

# The Demographic Transition: Opportunities and Challenges – The Case of Sri Lanka

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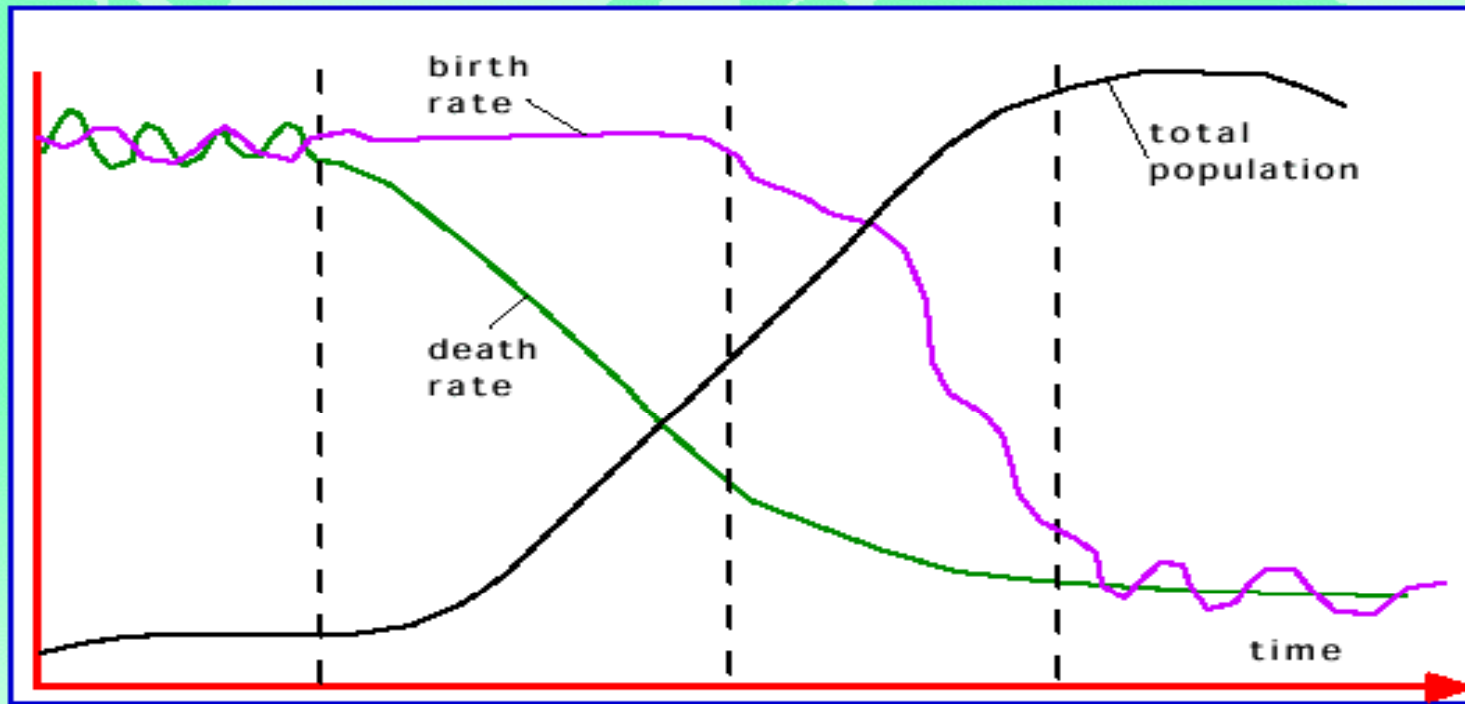
***27<sup>th</sup> Asian Parliamentarians Meeting on Population and Development  
The World Population at 7 Billion***

***Organized by the Asian Population and Development Association, Japan.  
18-19 July, 2011  
Sri Lanka***

# Demographic Transition

It is a transition from an undesirable state of slow growth of population where mortality and fertility rates are high to a desirable state of slow population growth with low fertility and mortality levels.

# The Demographic Transition

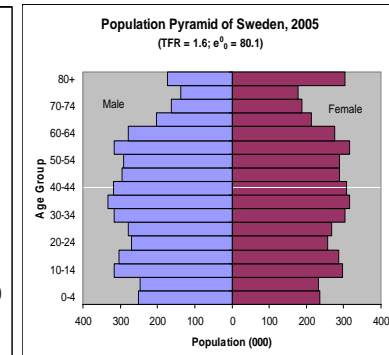
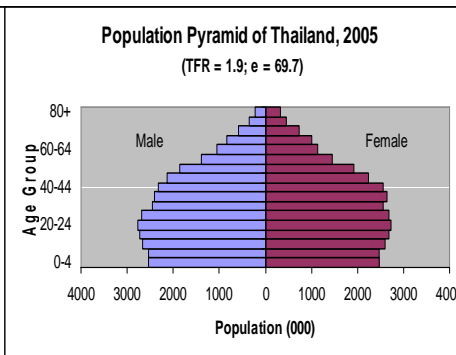
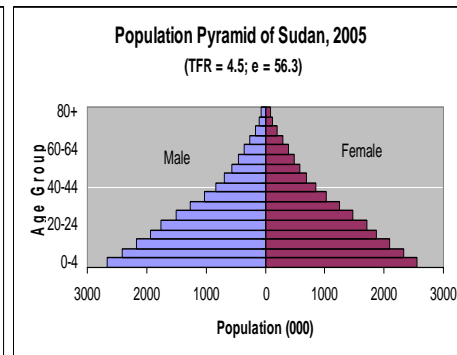
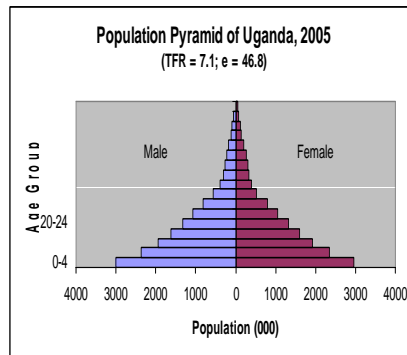


**Stage 1** High birth rate high, but fluctuating and high, but fluctuating death rate

**Stage 2** Declining death rates and continuing high birth rates

**Stage 3** Declining birth and death rates

**Stage 4** Low death rates and low, but fluctuating birth rates

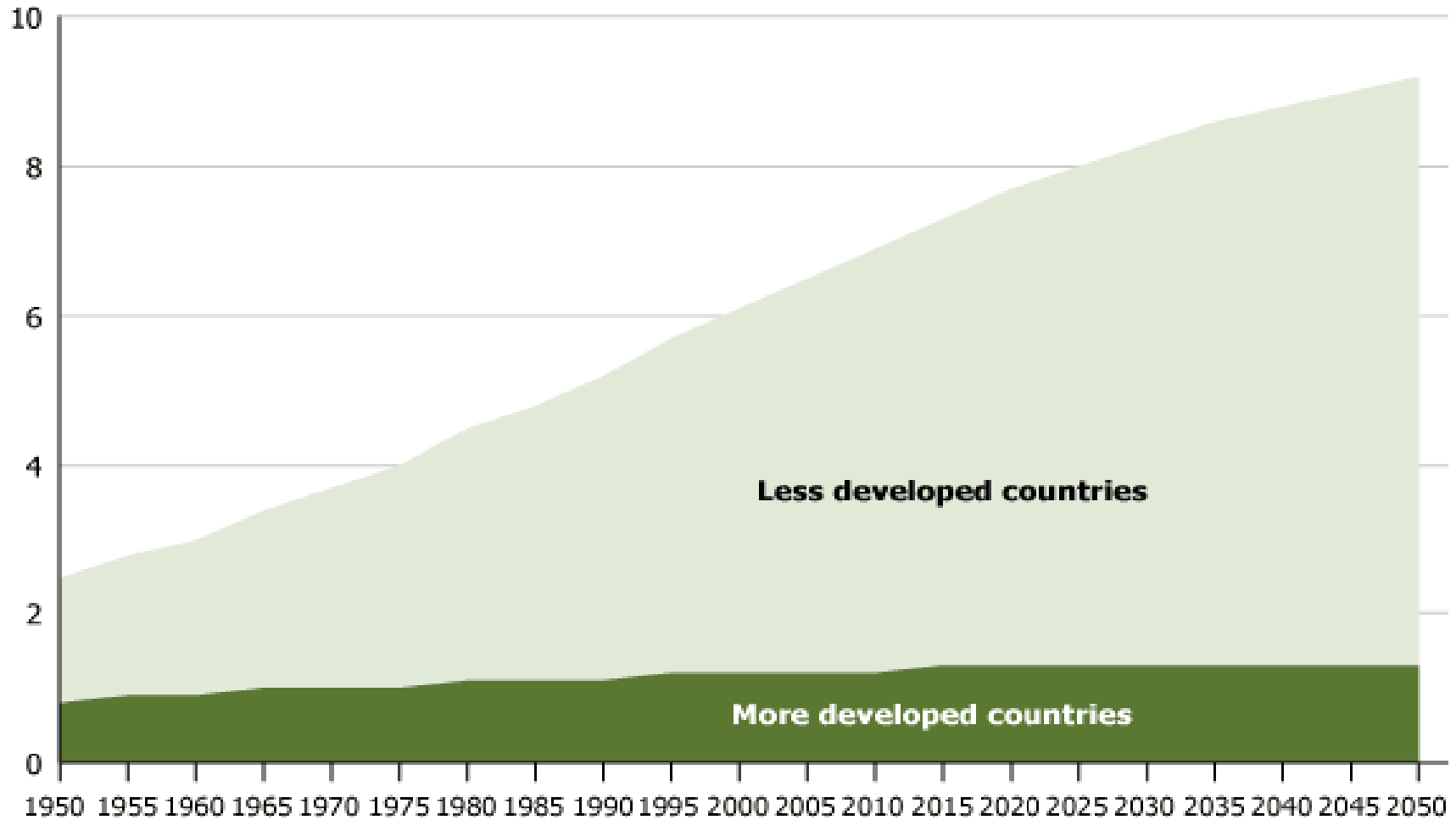


# Growth of World Population

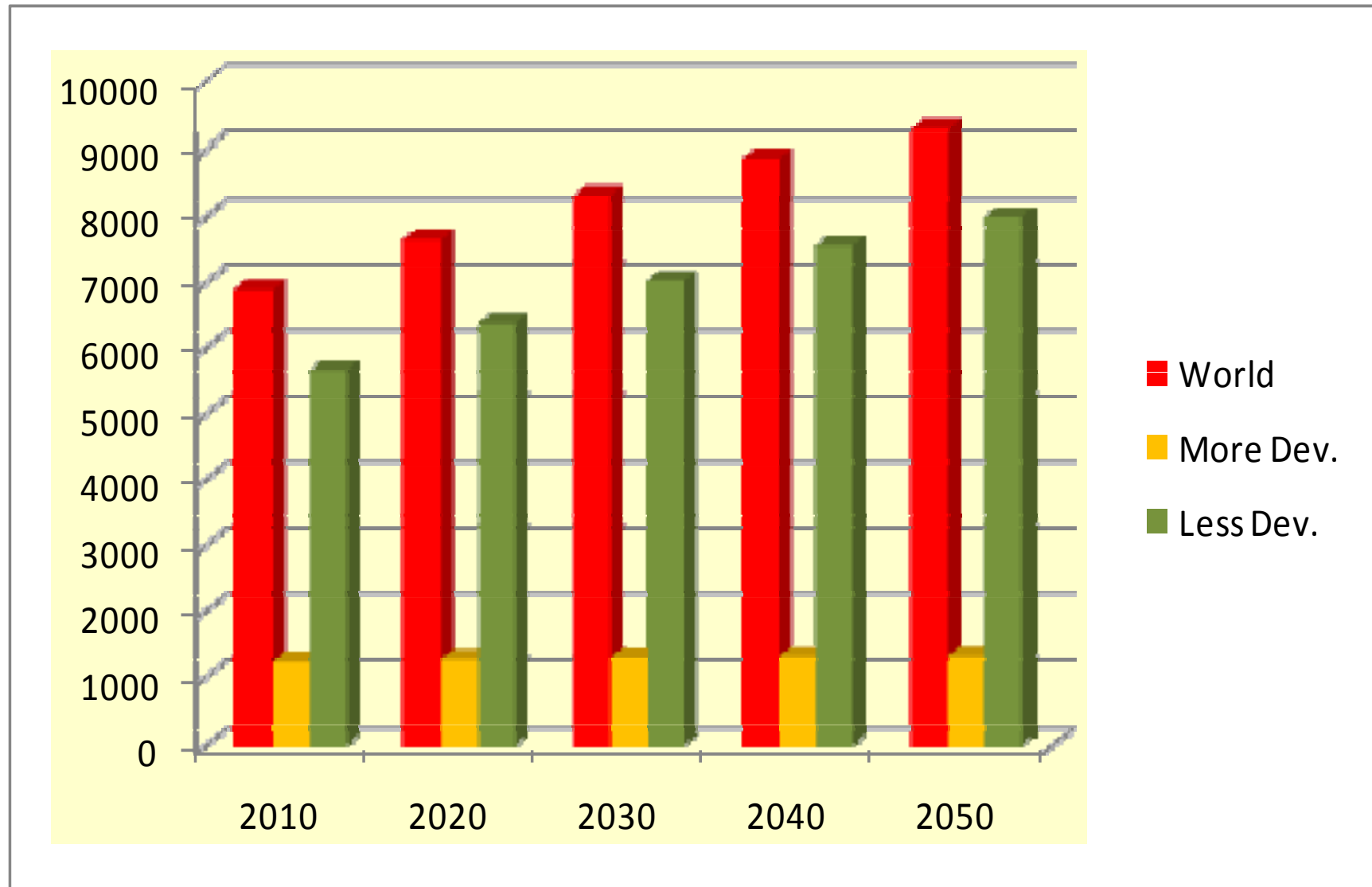
<b>Year</b>	<b>Population In Billions</b>	<b>Number of Years to add a Billion</b>
1804	1	125,000
1927	2	123
1960	3	33
1974	4	14
1987	5	13
1998	6	11
2011	7	12
2024	8	13
2050	9	26
2100	10	50

# Population Growth of More Developed and Less Developed Countries

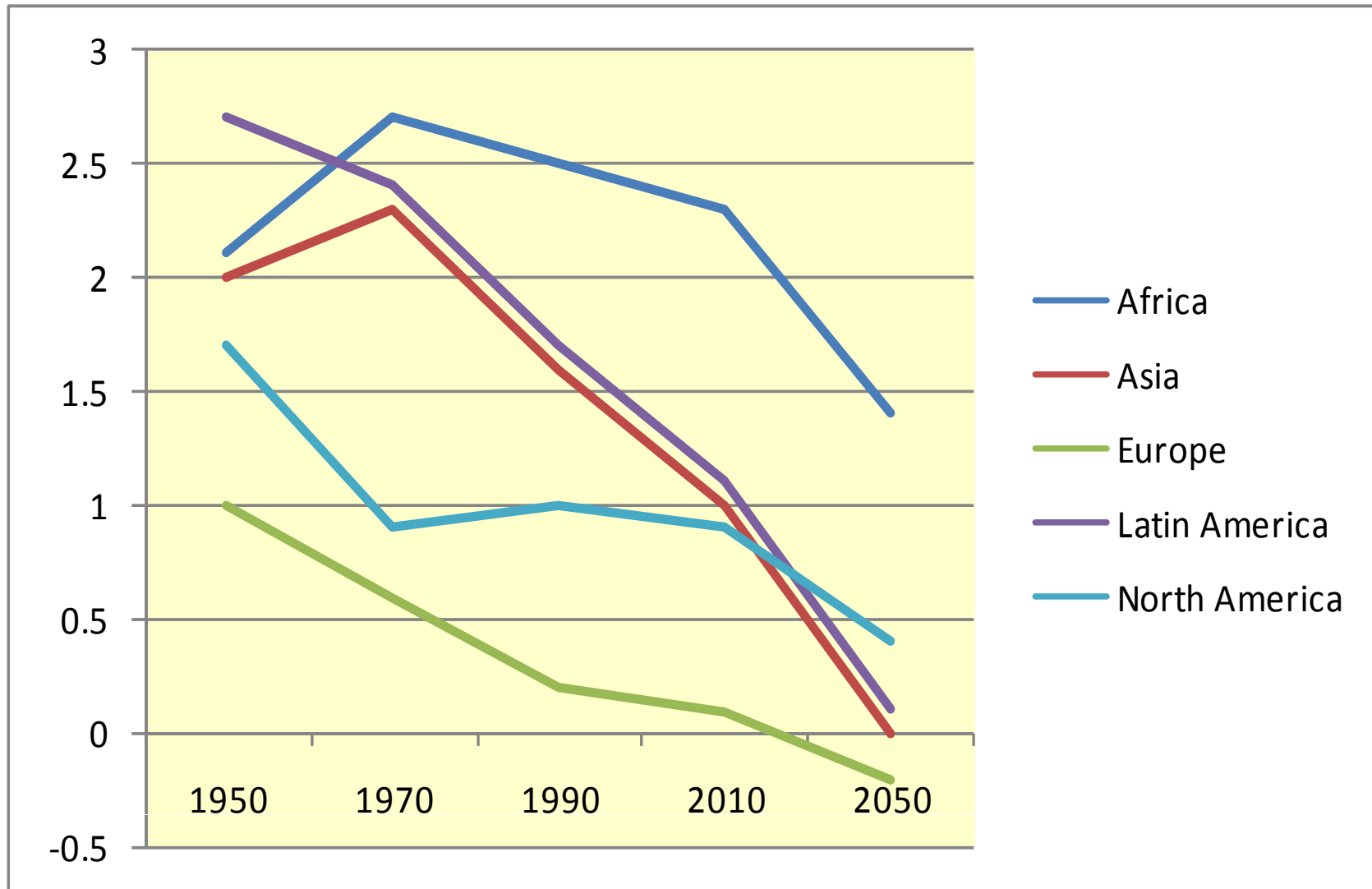
Population, in billions



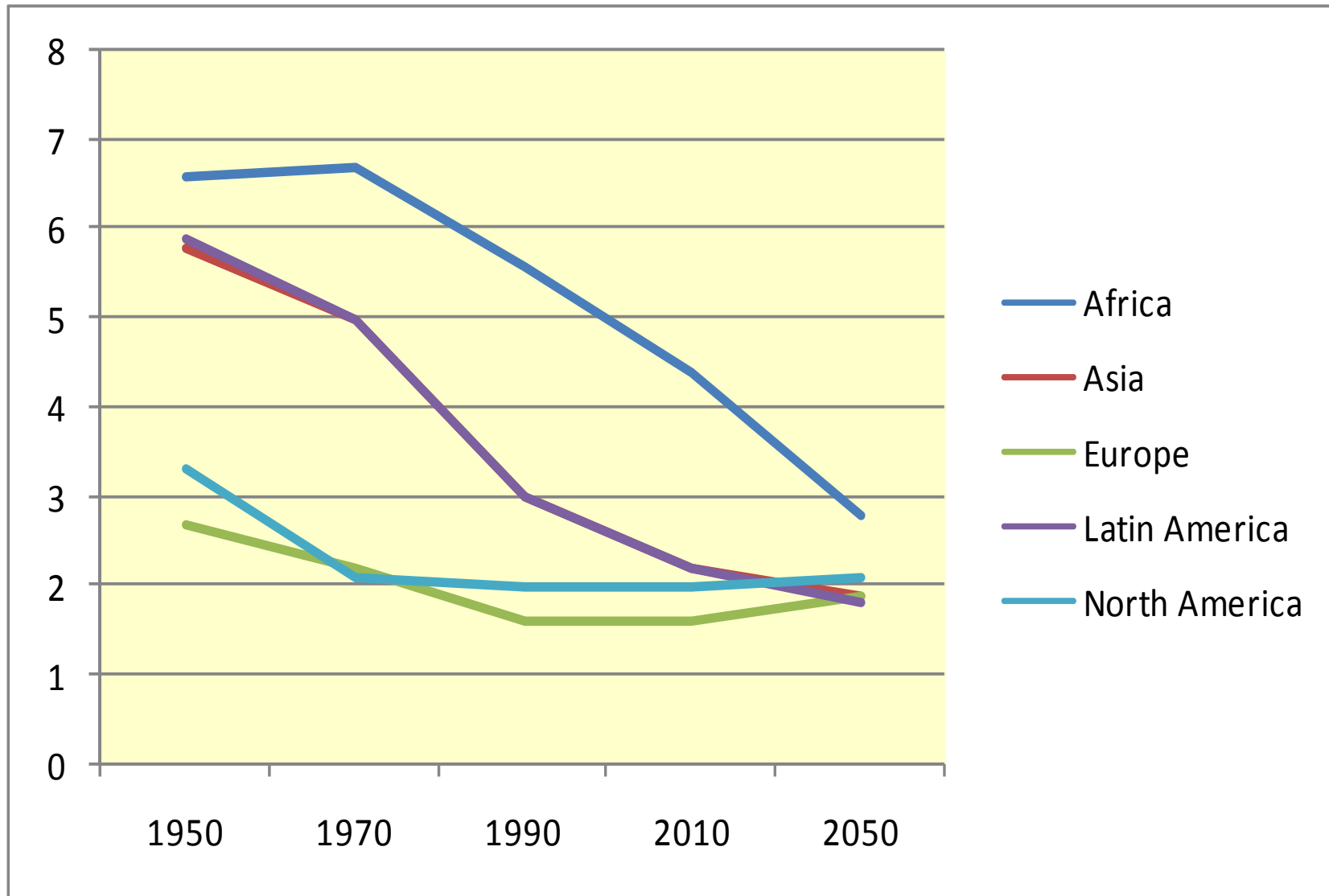
# World Population Growth, 2010-2050



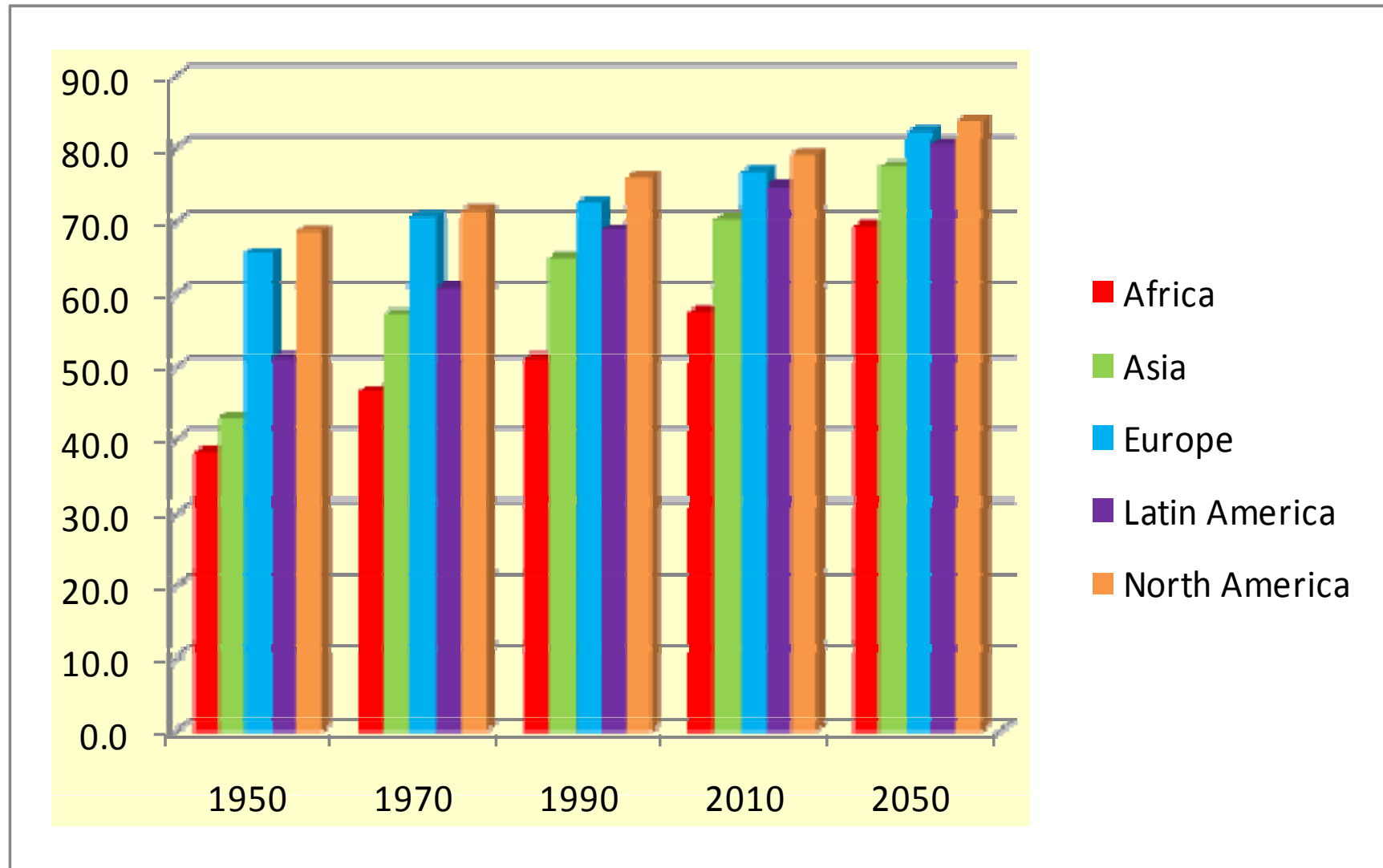
# Rate of Growth of Population of Major Regions of the World



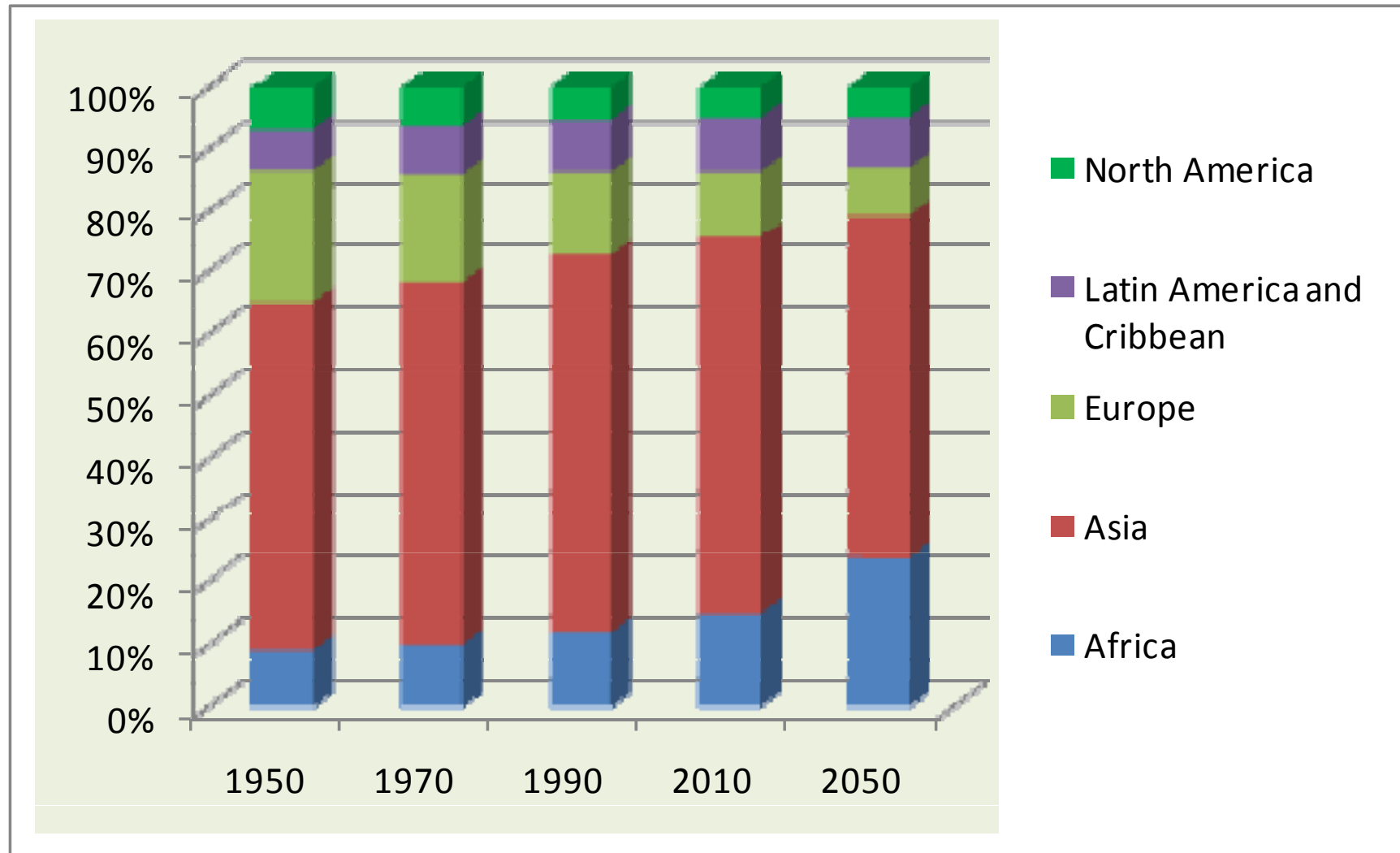
# Total Fertility Rate of Major Regions of the World



# Life Expectancy at Birth(both sexes) of Major Regions of the World

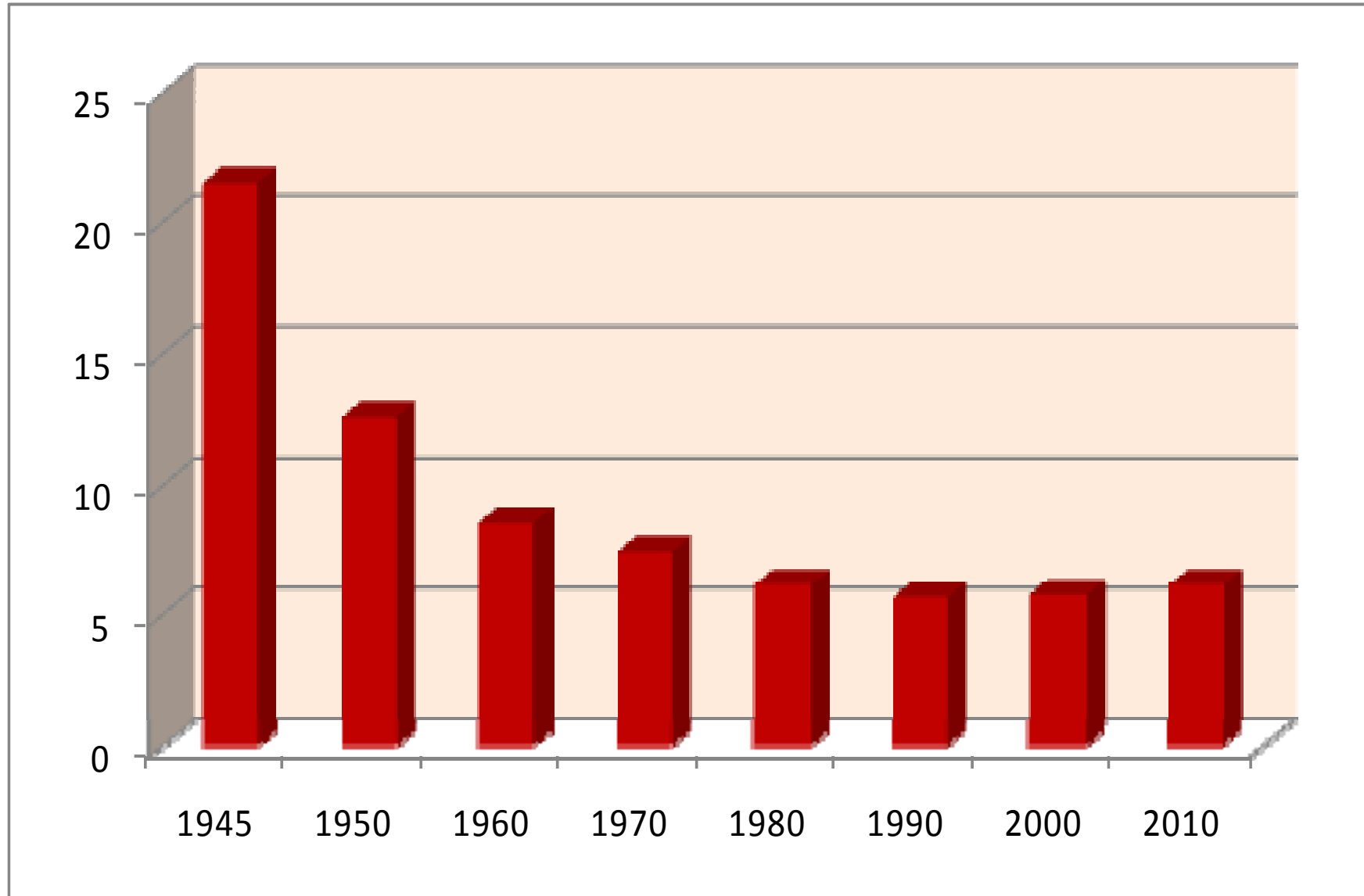


# Distribution of Population of Major Regions of the World

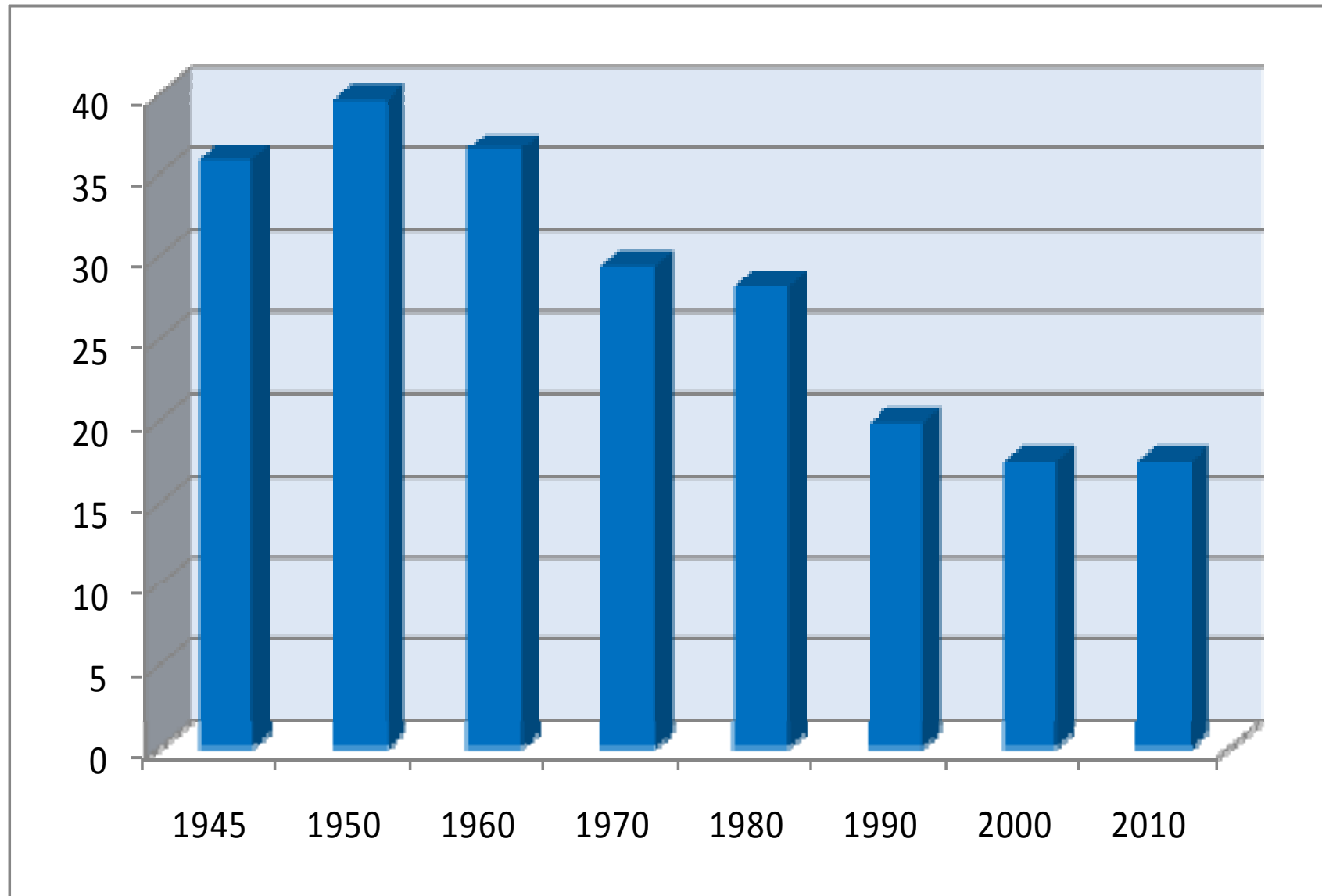


# **The Demographic Transition in Sri Lanka**

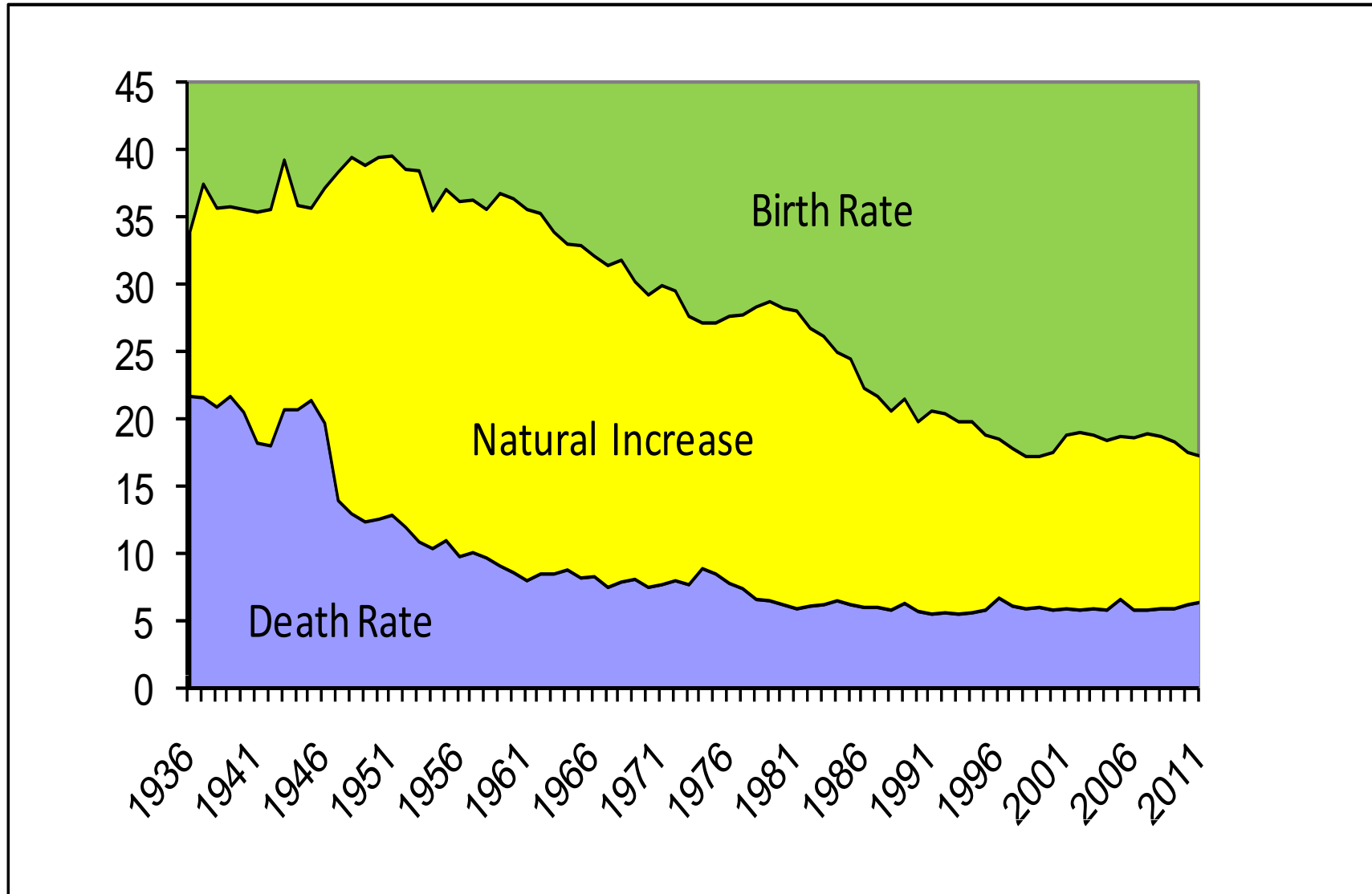
# Crude Death Rate, 1945-2010



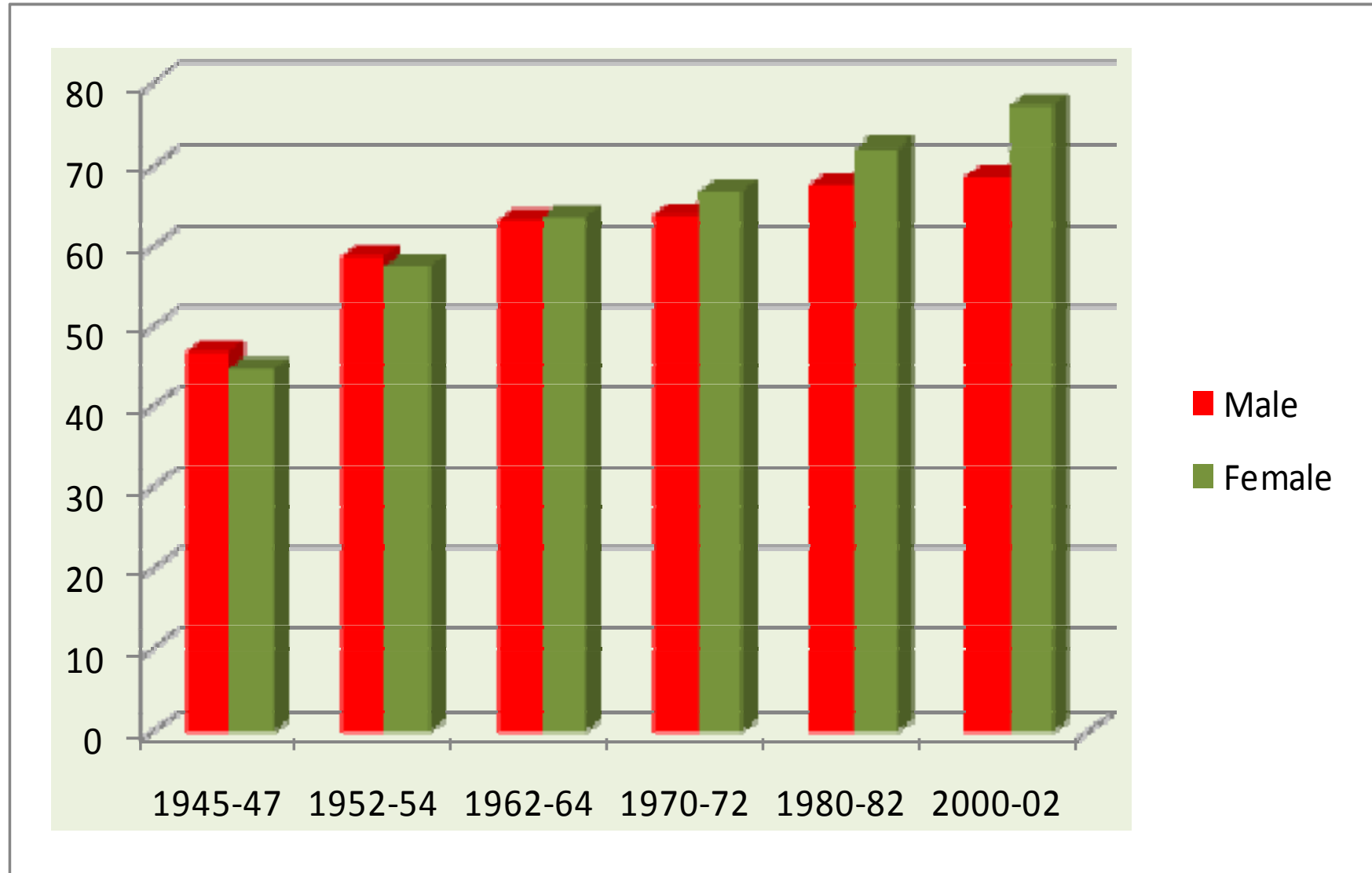
# Crude Birth Rate, 1945-2010



# Demographic Transition in Sri Lanka



# Life Expectancy at Birth



# Factors Contributing to the Mortality Transition

## (a) Institutional Factors

- The first Health Unit was established in 1926 and by 1950 the number increased to 91 and in 2010 there were 330 units covering the entire country.
- In 1925, the medical and sanitary services were combined and brought under one control.
- The Department of Health services was established in 1952.

- In 1954, health administration was decentralized to the sub-national level.
- In 1992, it was further decentralized to the sub-district level.
- Political devolution of health administrative powers to the Provinces took place in 1987.
- Strong political commitment and active participation of people in preventive health services.

## b) Programme Factors

- The gradual decline in mortality began in the 1920s with the organized effort to provide public health services.

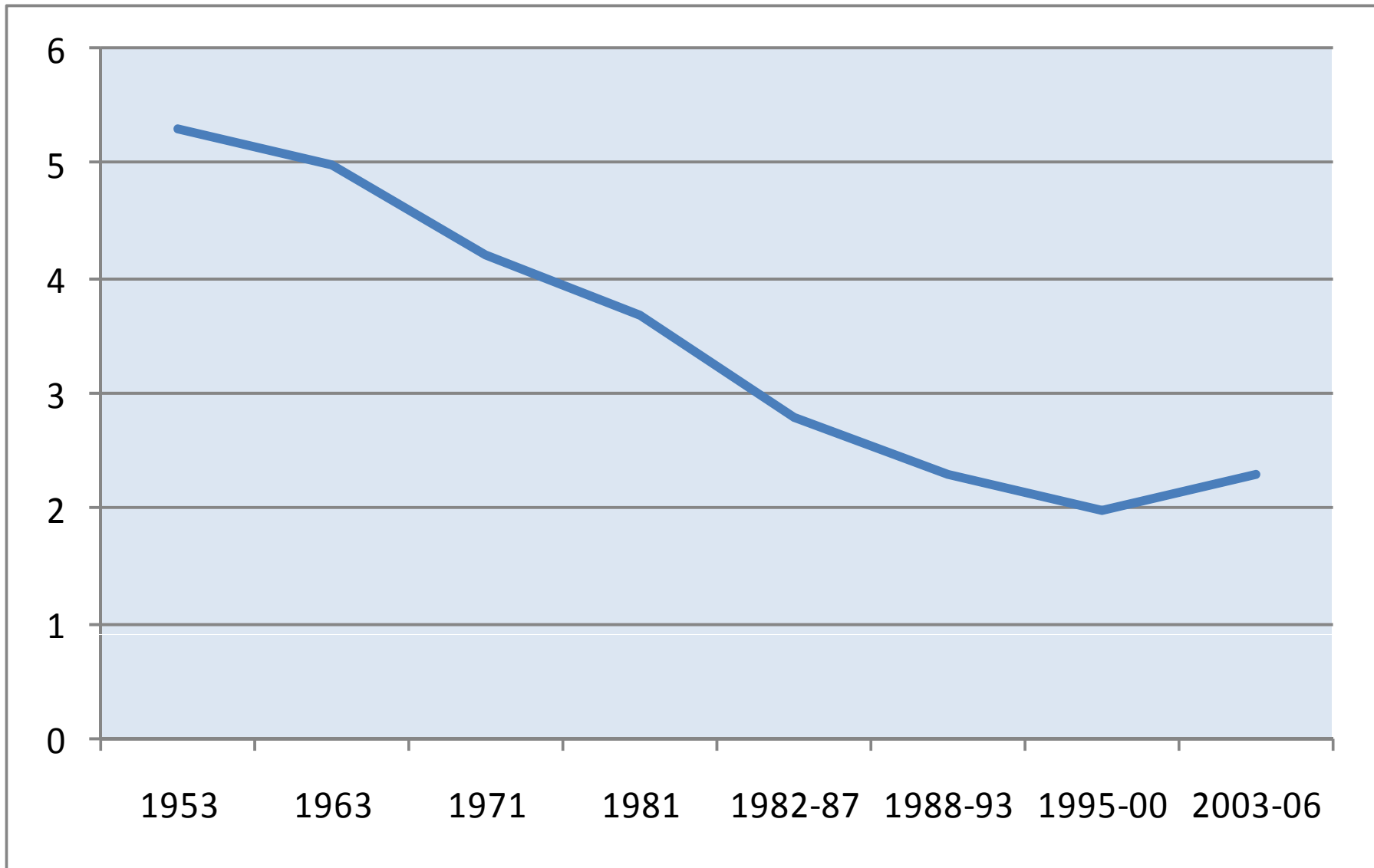
- The introduction of DDT in the malaria control programme resulted in the eradication of malaria in 1946. The crude death rate declined sharply by 30 percent between 1946 and 1947.
- The number of health units providing maternal and child health services increased by three fold between 1940 and 2010. During 1946 to 2008 the infant mortality rate declined from 141 to 8 per 1000 live births.
- The number of medical institutions providing facilities for the delivery of births increased from 187 in 1940 to 470 in 2010. The maternal mortality ratio declined from 1650 in 1945 to 33 in 2008.

- In 2006, 98 percent of annual births took place in institutions.
- Trained Midwives increased by more than 10 fold between 1950 and 2010.
- Immunization against vaccine preventable diseases commenced in 1886. Universal coverage of child immunization was achieved in 1989. And today there is more than 95% coverage for all immunization vaccines.
- The number of hospitals providing curative services has increased by four fold between 1948 and 2010.

## C) Socio-economic Factors

- Improvement of environmental sanitation.
- Rising educational attainment of the general population particularly that of females. The literacy rate of females has increased from 44% in 1946 to 90% in 2006.
- Distribution of rice free of charge to the entire population for three decades and the supply of subsidized food for low income families.
- The general improvements in living standards with the country emerging from a low income level to a lower middle income status.

# Total Fertility Rate



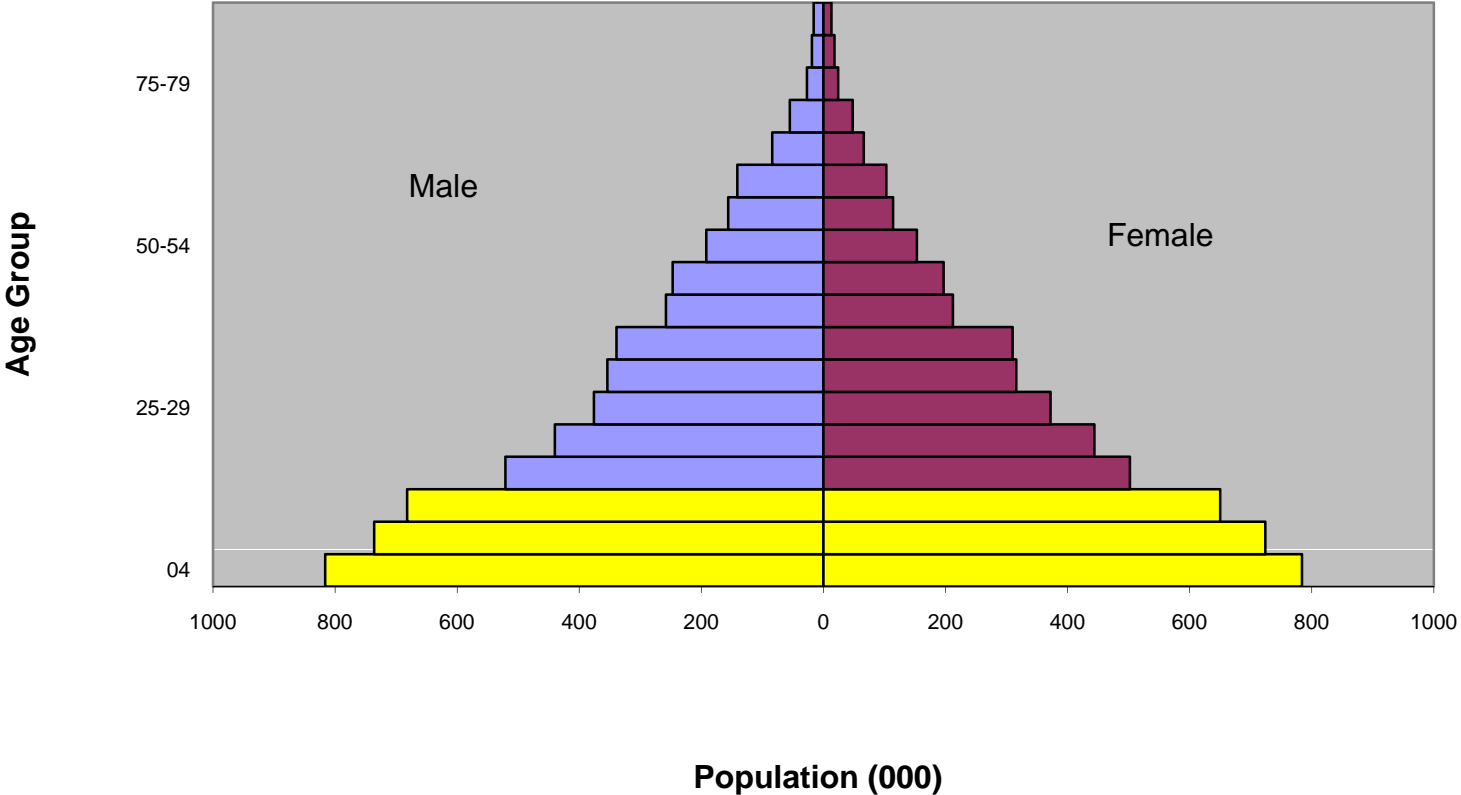
# Factors Contributing to the Fertility Transition

## (a) Institutional Factors

- In 1954 the government recognized the work of the Family Planning Association which was established in 1953 by providing an annual grant.
- In 1958, an agreement was signed between the governments of Sri Lanka and Sweden for co-operation in a pilot project on family planning.
- The need to reduce the rate of population growth to improve the standard of living of the people was stressed in the Ten Year Plan of economic development presented in 1959.

- By early 1960s, with rising unemployment rates it became evident to policy makers that the population growth rate in the country needs to be brought under control.
- Thus in 1965, family planning became a national programme and was integrated with the maternal and child health programme of the Ministry of Health.
- Thus it was three decades before the ICPD that Sri Lanka recognized the importance of integrating family planning with other reproductive health services such as maternal and child health.

# Population Pyramid 1963



- 1968 - The Family Health Bureau was established to implement the maternal and child health and family planning programme.
- 1971- Youth unrest with unemployment rates reaching 20% of the labour force.
- 1972- The Five Year Plan (1972-1976) therefore, stated that if the fertility rate prevalent at that time were to continue, Sri Lanka would have 27 million people in the year 2000 and gave high priority to the diffusion of family planning services amongst the mass of the adult population.

- In 1977, the subject of Population Policy formulation and coordination was assigned to the Ministry of Plan Implementation which functioned under the President of the country.
- In 1979, a Population Division was created in the Ministry of Plan Implementation to coordinate the national population programme.
- In 1982, the President of Sri Lanka appointed a Parliamentary Advisory Committee on Population (PACP) to advise the government on appropriate policies on population and family planning.
- Towards the end of 1980s, the population programme transformed from a demand creation phase to a supply oriented one where family planning service delivery became the key issue.

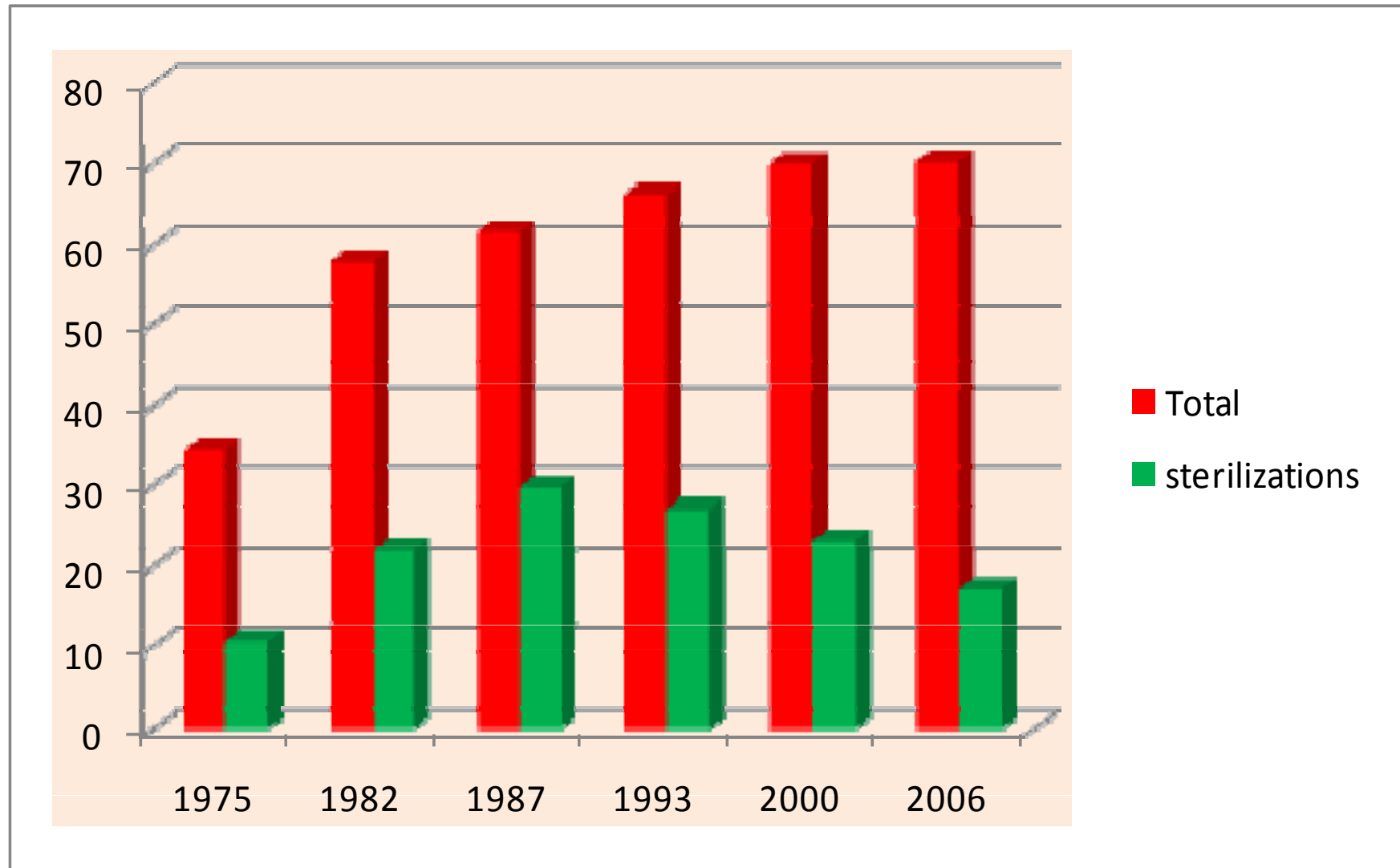
- Thus in August 1989, the function of population policy formulation and implementation was re-assigned to the Ministry of Health.
- As a result, the Population Division of the Ministry of Plan Implementation was moved to the Ministry of Health to strengthen strategic planning and implementation of population activities.
- In 1991, the government issued a policy statement to achieve replacement level fertility at least by the year 2000.
- In 1998, a comprehensive Population and Reproductive Health Policy and Action Plan were formulated.

## b) Programme Factors

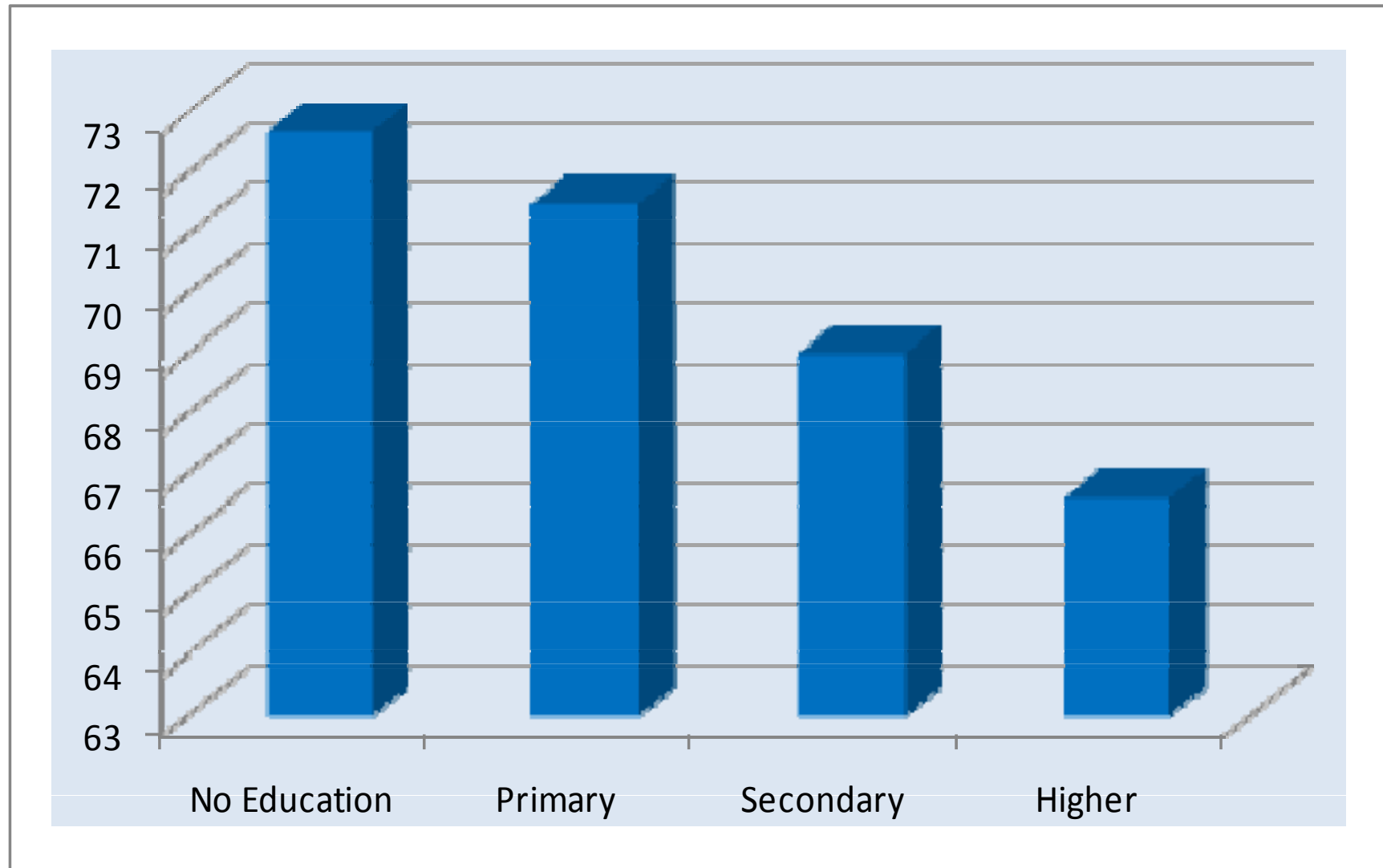
- In 1966, the Swedish Government came in a big way to support the government family planning programme.
- A project agreement was signed in 1973 between the Government and the UNFPA to further strengthen the population programme.
- In 1980, financial inducements were provided to those who underwent sterilization as a method of family planning.
- In 1998, the maternal and child health and family planning services were broad based to include other elements of reproductive health through the network of existing primary health care facilities.

- The contraceptive prevalence rate increased from 34.4 percent in 1975 to 70.2 percent during 2006/07.
- The proportion using permanent methods of contraception reached nearly 50 percent in 1987 with the introduction of incentive payments in 1980.
- By 2006, those with no education or with primary education had the highest rates of contraceptive use. This indicates the high level of accessibility to family planning services.

# Contraceptive Prevalence Rate



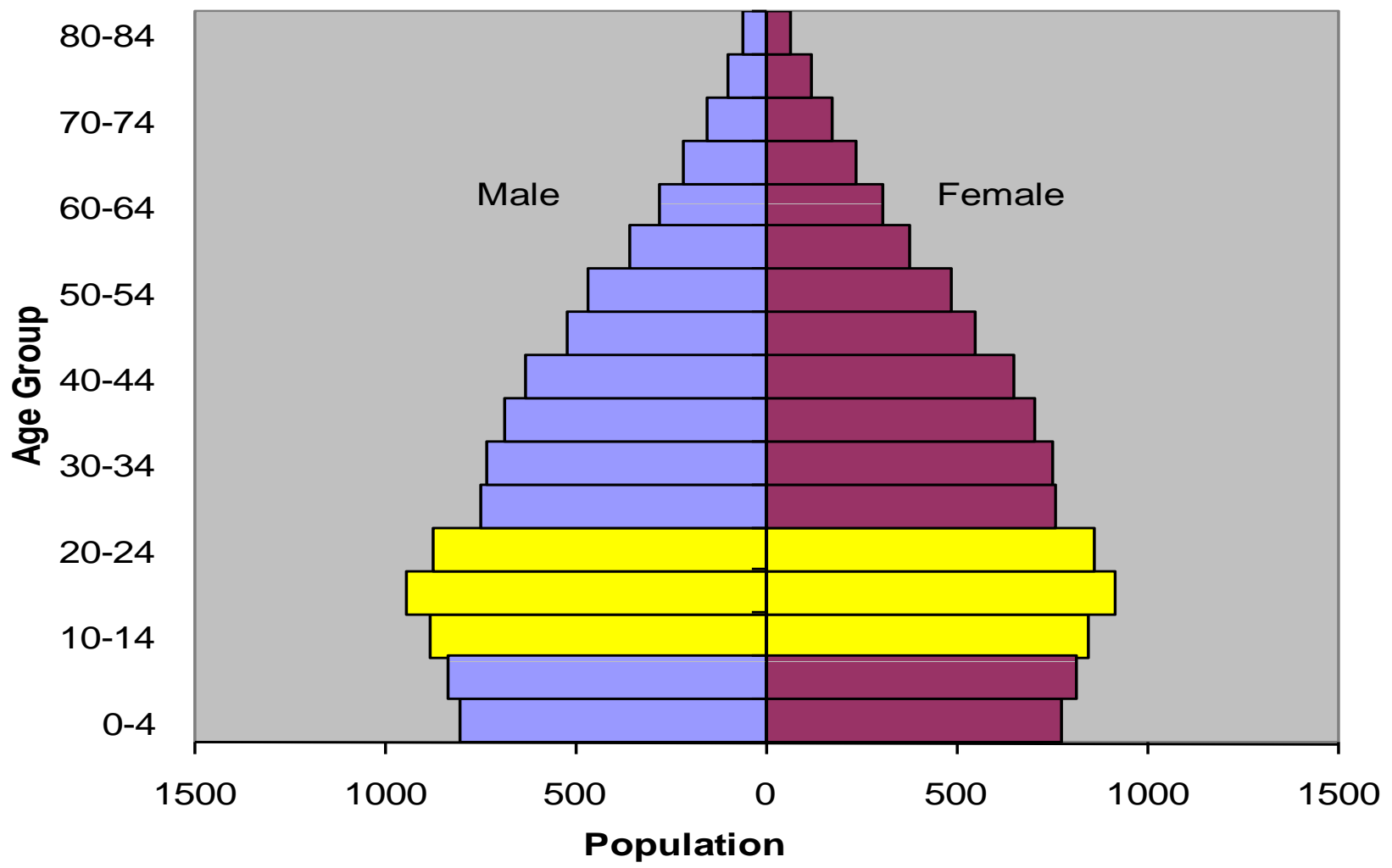
## Contraceptive Prevalence Rate by Educational Level, 2006-07



### c) Socio-Economic Factors

- The rising educational level of females in the reproductive ages. In 2001, 47% of females in the age group 15-44 had nine or more years of schooling.
- Large percentage of females working outside the home in non-agricultural occupations. The proportion of females in non-agricultural employment increased from 38% in 1971 to 70% in 2001.
- Decline in infant mortality made couples to realize fewer births are required to ensure the desired number of children.
- Rise in per capita incomes. The GNP per capita income has increased from US \$469 in 1990 to US \$2,368 in 2010.

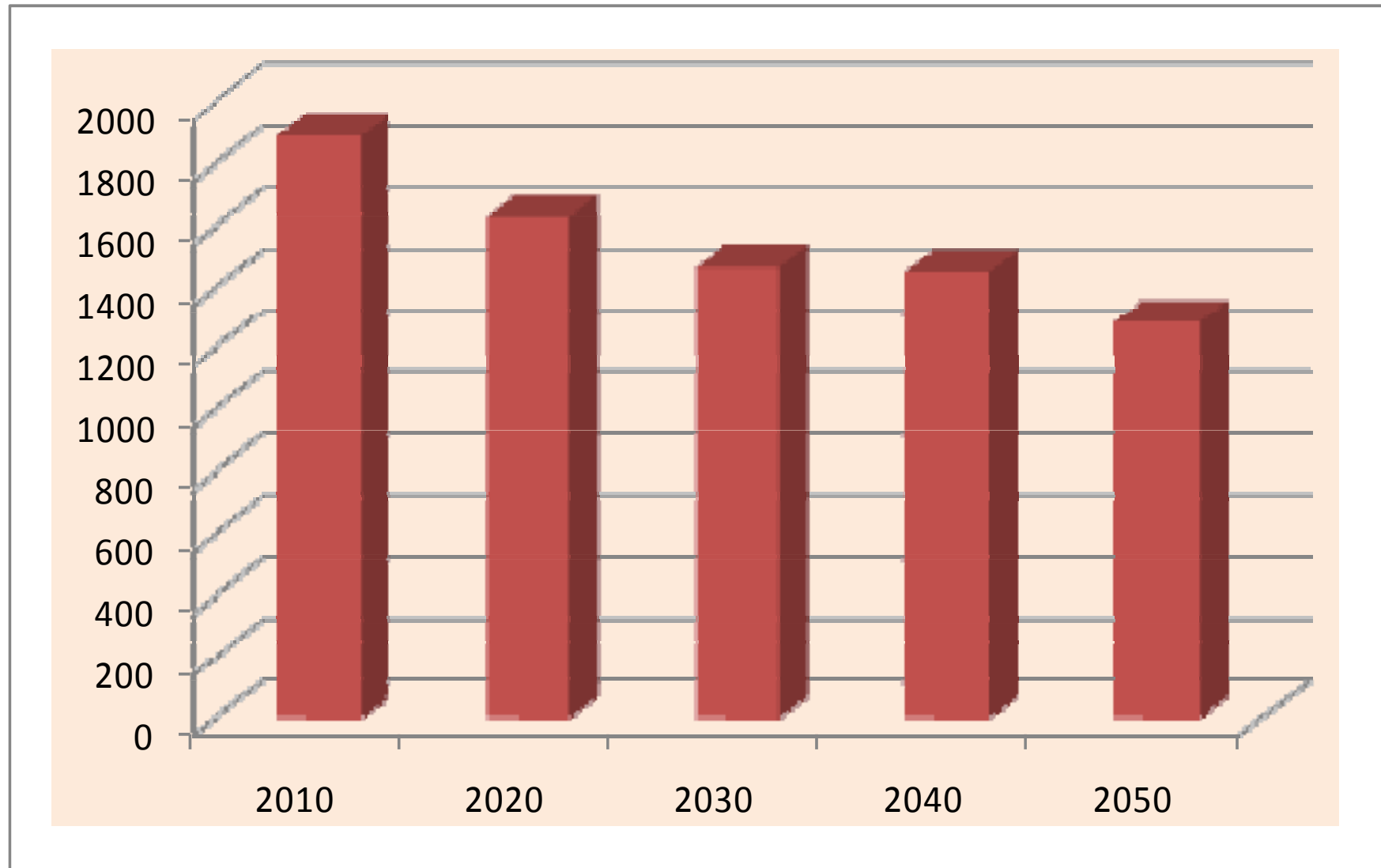
# Population Pyramid 2000



## Opportunities Afforded by the Demographic Transition

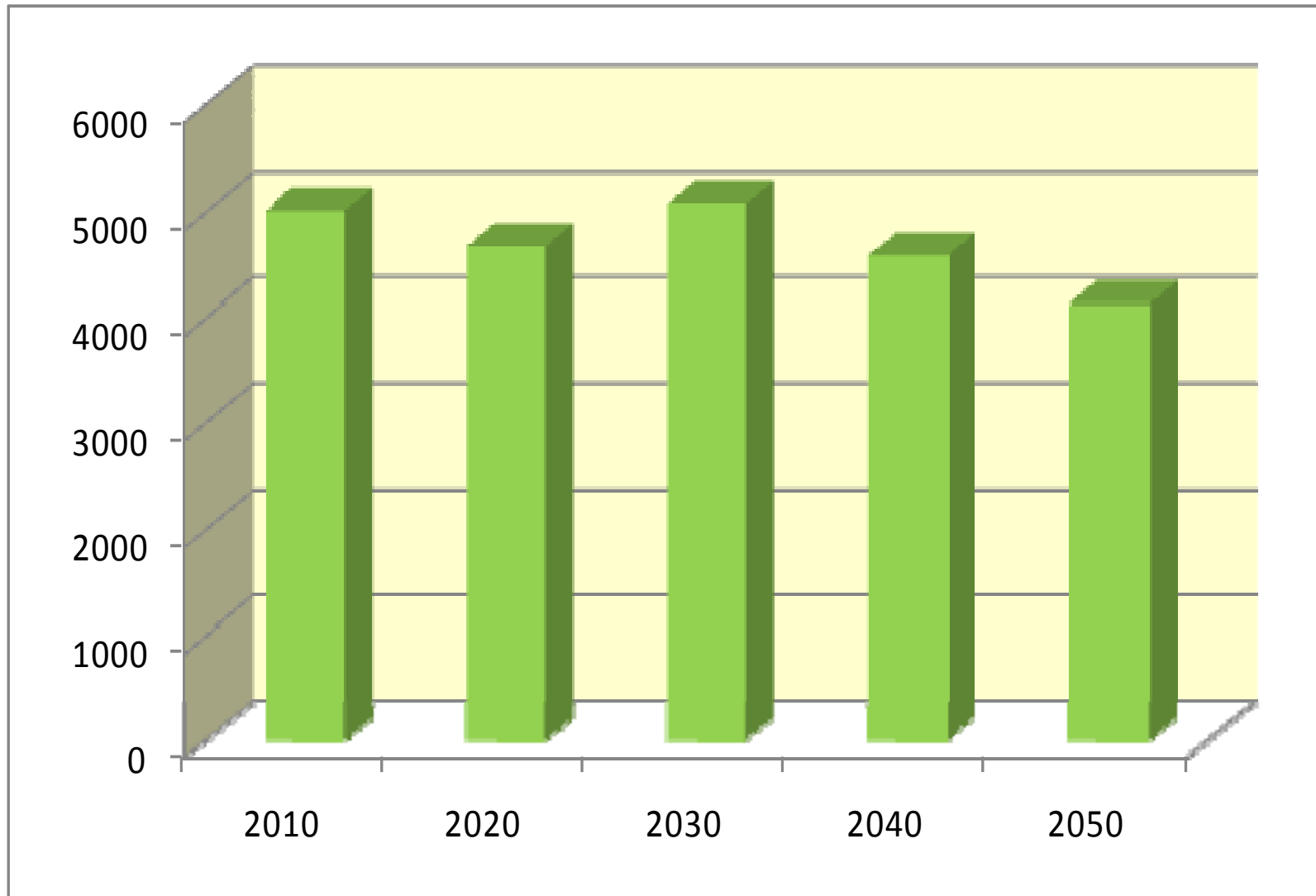
- The proportionate share and the absolute number of children aged 0-4 would decline in the future. It would place less pressure on primary health care services which would enable the improvement of quality of these services.
- With population growth rates declining further, it would facilitate the growth of the economy and per capita incomes.

# Population Aged 0-4 Years



- Another window of opportunity is the 'youth bulge' of 5 million in 2010. Which is one fifth of the total population.
- This 'demographic bonus' needs to be wisely utilized for economic development with further investments in human capital.
- Improvements in the productivity of labour and capital would further accelerate economic growth.

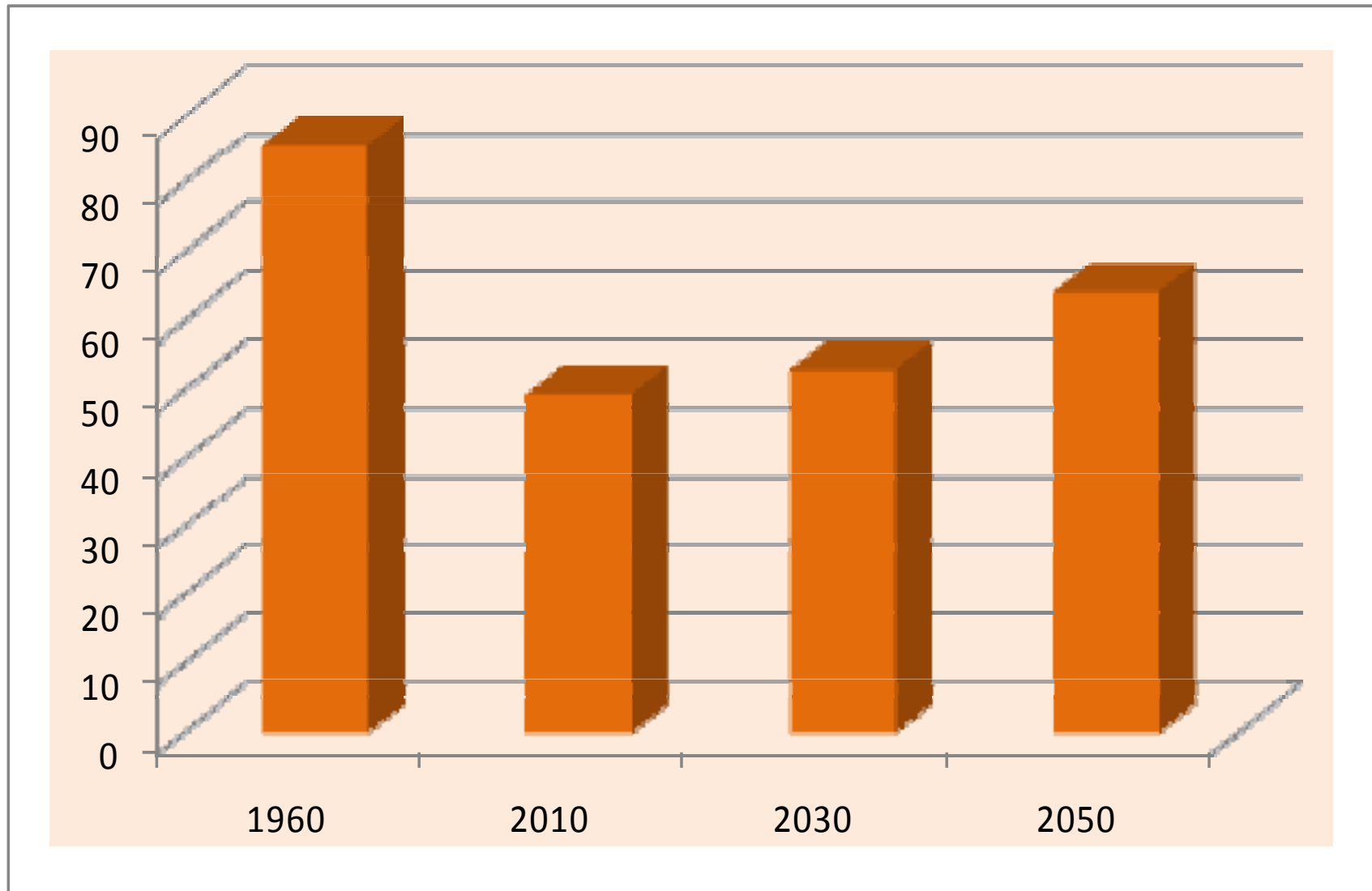
# Population of Young Persons (15-29 years)



- This 'demographic dividend' is not automatic and will be realized only if appropriate policies are in place. If not the demographic bonus will be wasted.
- Economically advanced countries in the region such as Japan and South Korea have already reaped the benefits of this dividend by building appropriate human capital in young people.
- In Japan the 'demographic window' opened in 1955 and closed in 1985. In Sri Lanka, it opened in 2005 and would close in 2030.

- The current age structure in Sri Lanka is neither very broad at the base nor wide at the apex and therefore, is ideally suited for rapid economic expansion.
- The dependency ratio is currently at its lowest point, it would however increase gradually in the future and at a faster pace beyond the year 2030 due to population ageing.
- Thus there is a lead time of about two decades to put in place the appropriate policies.

# Dependency Ratios, 1960-2050

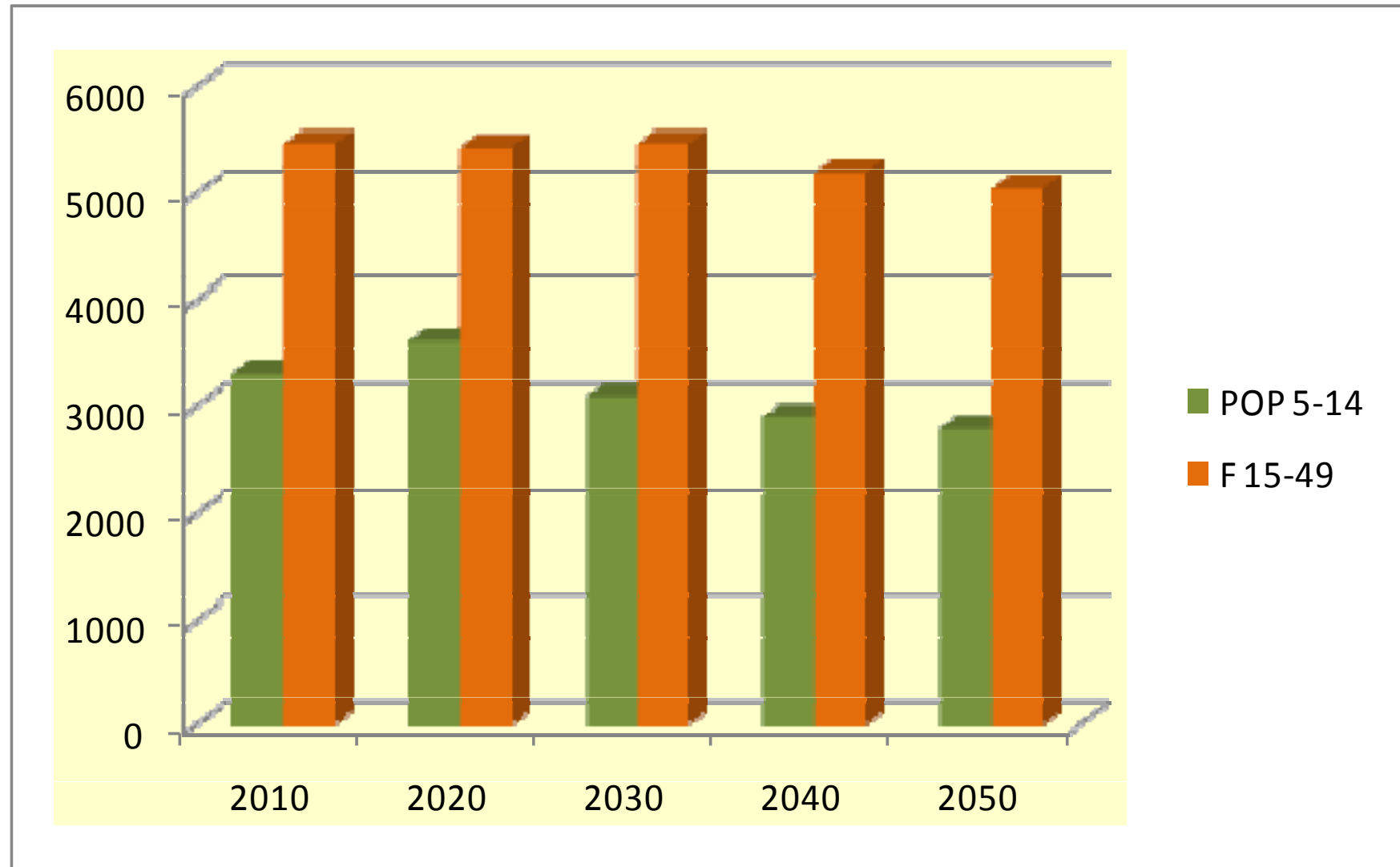


## Future Challenges

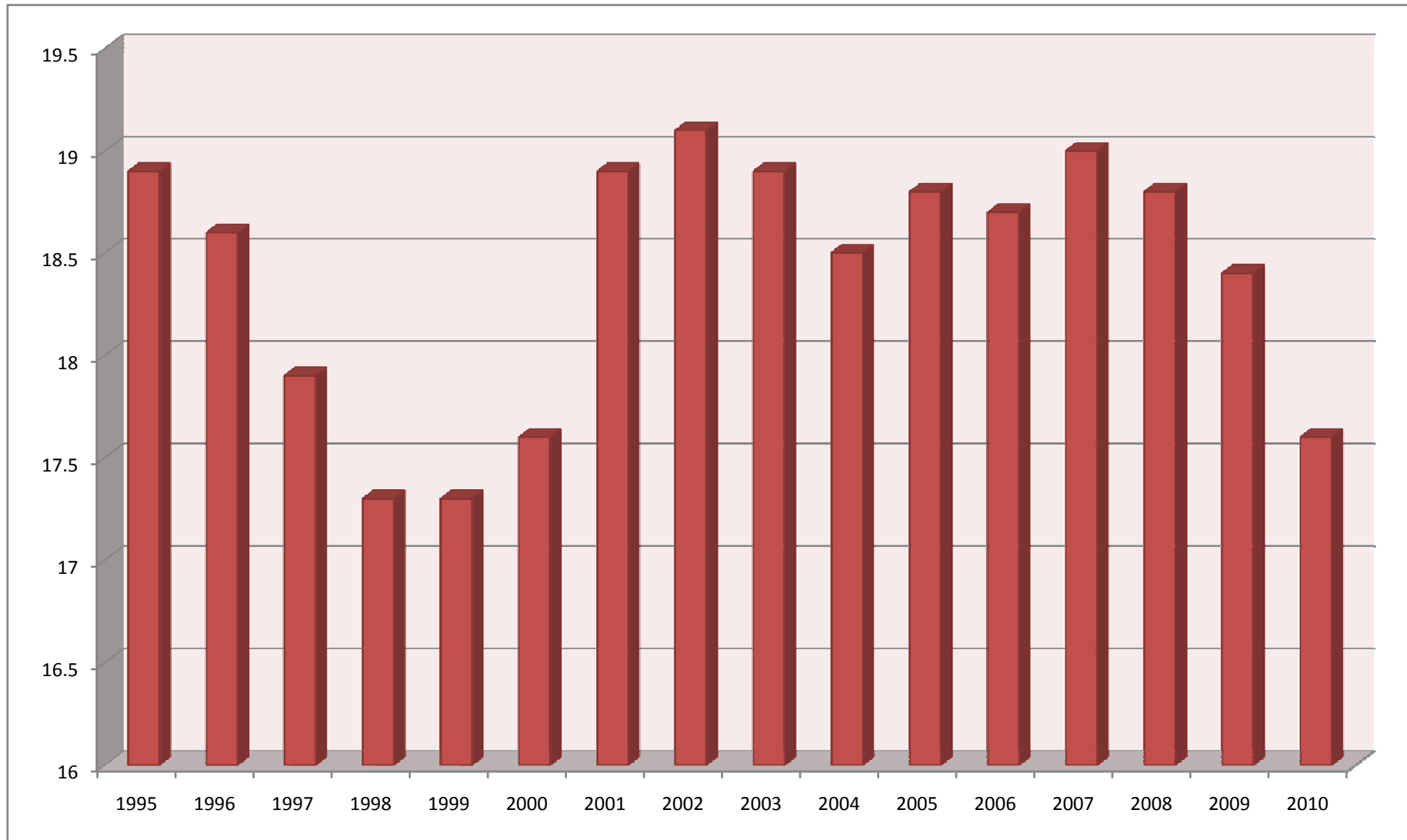
- The numbers in the age group 5-14 years would increase during 2010 to 2020. This would require additional resources to maintain educational services during this decade.
- This increase in the younger age groups is due to the slight rise in fertility during 1998 to 2007.
- The female population in the reproductive ages will increase during 2020 to 2030 and thereafter decline. The demand for reproductive health services would continue to increase.

- The current bulge in the young ages poses a challenge to health educators to provide the necessary information and education on good health practices particularly with regard to reproductive health.
- If not, the disease burden is likely to increase by 2030 when the young of today enter the middle ages.

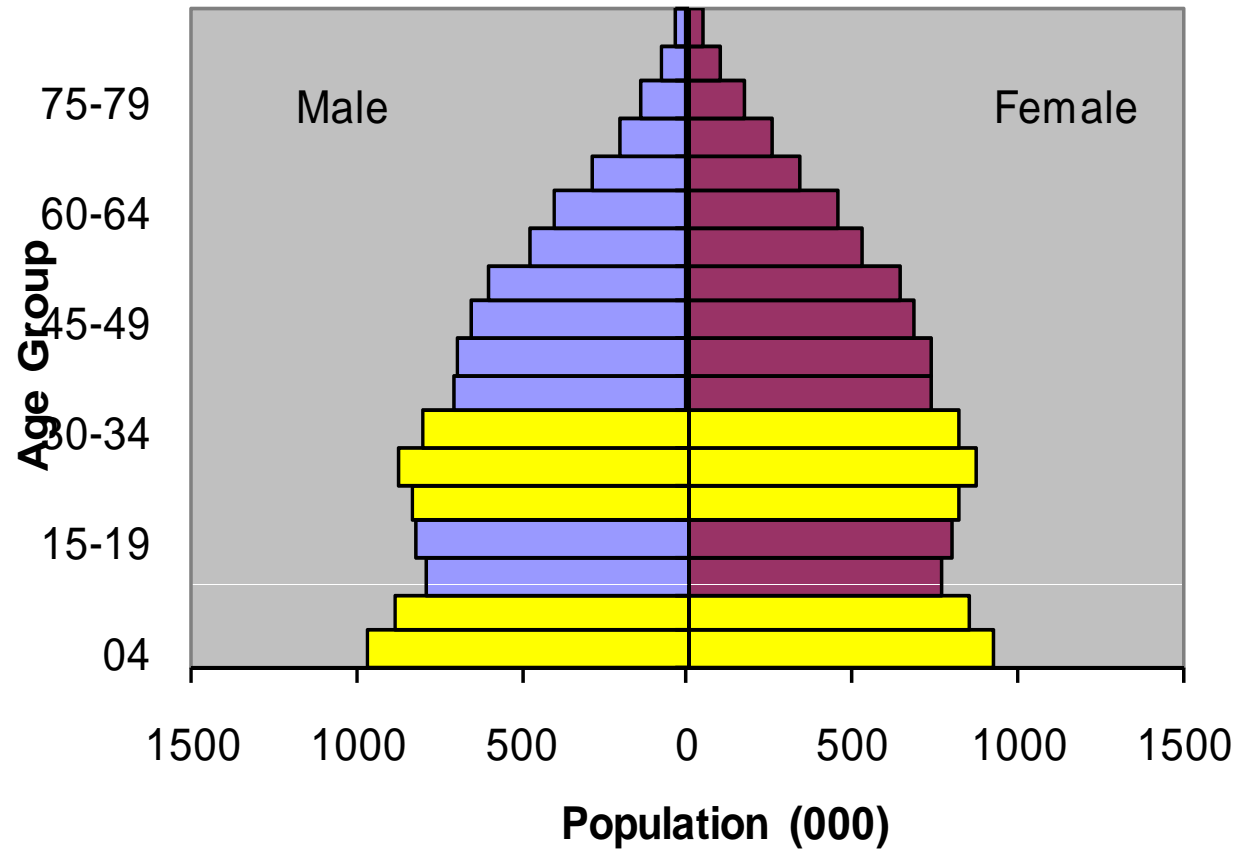
# Population 5-14 and Females 15-49



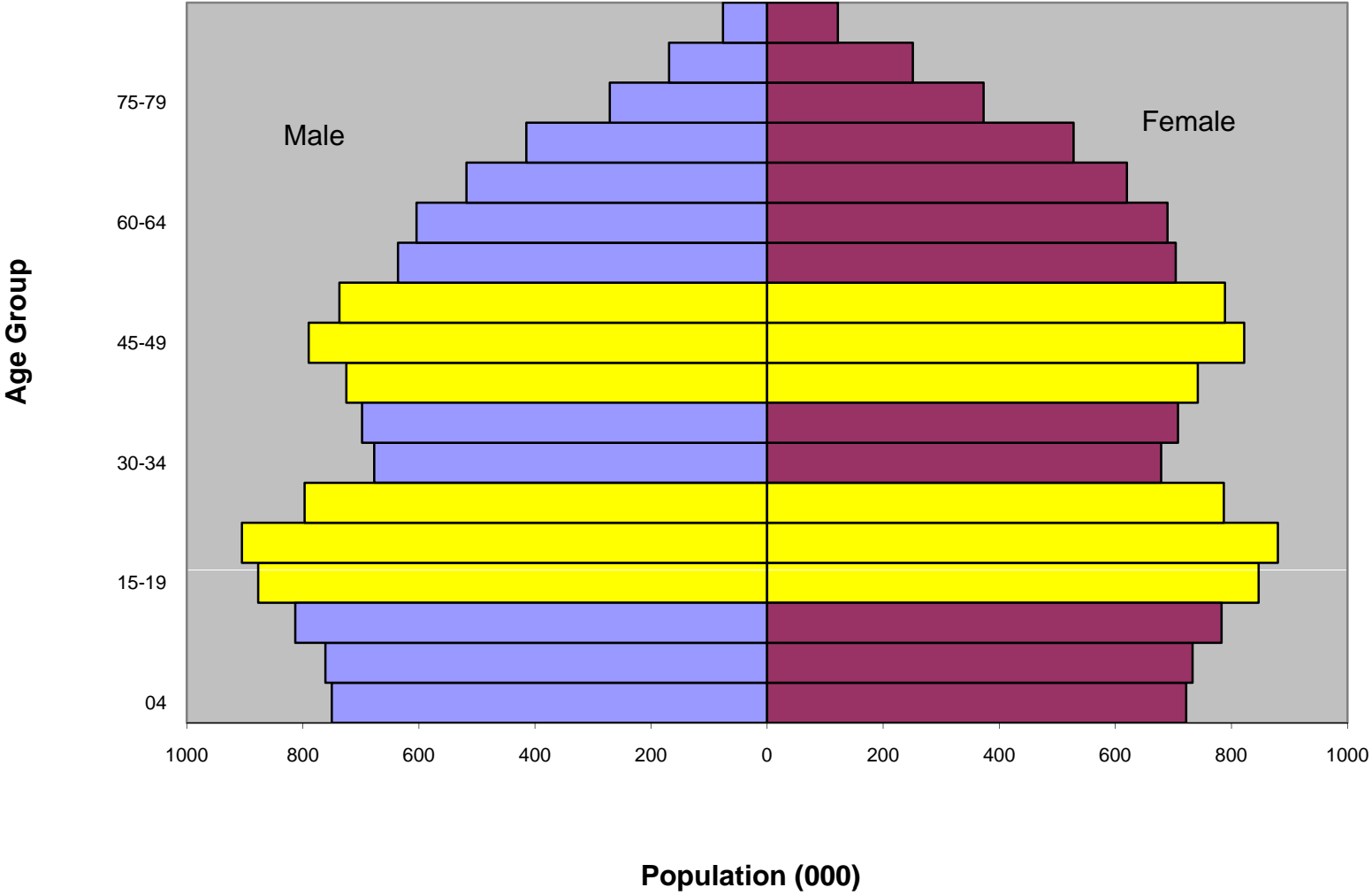
# Crude Birth Rate, 1995-2010



# Population Pyramid 2010

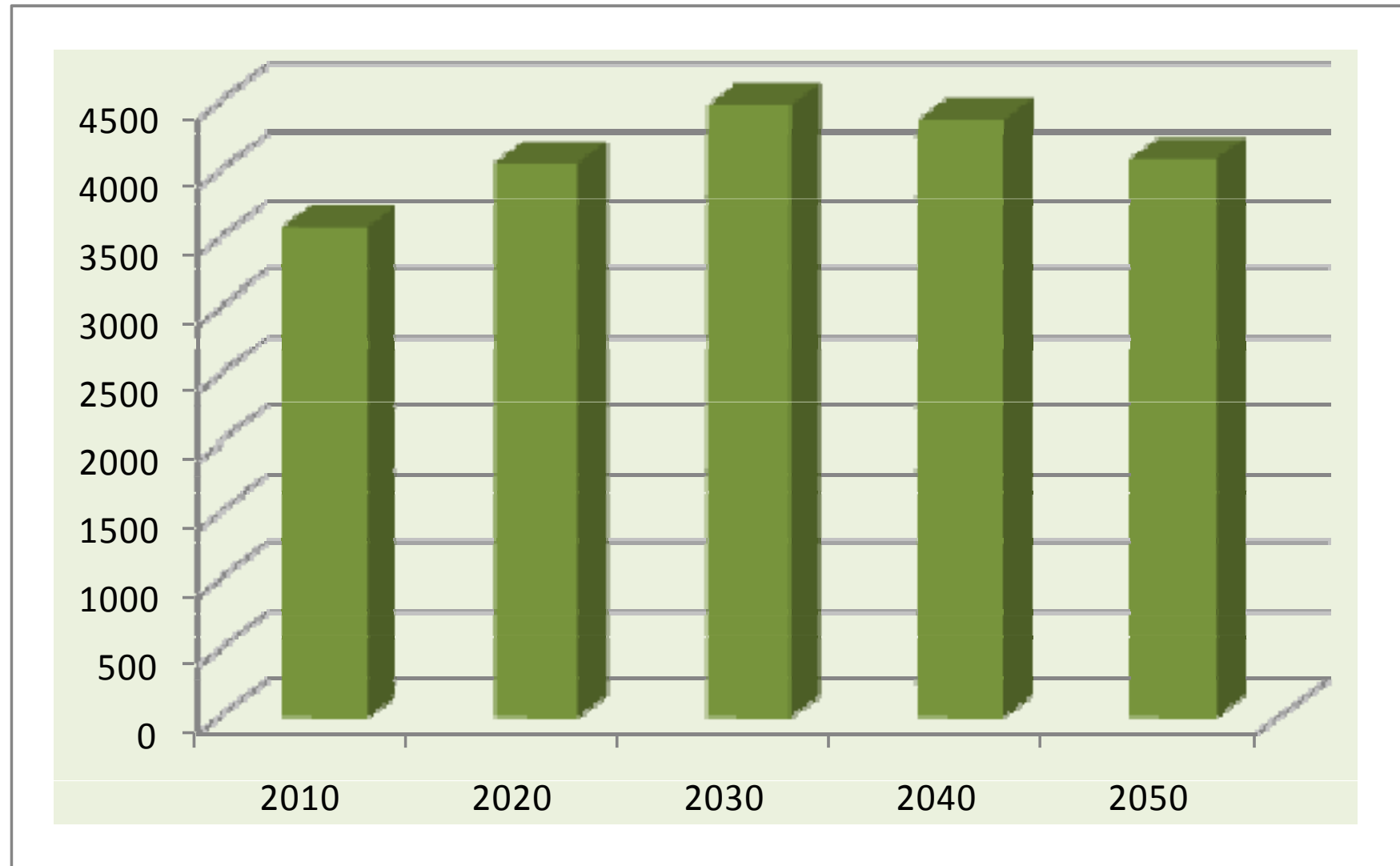


# Population Pyramid 2030

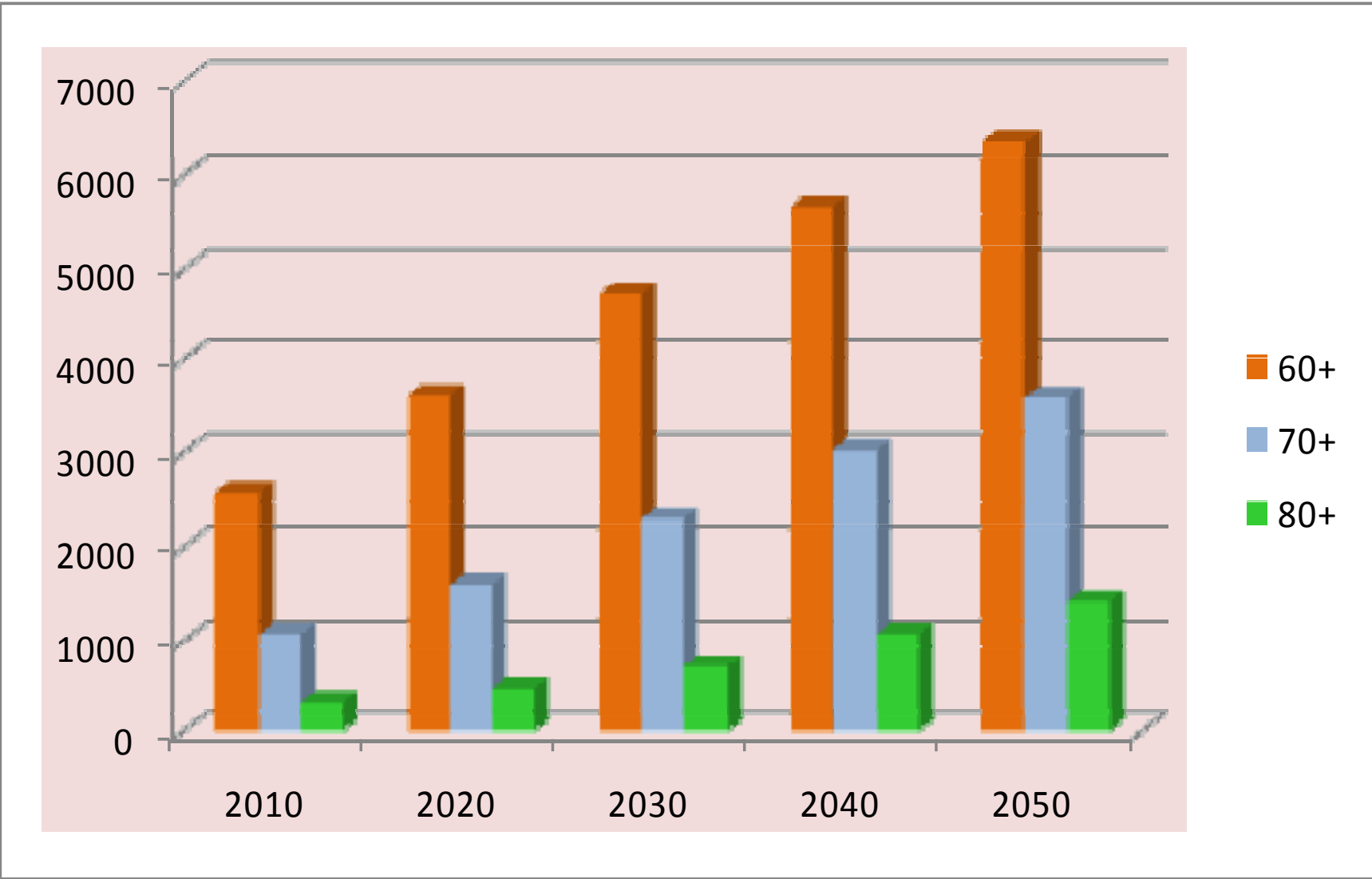


- The age group 45-59 years will also increase in the future. This would impose greater pressure on health care services as the degenerative process of the human metabolism begins at these ages.
- The older age groups 60 years and over will increase in absolute and relative terms and would result in important implications for health and welfare services.
- With six decades of free education and health care for the entire population, Sri Lankans reaching age 60 today are much healthier and are more educated. Thus greater attention should be on the much older segments of the population.

# Population Aged 45 to 59 years

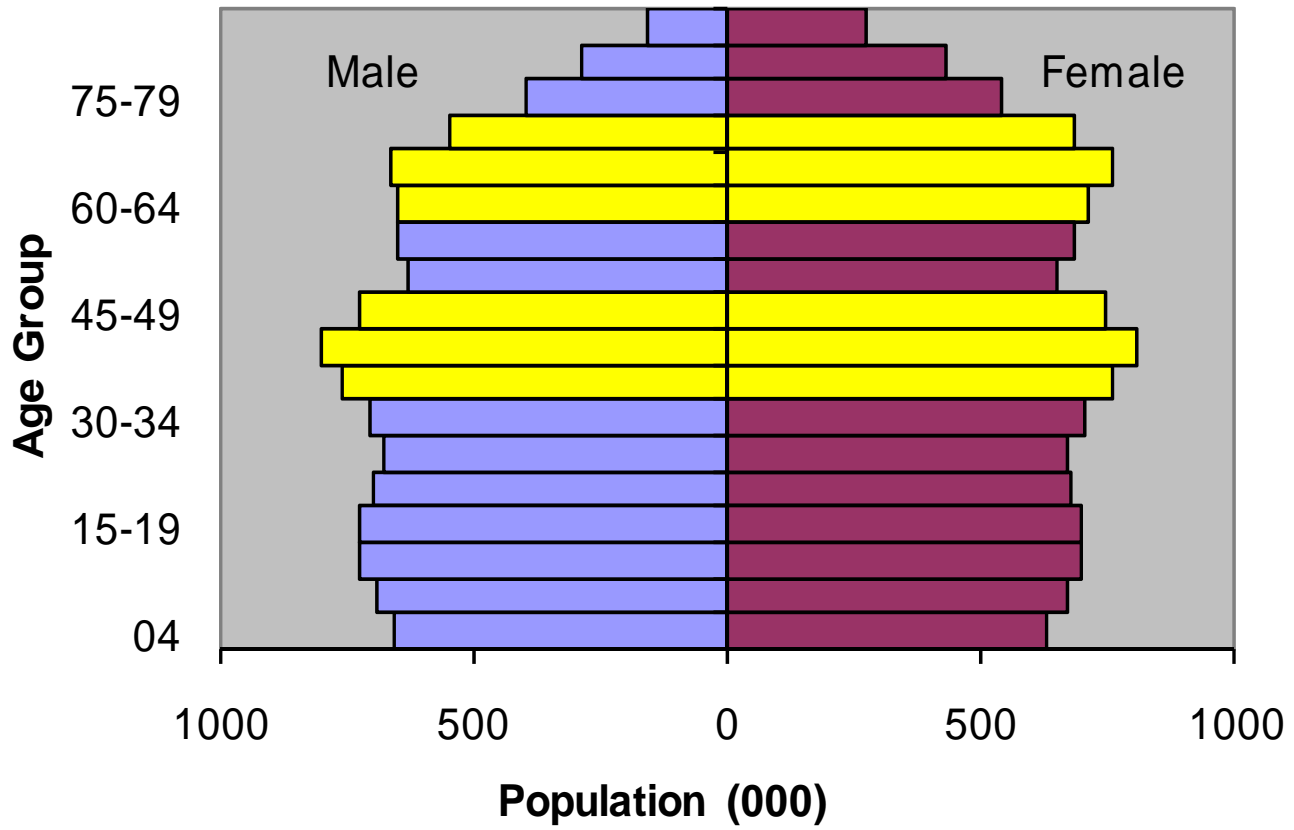


# Growth of the Elderly Population

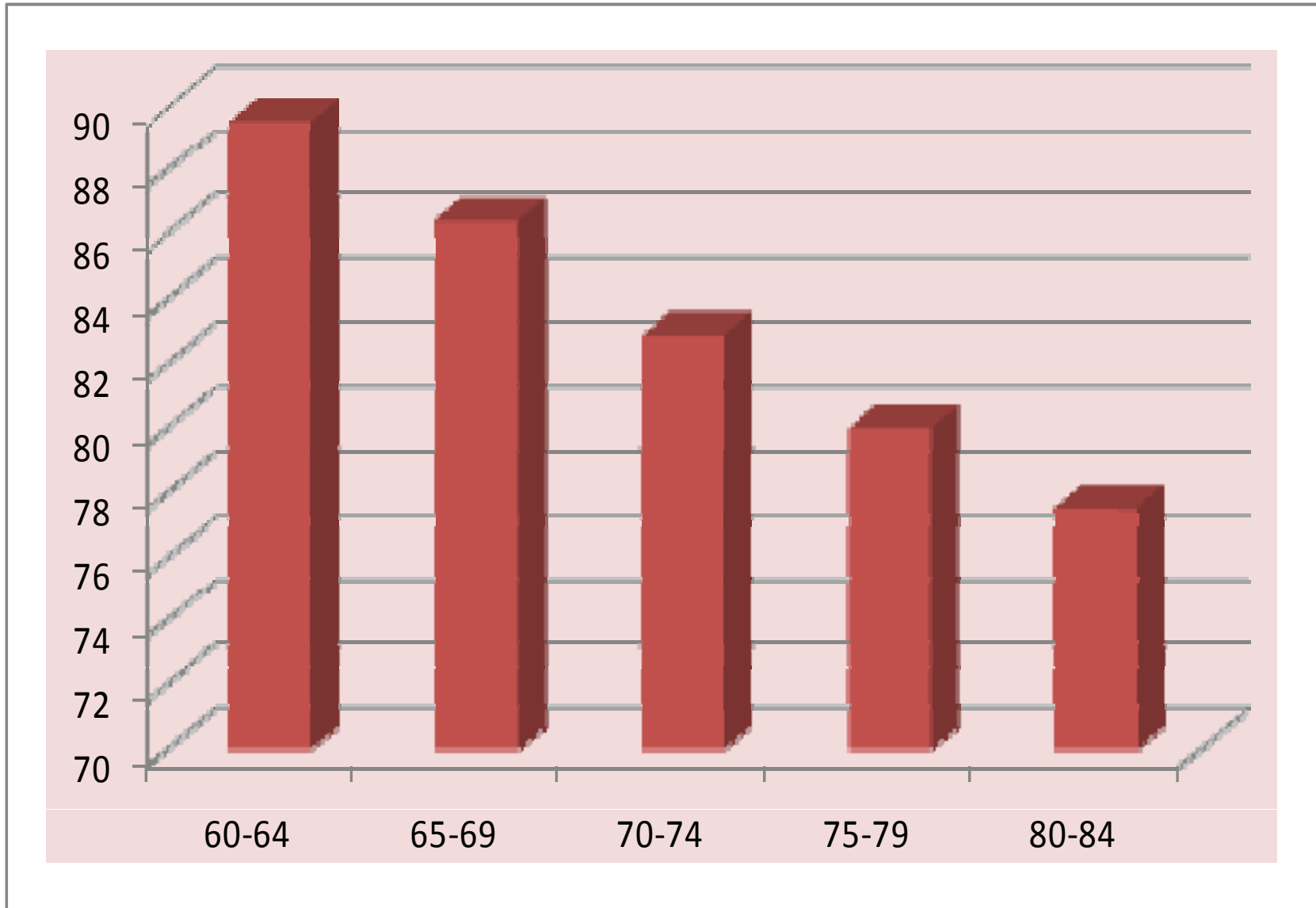


- Due to the recent increase in fertility, by 2050 Sri Lanka would have larger middle age and old age population which would put greater pressure on the health care system.
- Given their higher life expectancy, females will live longer than males to advanced ages. This is clearly evident when one looks at the sex ratios at advanced ages. It suggests that there will be more widowed women in the older ages.
- The State will have to play an important role in providing health and welfare services to elderly women, particularly those in low income households.

# Population Pyramid 2050



# Number of Males per 100 Females, 2010



In summary, Sri Lanka's demographic transition in the South Asian context is unique and has been brought about by a host of institutional, programme and socio-economic factors. With the resulting changes in the age sex compositions of the population, it offers many opportunities with a lead time of about two decades to put in place appropriate policies to maximize its benefits. As we move into the future, proportionately there will be less younger people and more elderly population for whom appropriate economic and social welfare policies have to be formulated well in advance.

***Thank you for your attention***