CHAPTER 3

3.   DEMOGRAPHIC TRANSITION IN CENTRAL ASIA

3.1   INTRODUCTION

A discussion of the demographic characteristics of the peoples of the CARs is essential in a study of this nature. Demographic trends and characteristics represent important elements of the setting in which societal changes take place. While the populations of the CARs are, in respect of several indicators, heterogeneous, the population trends of the republics will be discussed as an entity. The proximity of the CARs and their rich and intertwined political history warrant an inclusive approach to the discussion on population trends.

Prior to dissolution, the USSR had one of the fastest growing populations of any developed country. The former Soviet Republics in Europe had completed their demographic transition long before the breakup of the USSR. Central Asia, however, still retains many of the demographic characteristics of a developing country. The high fertility and young age structure of the population of Central Asia present a significant long-term potential for population growth (Haub, 1994:6; UNECE, 2005:17).

The CARs emerged from the Second World War with an estimated population of 17.2 million in 1950 and an annual growth rate of 3.2 percent. During the next twenty years (1950-1970) the population almost doubled to 32.8 million while the annual growth rate declined to 2.1 percent. The expansion of the population continued unabated, reaching 53.7 million in 1994, although a further decline in the annual growth rate was noted (1.2%). In 2005 the region had a total population of approximately 60 million inhabitants Chapter 2, p14). This increase attributable to in-migration from the other republics and high fertility rates in some of the republics. In 1994, Kyrgyzstan and Kazakhstan had negative annual population growth rates of –0.9 and –0.3 percent respectively, while Uzbekistan, Turkmenistan and Tajikistan had annual growth rates of 2.2, 2.5 and 2.3 percent respectively. The growth rates have

been declining annually since 1950 (Haub, 1994:7; United Nations, 2005b:514-515).

3.2   POPULATION GROWTH

There have been profound demographic responses to the collapse of the communist regimes at the beginning of the 1990s. In addition, the social and economic disruption caused by the breakup of the USSR appears to have accelerated the pace of in- and out-migration, and high mortality, and therefore the course of demographic transition in these countries. The large-scale emigration, especially of Russians, Ukrainians and Germans, from the CARs and the return of indigenous inhabitants led to increases in the population, but also led to fears of a brain drain as the population groups leaving the countries had been the intelligentsia in the region throughout Soviet rule (Kort, 2004:154).

Labour in-migration, mainly Russian, and high fertility among the Kazakh population in the 1950s led to increases in the population in this republic. Dwindling labour migration in the 1970s and low fertility among the Russians slowed growth. In spite of the decline in fertility in the early 1990s the region has retained a high population growth rate. By January 2005 the United Nations estimated 1.22 percent and –0.30 percent annual population growth rates for Kyrgyzstan and Kazakhstan respectively. The population growth rate for Kyrgyzstan is indicative of a less developed country status. Less developed countries have an intermediate position with a growth rate of 1.27 percent, whilst the growth rate of the more developed countries stands at 0.30 percent per annum, and that of the least developed at 2.40 percent per annum. A noticeable decline has been observed in the annual growth rates of Uzbekistan (1.46%), Turkmenistan (1.42%) and Tajikistan (1.10%). This could be indicative of the influence of declining fertility rates and low out-migration (Haub, 1994; 37; United Nations, 2005b:514-515).

The population density in Kyrgyzstan, Uzbekistan and Tajikistan is 26, 59 and 45 inhabitants per square kilometre respectively, compared with a ratio of 14 and 5 inhabitants per square kilometre in neighbouring Turkmenistan and

Kazakhstan respectively. The majority of the population (67%) of Kazakhstan lives in urban areas, while the populations of the other countries live mainly in rural areas. The CARs are the most rural of the FSU. The high proportion of the population residing in rural areas in Central Asia reflects the regional investment policies of the FSU. Strong extended kinship network preferences and low incentives for urban in-migration reinforced these preferences, thus generating the lowest rural out-migration rates in Central Asia. Over the past few years this has begun to change. The economic crisis has brought unemployment and poverty to rural areas, and forced members of the younger generation to move to the cities in search of work (Ferdinand, 1994:28; Buckley, 1998; United Nations, 2006a:266-455).

Population trends seem to have stabilised slightly after the rapid population changes (intensive migration, a fall in the birth rate and an increase in mortality) that took place between 1991 and 1994 following the collapse of the Soviet Union. Despite the recent decline, the birth rate remains high in some republics compared to that of other countries in the European former republics. In many of these countries (European former republics) life expectancies have fallen, especially amongst males. However, high adult mortality is not expected to contribute to long-term population decline, given the above-noted replacement fertility levels still being experienced in some of these countries (Haub, 1994:37-44; United Nations, 2005b:586-587).

3.3   POPULATION STRUCTURE

Historically these countries have experienced higher fertility rates and this has contributed to the younger age structures of the past and the present. The young age structures virtually ensure population growth for the foreseeable future. Population pyramids (age and gender structure) of the former Soviet Republics until the early 1990s suggest a disturbing demographic past (see Figures 3.1-3.5). Population pyramids, the key to the life of a social group, are used to assess past history and also provide an indication of future trends. The gender and age composition of the pyramids indicates the effects of the low birth rates during the Second World War on the 45-49 age group. This

picture has not changed much, except for an upward shift in the age group intervals.
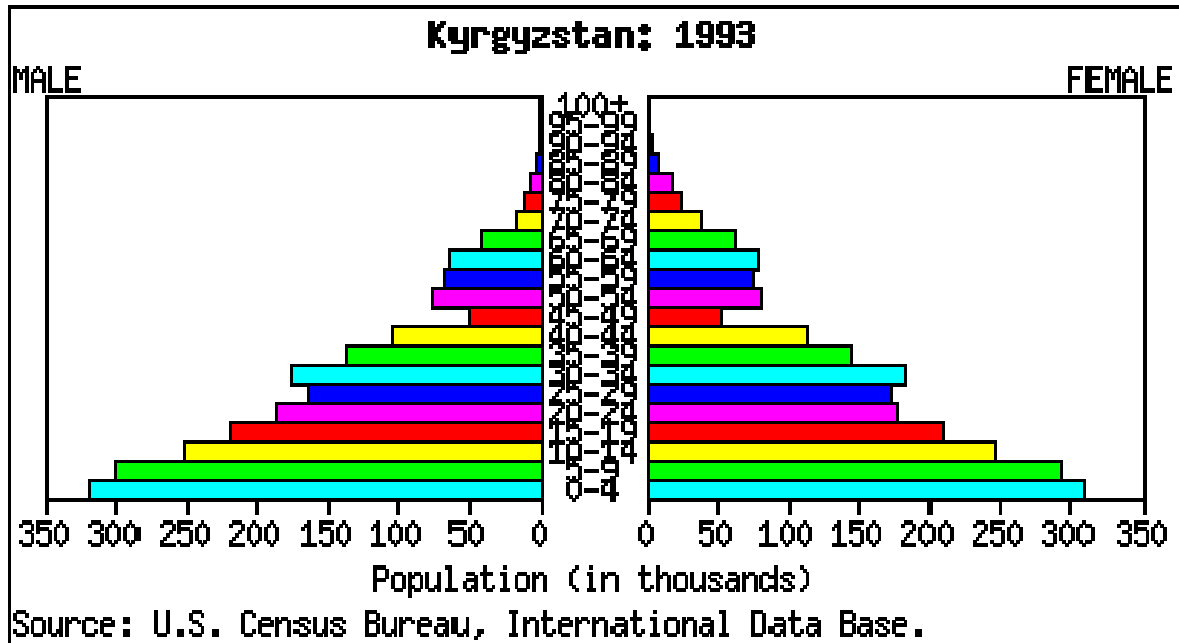
Figure 3.1: Age and gender structure of Kyrgyzstan 1993

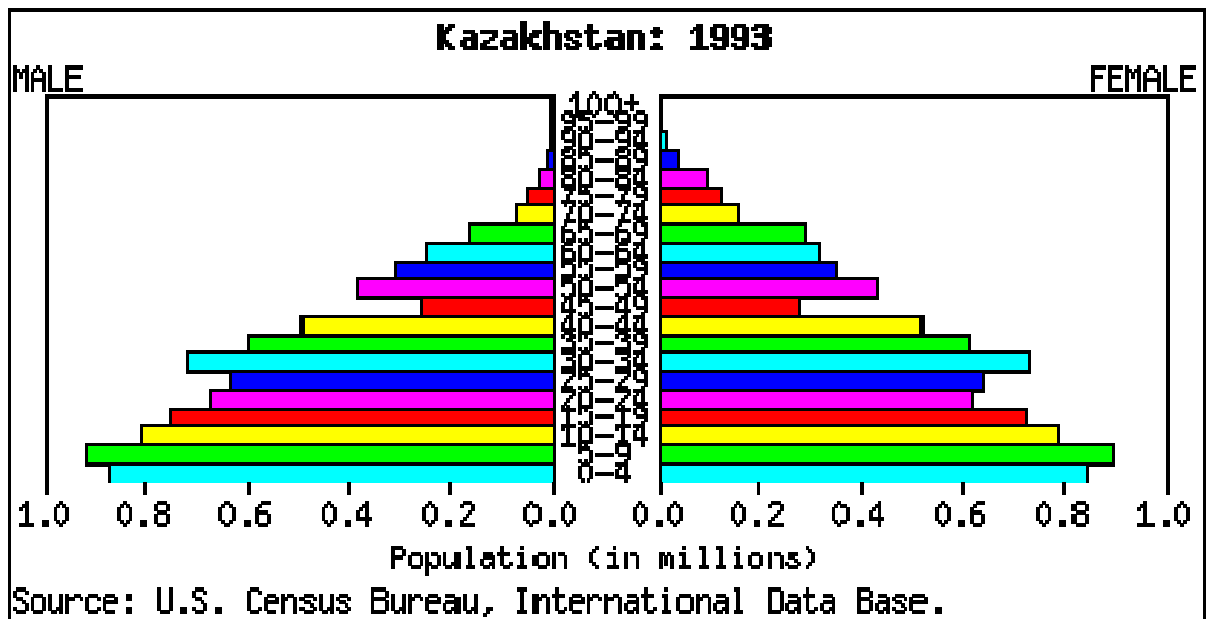**Figure 3.2: Age and gender structure of Kazakhstan 1993**

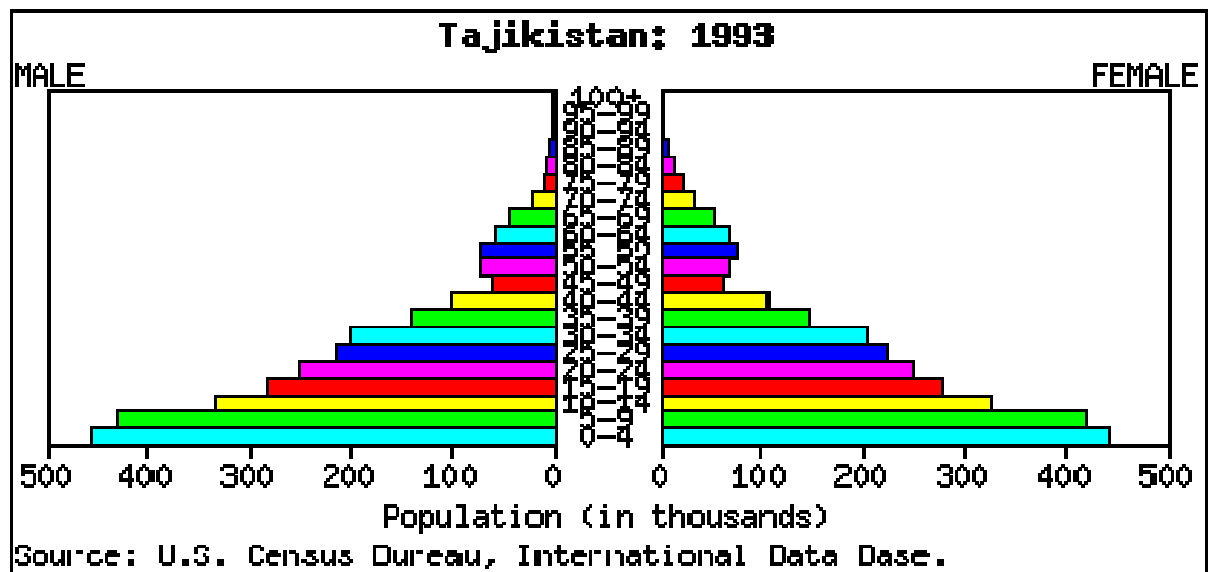**Figure 3.3: Age and gender structure of Tajikistan 1993**

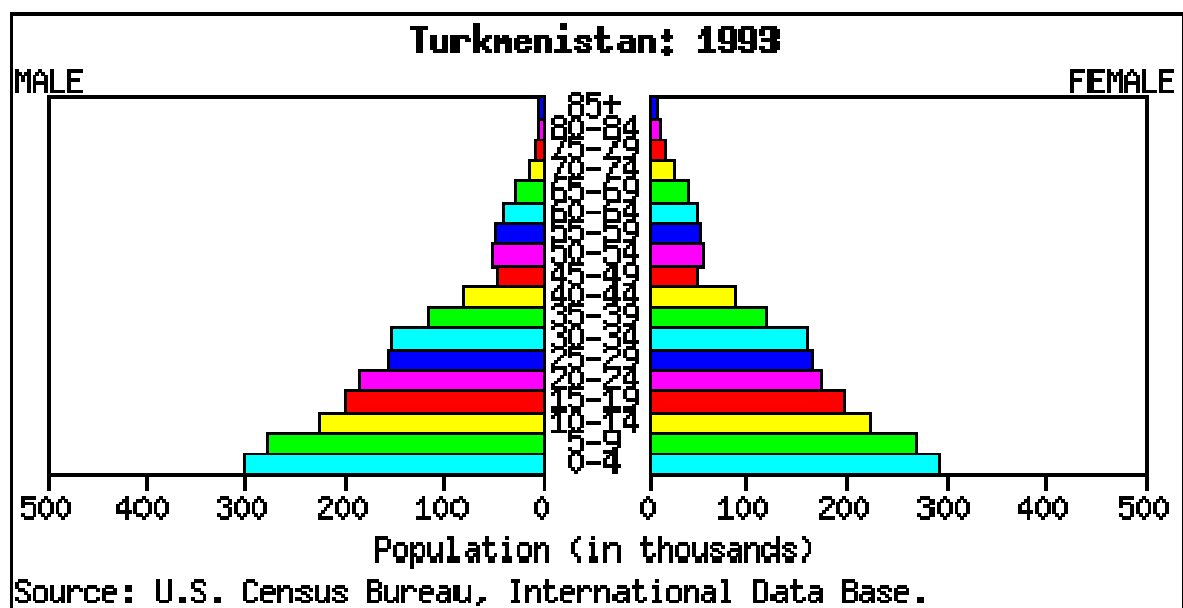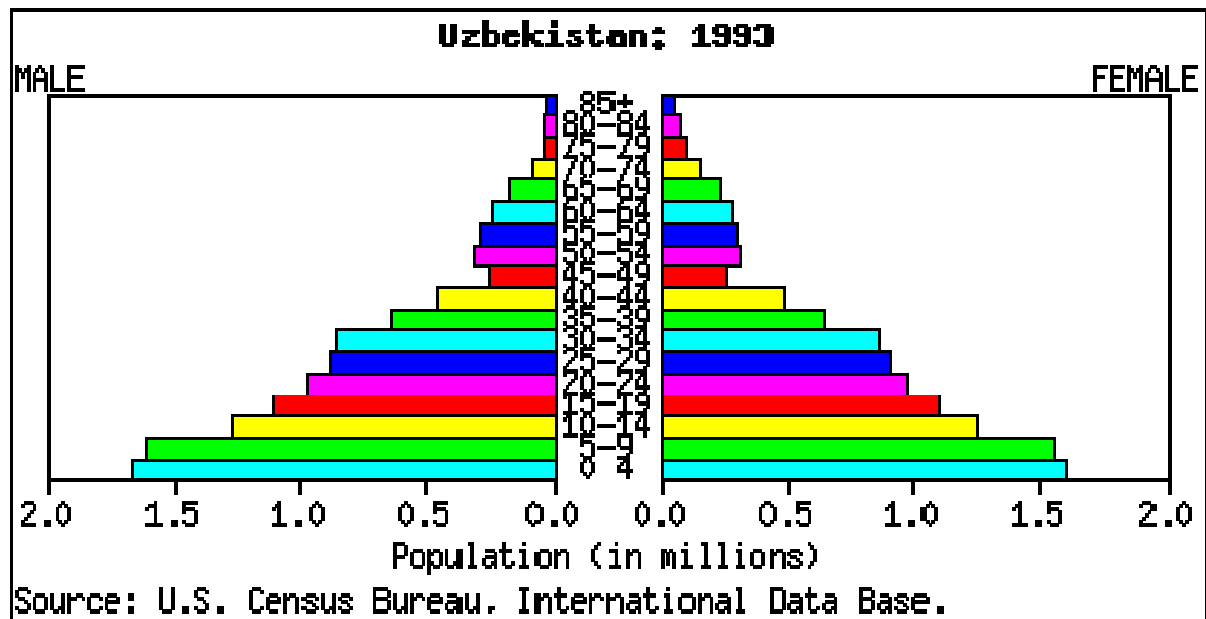**Figure 3.4: Age and gender structure of Turkmenistan 1993**

Figure 3.5: Age and gender structure of Uzbekistan 1993

The high mortality rates are particularly evident in the paucity of men above the age of sixty-five (see Figures 3.6-3.10). For instance, except for Kazakhstan, the population pyramids of the other four Central Asian Republics have a relatively smaller male and female population in the age interval 50-59, although these populations are definitely much larger than those in the 45-49 age group. There is also a paucity noted in the percentage of males in the 65+ years in the early 1990s in all five countries. However, an increase in the number of people in the 65+ age group has been noted in all CARs, especially in the female population (Haub, 1994:7-12, United Nations, 2005a:516-890).

Although there are clear commonalities in the population pyramids there are also distinct differences. The extremely broad-based pyramids of Central Asia are reminiscent of the historically high fertility rates experienced in this region. This high fertility rate produced a distinctive pattern in the age and gender structure of the early 1990s. Each age cohort was higher than the one above, except in the 45-49 age group. The impact of this pattern may be seen in the 2006 age and gender structures, as the number of childbearing women has increased, leading to an increase in the number of births each year.

Kazakhstan is the only country of the five CARs that presents a different pattern.

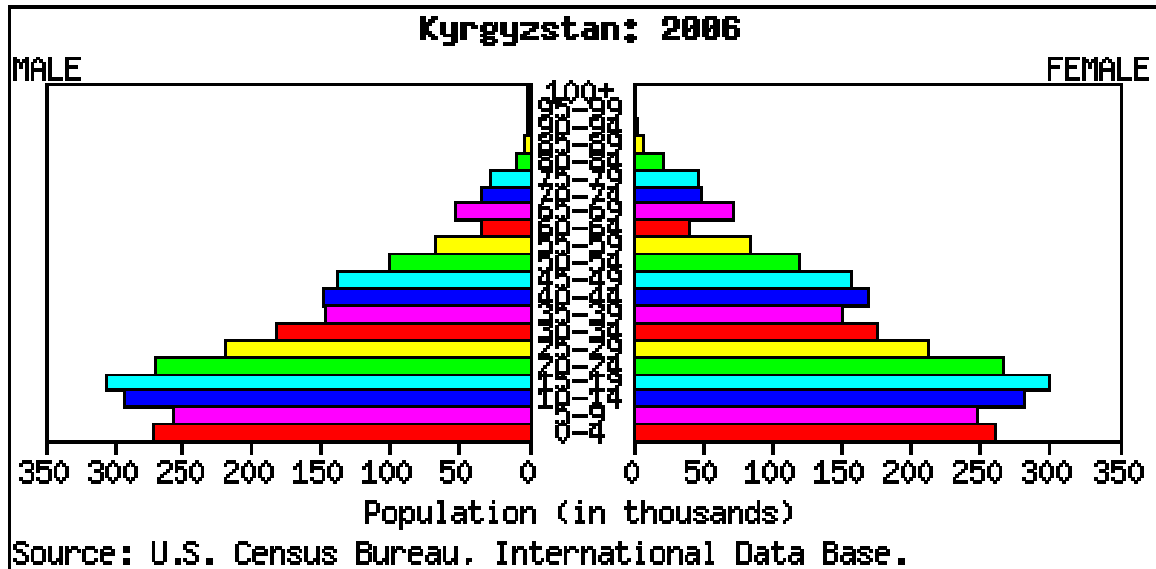**Figure 3.6: Age and gender structure of Kyrgyzstan 2006**

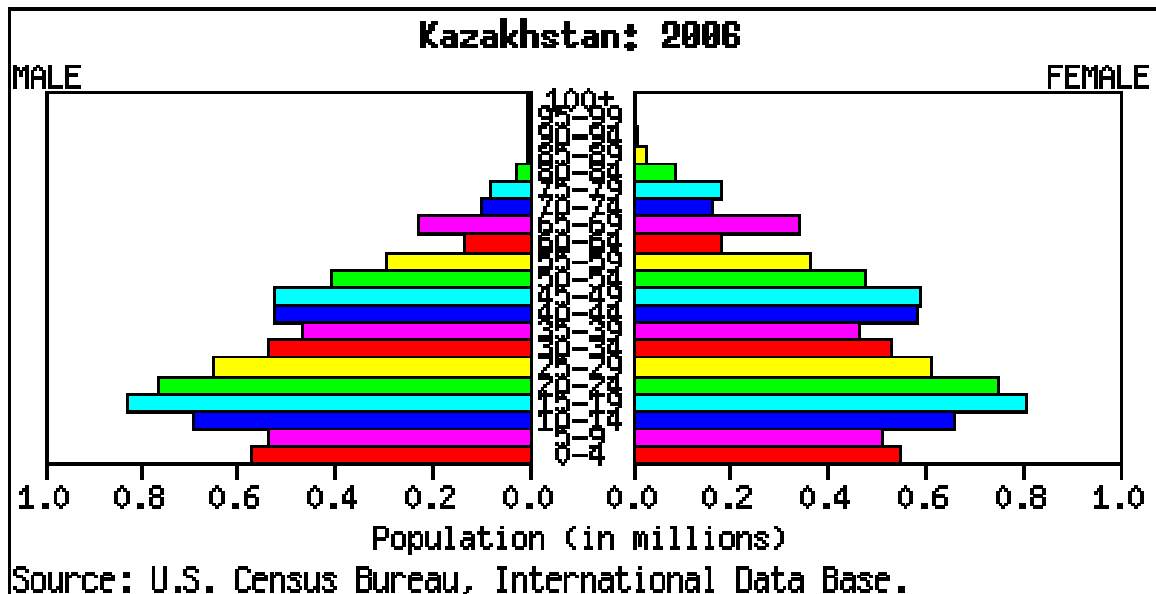**Figure 3.7: Age and gender structure of Kazakhstan 2006**

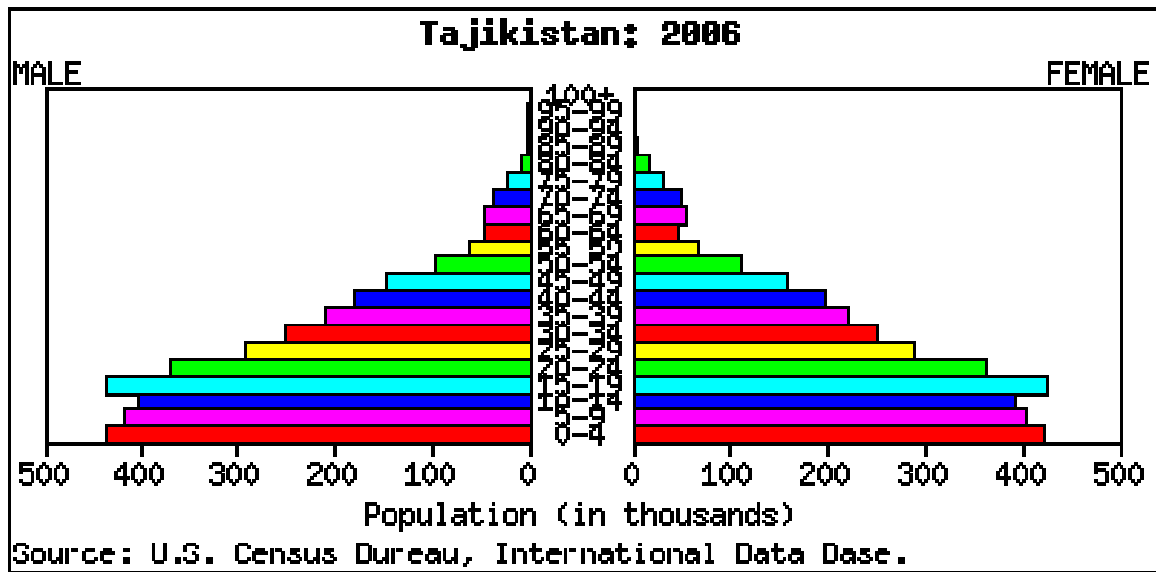**Figure 3.8: Age and gender structure of Tajikistan 2006**

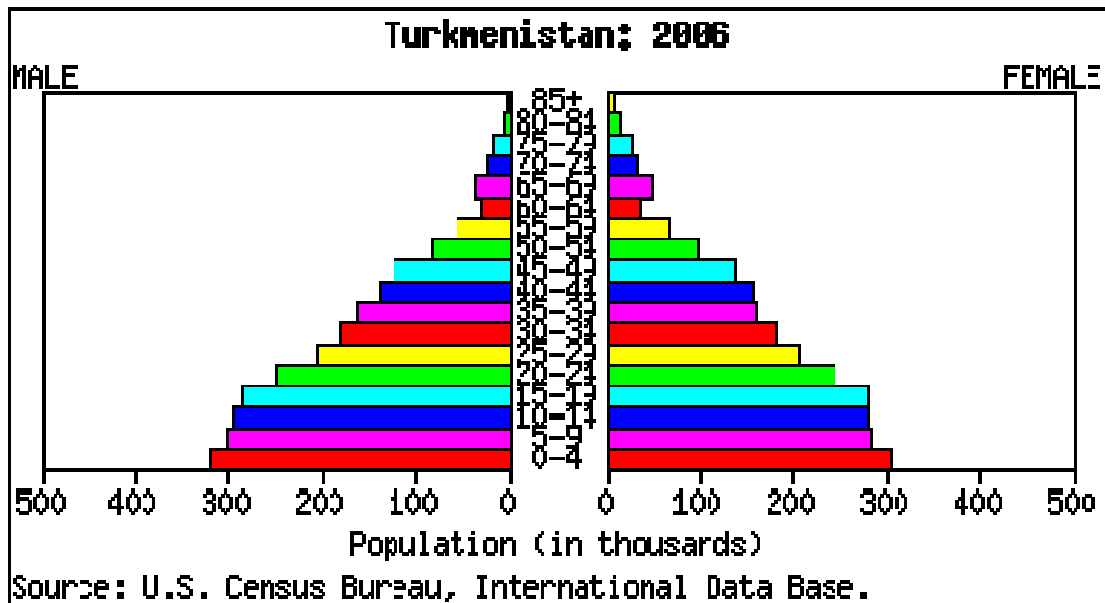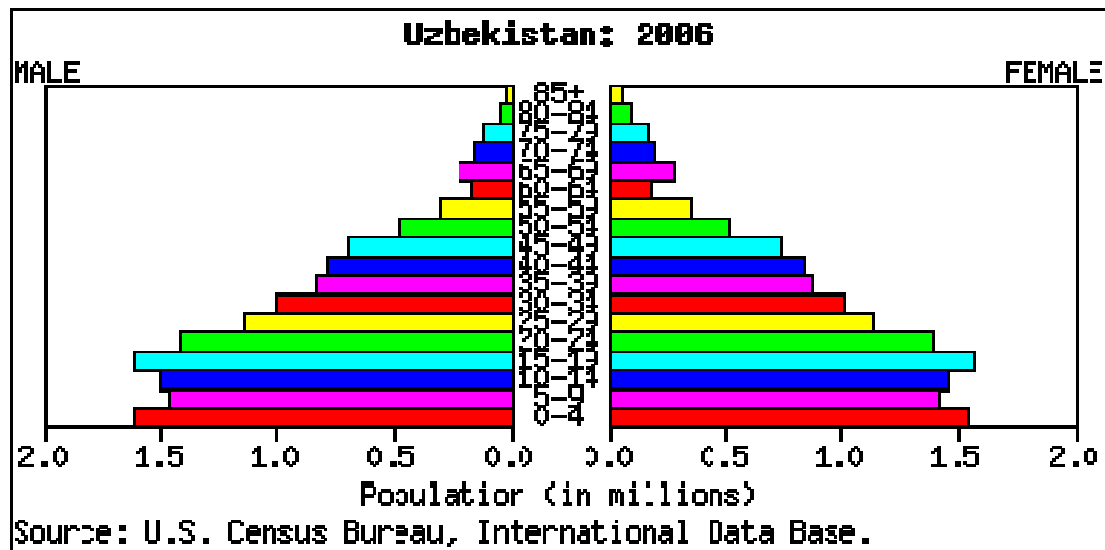**Figure 3.9: Age and gender structure of Turkmenistan 2006**

**Figure 3.10: Age and gender structure of Uzbekistan 2006**

This difference was clearly influenced by the lower birth rates experienced in this country over a longer period of time than in the other republics, possibly due to the influence of the lower birth rates of the Russian population (Haub, 1994:13-14; Uzbekistan Demographic and Health Survey (UDHS), 1996:14; Kyrgyzstan Demographic and Health Survey (KRDHS), 1997:12; Kazakhstan Demographic and Health Survey (KDHS), 1999:12; US Census Bureau, 2006).

3.4   FERTILITY

Throughout Soviet rule, especially during the 1960s, population was perceived as a resource. The country maintained a pro-natalist policy to support families with several children, thus encouraging high fertility. Families were rewarded for having large numbers of children and abortions were restricted. Social programmes guaranteed maternity leave, and provided small grants and state pensions for mothers. During this time all the countries in this region had total fertility rates (TFRs) above 3.0 although these were below average for all developing countries except China. Uzbekistan led with a TFR of 6.8, followed by Turkmenistan, Tajikistan, and Kyrgyzstan with 6.7, 6.3 and 5.4 respectively, and finally Kazakhstan with 4.4 (Haub, 1994:13; Buckley, 1998; United Nations, 2005b:586).

In the early 1990s the highest TFRs in the FSU were to be found in Central Asia, with the exception of Kazakhstan, which had a TFR of 2.3. According to the UNDP 2006 figures (see Figure 3.11) these countries, again with the exception of Kazakhstan (1.9), still have TFRs above 2.1, although a decline has been noted in the total fertility rates within these countries, Kyrgyzstan: 2.6; Tajikistan: 3.9; Turkmenistan: 2.9; and Uzbekistan: 2.7 (UNDP, 2006).

Figure 3.11: Total fertility rates (TFR) Central Asia 1980-2005
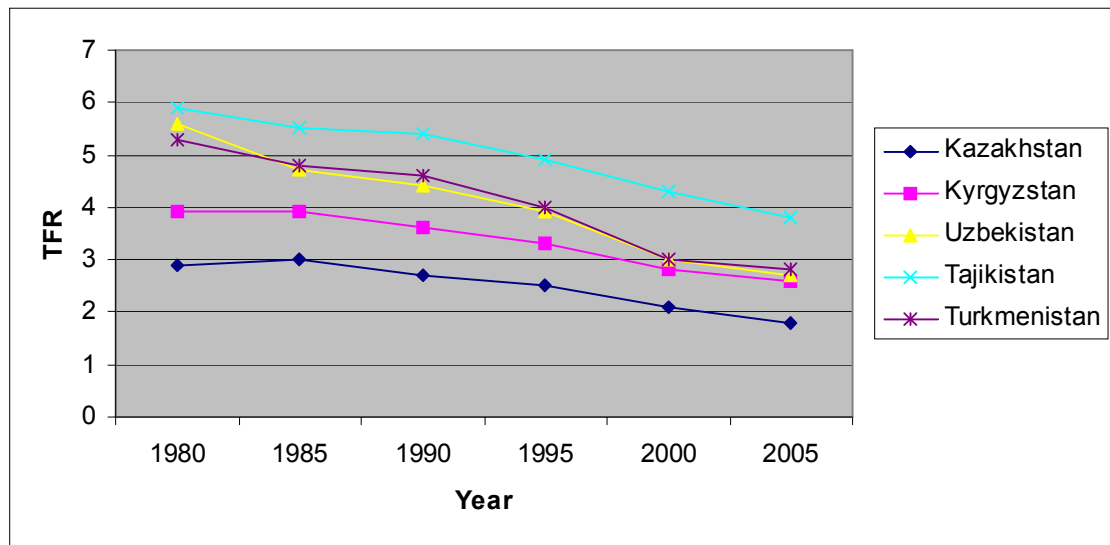
Source: UNDP 2006

After the dissolution of the FSU increased contraceptive usage gained governmental support in the republics. However it is not possible to attribute the recent reductions in fertility to increased contraceptive use only. Low fertility rates in poor or developing countries are often associated with poor nutrition due to maternal depletion or stretched inelastic resources. The collapse of the economy played the most significant role in fertility reductions, together with changes in marriage patterns, and a high dependence on abortion (although the abortion rates have fallen in recent times). Although the abortion law was liberalised in 1956 the abortion rates were, however, much lower in the heavily Muslim-oriented republics such as Tajikistan and Turkmenistan (Popov, 1993:281; Haub, 1994:13; UNICEF/WHO, 2002).

In the former Soviet Union marriage was universal, with a very small proportion of women (between 3 and 13 percent) remaining single. Since the

collapse of the FSU the percentage age of women in Central Asia in the 20-24 age interval, who are not married, has risen to 20 percent in Kyrgyzstan, 23 percent in Uzbekistan, 40 percent in Kazakhstan, and 53 percent in Turkmenistan (Haub, 1994:15; 1996:79; KRDHS, 1997:73; KDHS, 1999:88; UDHS).

While the number of women in the 20-24 year age interval who remain unmarried is increasing, the rise in the number of births outside marriage has also increased. This rise in nonmarital births may be attributed to the growing socioeconomic independence of women in the former Soviet Republics (Haub, 1994; 16).
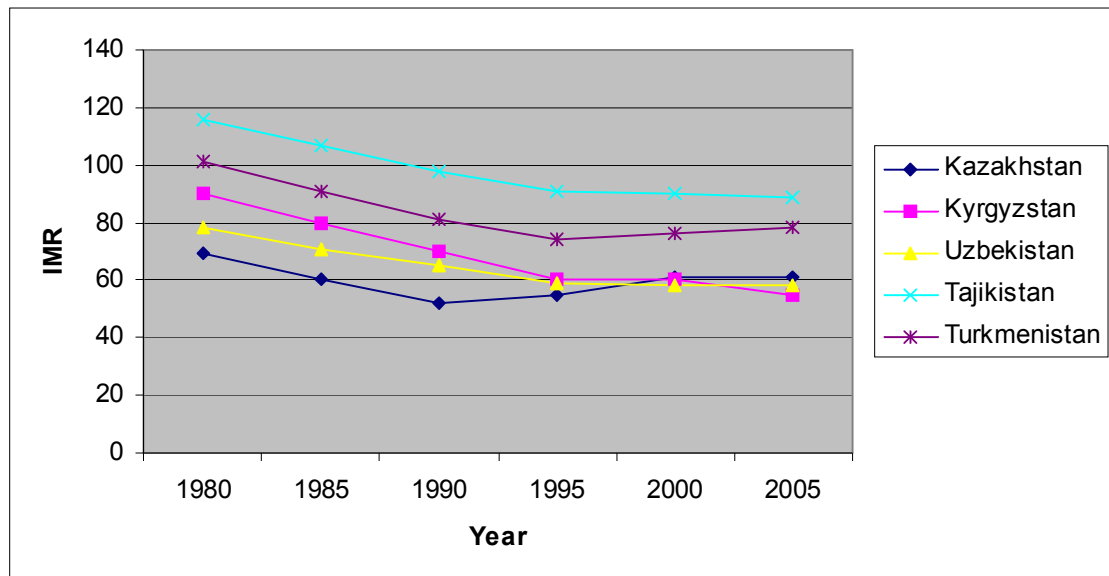
3.5   MORTALITY

The former Soviet Union, classified as an industrialised and developed country before its collapse, had higher mortality levels than other industrialised countries. Within this empire the CARs experienced the highest mortality rates. In the 1930s life expectancy at birth was less than fifty years. Recurring famines and the two world wars led to a continued decline in life expectancy. However, the introduction and availability of medical and public health technologies led to an improvement in living standards and therefore to better health. Life expectancy thus improved, yet it never stabilised due to inadequate health care systems, alcoholism, severe environmental pollution in certain regions, and suicide (Haub, 1994:17).

During the late 1980s further improvements in life expectancy and mortality were noted. However, gains made in the period immediately prior to the collapse of the FSU were lost when a sharp increase in mortality was noted in ten out of the fifteen republics, with the exception of the five CARs. Interestingly during the early 1990s the CARs enjoyed improvements in life expectancy, ranging from 59 to 69 years for males and 70 to 73 years for females (United Nations, 2006a:228-416). Although life expectancy has been gradually dropping in this region since 1993, it has seemingly begun to stabilise. According to the United Nations 2005 figures the overall life

expectancy for both males and females ranges between 63 and 68 years (United Nations, 2006a:228-416).

A well-documented sign of deteriorating health conditions in any country is the apparent rise in infant mortality. Infant mortality rates in the CARs have increased drastically from the 1960 figures of 35 to 135 infant deaths per 1 000 live births to between 55 and 80 infant deaths per 1 000 live births (see Figure 3.12). In the former Soviet Union the Central Asian Republics had the highest reported infant mortality rate (United Nations, 2005b:107-109).

**Figure 3.12: Infant mortality rates Central Asia 1980-2005**

Source: UNDP 2006

Infant mortality rates vary significantly by province, especially in the least economically developed provinces, and in certain rural areas. Some rural areas have lower infant mortality rates than their urban counterparts. There are a number of possible reasons for this, for example, under-enumeration of infant deaths. It is possible that rural children who die soon after birth are simply not registered either as a birth or as a death, especially if born outside of a hospital. Some of these deaths could be related to either the malnourished mother giving birth to a malnourished child, or to an infant who becomes malnourished after birth (Andreev et al., 2003).

Data for child mortality rates (CMR) for the 1-4 age group before 1990 are not available. However, based on data from 1990 that is currently available (see Figure 3:13) we may assume that the levels were high. The CMR increased in Kazakhstan and Turkmenistan between 1990 and 2005, while it has gradually decreased in Kyrgyzstan, and remained almost the same in Uzbekistan and Tajikistan (United Nations 2005b:107-109; United Nations 2006a & b).

Figure 3.13: Child mortality rates Central Asia 1990-2005
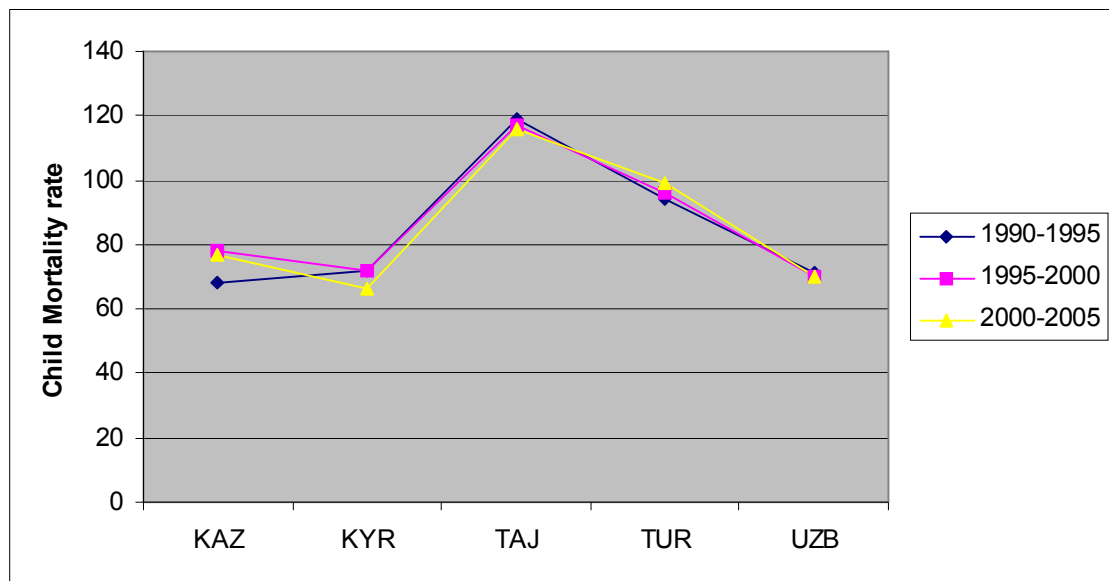
Source: UN 2006a; UN 2006b

3.6   AGING

A comparison of the 1993 and 2006 population pyramids (Figures 3.1-3.10) indicates that the number of the elderly is growing. Currently, the percent of the population past retirement age is highest in Kazakhstan. The other republics have relatively lower percentages of populations past retirement age although there are more 65-69 year olds than there are 60-65 year olds in all the countries. The high fertility rates in the republics have kept the percentage of the population past retirement age low. As fertility begins to decline the proportion of the population past retirement age will increase. Increased numbers of pensionable age individuals also represent a challenge to the emerging states in the region given the resource constraints that the respective governments are experiencing. The demands for health care and

material provision, especially for pregnant mothers and children under the age of five, increase in competition with the increased number of pensioners.

3.7 SUMMARY

Fertility and mortality differentials between the countries stem from the difference in context between the states in the CARs. Relatively poor infrastructure and a lack of economic diversification between the states underpin the demographic gap that exists between the countries. Regional variations in fertility, mortality, migration and aging exist across the states of this region. Greater attention to the context in which these differentials emerge and their influence on child health and nutrition is required in order to make an accurate assessment of the current demographic trends and to plan for future health and social policy demands.