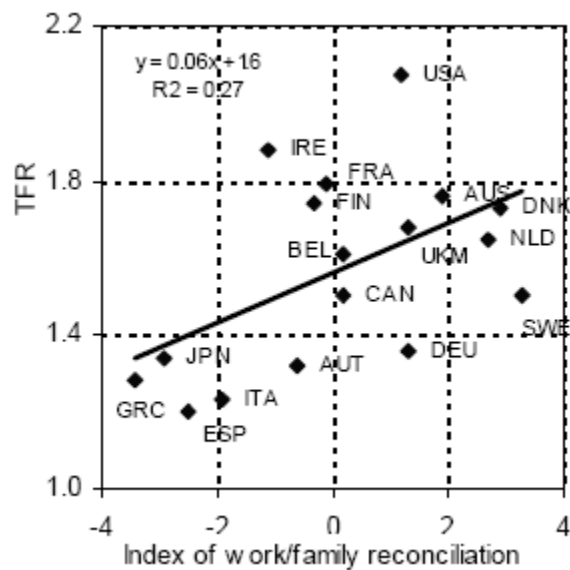

Source: Sleebos, 2003.

A second set of policies focuses on persuading women to have more children and also to return to work after maternity. These policies are meant to make it easier for mothers to combine work and family roles, thus reducing the opportunity costs of having children. Ideally, these policies would also promote gender equality, thus leading to a more balanced division of responsibilities between men and women (Sleebos, 2003). One of the main elements of family-friendly policies is free or subsidized childcare services which would allow mothers with young children to work. Studies conducted in several Nordic European countries, as well as in the United States and Canada, show a positive and significant relationship between total fertility rates and the availability of childcare services as evident from Figure 5 (Sleebos, 2003). In addition to maternity leave, many countries now provide several weeks of parental leave. The effect of these leave provisions on fertility depend on its duration, as well as the benefits received during this period. Once mothers return to work, it is important that women are allowed flexible working hours to help balance work and family responsibilities. Provisions are made for setting work hours in concert with school hours, granting short term absences to care for sick children, to attend school occasions, or to take children for important appointments. Furthermore, employment legislation strictly prohibits discrimination on the grounds of gender and family status, in order to help women with childrearing. Research shows that the relationship between total fertility rates and work/family reconciliation policies is a weak positive relationship, as evident from Figure 6 (Sleebos, 2003).

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**Figure 5: Total Fertility Rates and Childcare Availability
for Children below Age 3**
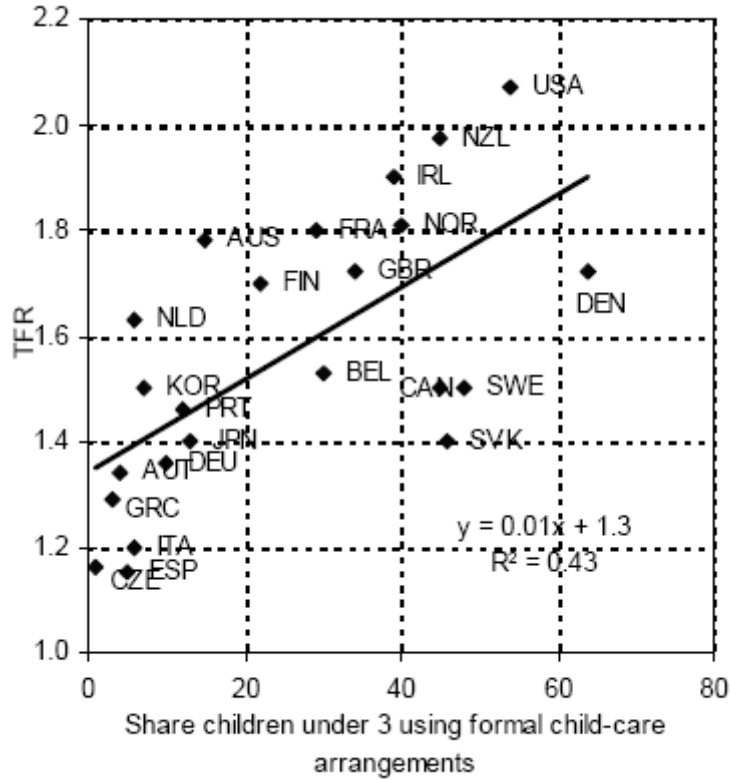
Source: Sleebos, 2003.

**Figure 6: Total Fertility Rates (TFR) and Index of Work and Family
Reconciliation Policies**

Source: Sleebos, 2003

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Effectiveness of Policies to Increase the Fertility Level

A number of studies have examined the effectiveness of specific policies on women's reproductive decisions. With regards to the effect of family cash benefits, a study by Buttner and Lutz (1990) reported a weak positive relationship in France and Germany between TFR and cash incentives. It was also suggested that "stronger incentives cause larger changes of the probability of giving birth to children" (Sleebos, 2003). However, it is generally agreed that the impact of these policies is small and tends to vary across countries. For instance, Blanchet and Ekert-Jeffe (1994) estimated the impact of family cash benefits at 0.2 children per woman. A 25 percent increase in family allowances would increase the fertility rate about 0.6% in the short run and by 0.4% in the longer term – an increase of the TFR by 0.07 children per woman (Sleebos, 2003).

With regards to tax policies, studies show a strong positive correlation between tax exemptions and fertility. In the United States, tax breaks for low-income households with dependents have a strong positive impact on family birth decisions. Similarly, a pronatalist tax policy in Quebec Canada increased fertility by 12% on average, and 25% for those eligible for the maximum benefit (Sleebos, 2003).

Studies conducted in a number of countries including Italy, Norway, Sweden and Canada show that work/family reconciliation policies, such as maternity and parental leave, as well as childcare subsidies, have a small but positive impact on fertility. A study by Hyatt and Milne (1991) estimated that a 1% increase in the real value of maternity benefits would increase the TFR in Canada between 0.09% and 0.26%. On the other hand, a Gauthier and Hatzius (1997) argue that neither the duration nor the benefits provided by maternity leave explain variations in TFR across OECD countries (Sleebos, 2003). Del Boca (2002) found that there is a positive relationship between availability of part-time jobs and fertility rates in Italy.

In countries such as the United States, researchers have found that various forms of childcare impact fertility rates differently. For instance, Lehrer and Kawasaki (1985) showed that the availability of care by relatives increases parents' willingness to have another child. In Norway, even a 20 percentage point increase in the provision of childcare would only increase fertility by 0.05 children per woman. Del Boca (2002) reports a positive relationship between the availability of childcare and fertility in Italy: a 10% increase in the availability of childcare increases the odds of having a child by 0.2 (Sleebos, 2003). When interpreting the results of studies, it is important to determine whether these policies are affecting the 'completed' fertility rates of individuals or if they are merely affecting the timing of births. Studies that have tried to distinguish between the two have concluded that the impacts are more significant on the timing of fertility rather than on the total number of children per se. In other words, the effects of these policies are usually just temporary, and are not relevant in the longer term (Sleebos, 2003).

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Some Future Policy Options for Sri Lanka

The Sri Lankan government has, during the past two decades, introduced several policy measures with the view to improving the status of women and children. Some of these measures have created a family-friendly social culture where work and family life are compatible. For instance, maternity leave for government employees, as well as for those in the private and NGO sector, have been further extended to enable mothers to care for their babies during the first year of their lives. Women who were previously given a period of 3 months are now allowed 6 months of paid leave with the option to extend the leave period up to one year without pay. In addition, in recent years the Family Health Bureau of the Ministry of Health has been advocating the health benefits of having children within appropriate age ranges, while not delaying the first birth for women who marry late. In addition, in the estate sector, plantation companies provide childcare facilities to women who have pre-school children. While the above policies are commendable, it is necessary to ensure that these facilities are available to all working women in the labor force. It may be interesting to note that in some developed countries, these policies have increased fertility levels as described in the previous section. There are other policies that would also improve the status of women, while preventing fertility levels, from dropping to very low levels. For instance, it is necessary that policies are in place to enable women to return to the workforce following childcare responsibilities without loss of accrued benefits.

It is important for the government to revisit its policy on the payment of financial inducements to acceptors of voluntary sterilizations. Since this policy was first introduced in 1980, sterilization became a popular contraceptive method. According to the 1987 Sri Lanka Demographic and Health Survey (DHS) 30 percent of married women aged 15-49 years were protected by sterilization, up from 10 percent in 1975 (De Silva, 1992). The financial inducements were introduced in 1980 when the country's total fertility rate was around 3.7. The objective was to reduce fertility to replacement level as early as possible, as population growth rates at the time were seen to adversely affect social and economic development. Moreover, the Five-Year Economic Development Plan introduced by the government in 1972 stated that if measures are not taken to reduce fertility to replacement level, the country would have 27 million people in the year 2000. However, the 2000 DHS revealed that the TFR had reached replacement level indicating that the objective of providing financial inducements had been achieved. Therefore, now it may be necessary for the government to withdraw financial inducements and improve the availability and accessibility of family planning services and provide contraceptives according to the needs of the client populations.

As pointed out in the previous section, some policies in the more developed world to increase fertility have had some success, particularly with regard to tax policies. For instance, studies have shown that there is a strong positive correlation between tax exemptions and fertility. Although the direct income tax base in Sri Lanka is relatively small but increasing, it may be useful to examine policies adopted in these countries with regard to tax policies.

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Conclusion

In the last few decades, in developed and less-developed countries alike, fertility rates have been steadily declining. As a result of the fertility transition which first began in European countries and much later spread to non –European countries, fertility has been dramatically lowered. It was originally predicted that fertility would stabilize around replacement level. However, contrary to expectation, fertility continued to fall. Similar to many developed countries, fertility in developing countries imitated the downward spiral and have now approached replacement level fertility and below.

The causes of low fertility are diverse and complex and vary between regions. In many countries, the adverse implications of high fertility prompted governments to introduce family planning programs. The result was a speedy transition to low fertility. However, in many instances, policy makers failed to consider what steps should be taken once replacement fertility was reached. It became increasingly clear that once fertility reaches very low levels, there is greater difficulty in crafting effective policies to reverse the fertility decline.

In the last decade or so, Sri Lanka's total fertility rate has been hovering around the replacement level. However, some demographers predict that in the next twenty years, it is likely to dip to a very low level of TFR of around 1.3 (De Silva, 2001). A consequence of this is Sri Lanka's transition to an aged society. Similar to other East Asian countries, it is likely that Sri Lanka will also have to face problems due to the exponential speed at which societies are aging.

Despite current replacement level fertility rates in Sri Lanka, the government has not yet reviewed its policies. However, if TFRs continue to decline as predicted, it may become necessary for the government to actively reconsider its population policies so as to avoid any social consequences of low birth rates. Similar to many European countries, it may not be long before Sri Lanka also has to offer direct financial incentives to encourage childbearing. In addition, the government may consider extending the retirement age to prevent Sri Lanka's old-age dependency ratios from rising alarmingly. Furthermore, the government might be required to introduce various work/family reconciliation policies to allow mothers to better balance work and family roles. However, as already seen in many developed countries, such policies have had limited success. It is often impossible to devise a simple solution that can be used across cultures to address both low fertility and the aging of the population. Therefore it is important that each country formulates policies that are appropriate to their own unique situation while taking note of the experiences of other countries.

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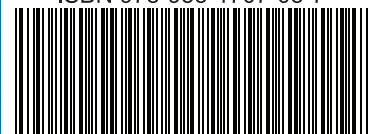
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