

POST-INDEPENDENCE DEMOGRAPHIC CHANGES IN UZBEKISTAN

A Regional Analysis

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Abstract

Uzbekistan is a landlocked country located in the heart of Central Asia. It is bordered to the north and north-east by Kazakhstan, to the west and south-west by Turkmenistan, to the south by Afghanistan and to the east by Tajikistan and Kyrgyzstan. Uzbekistan has an area of 447,400 square kilometers. It has a diverse terrain comprising sandy deserts, intensively irrigated river valleys and high mountain ranges. The climate of Uzbekistan is of continental type, with long hot summers and short mild winters. The Syr Darya is the main source of water for Uzbekistan. Being a multi-ethnic country, it has been estimated that in the year 1996, Uzbek constituted 80 percent population of the country. The other important ethnic groups of the country include Russians (5.5%), Tajiks (5%), Kazakhs (3%), Karakalpaks (2.5%), Tatars (1.5%) and others (2.5%). After the disintegration of former Soviet Union there has been a very significant change in the ethnic composition of Uzbekistan. The Slavic groups of population such as Russians, Ukrainians and Belorussians have registered a declining trend in the country. The country has undergone numerous demographic changes since its independence in which the geographical setting and ethnicity has contributed directly / indirectly. An attempt has been made in this paper to highlight these changes which will have long bearings on future developmental planning of this country.

Keywords

Demographic Changes, Socio-economic Transformation, Multi-ethnicity, Provinces, Uzbekistan, Geophysical Features, Migration, Pull-push Factors.

Demographic Changes in Uzbekistan

As a result of political, economic and social transformation in Uzbekistan following its independence in 1991, the country has experienced major demographic changes over the past more than one and a half decade. The major socio-economic changes during the country's transitional phase has not only impacted the present demographic situation of Uzbekistan, but will have also the long term consequences for the country's socio-demography and economic development. The important indicators selected for understanding the post-independence demographic changes in Uzbekistan for the period 1991-2007, include, population distribution, density and growth as well as the indicators

like longevity, literacy level, employment rate, incidence of poverty, urbanization in the country. Besides analyzing the temporal changes in the occurrence of these demographic characteristics of Uzbekistan, an effort has been made to study their regional variations as well, so as to identify the provinces which are much behind in the race of demographic development of the country.

Changes in Population Distribution

By a cursory look at Table-I, it reveals that Uzbekistan had a total population of 26.6 million persons during the year 2005. The population of Uzbekistan is very unevenly distributed over the length and breadth of the country. The highest population concentration is found in Samarkand, Tashkent and Ferghana provinces, where more than 2 million persons are concentrated in each province. The Dzhizak, Syrdarya and Navoi provinces are having the lowest population concentration in the country with less than one million population in each province. The Andizhan and Kashkadarya provinces have joined recently the category of high population concentration provinces. Whereas, Bukhara Province falling in the second category of populous provinces in 1991, has dropped to the third category in the year 2001; because of forming of the Navoi province. The Karakalpakstan has risen from the third category during the late Soviet period to the second hierarchy among the most populous provinces over the last one and a half decade of independent Uzbekistan. The Khovrezm province has, however, retained its position in the third category of the most populous provinces of Uzbekistan over the entire post-independence period from 1991 to 2005.

Table-I
Demographic Indicators of Uzbekistan (1990-2005)

Indicator	1990	1995	2000	2003	2004	2005
Age- dependency ratio	0.8	-	0.7	0.7	0.6	0.6
Birth rate	33.9	-	22.2	-	-	19.9
Death rate	6.1	-	6.1	-	-	6.4
Fertility rate	4.1	-	2.6	2.3	2.3	2.2
Population below 15	40.9	-	37.2	34.8	34.0	33.2
Population 65 and above	4.0	-	4.3	4.6	4.7	4.7
Population density	48.2	51.4	57.9	60.1	60.8	61.5
Annual population growth	2.4	-	1.0	1.2	1.2	1.2
Total population (in million)	20.5	-	24.7	25.6	25.9	26.6

Source: World Bank, 2007.

Population Density Changes

The average population density of Uzbekistan has increased from 48.2 persons per square kilometer in 1991 to 61.5 persons per square kilometer in 2005. A close examination of Table-II reveals that the average population density of Uzbekistan has increased from 55.5 persons per square kilometer to 58.8 persons during the year 2006. The difference of -2.7 persons per square kilometer from 2005 to 2006 can be just because the estimation error of different agencies involved in the generation of demographic data on Uzbekistan. Over the past years starting from 2001 there has never been a negative growth in the population density of Uzbekistan.

Density is highest in the Ferghana Valley whose provinces occupy only 4 percent of the country's territory but 27.8 percent (over 7 million) of the country's entire population lives there, with an average density of 414.4 persons per square kilometer. In Samarkand, Syrdarya and Tashkent provinces (including Tashkent city) which comprise 8 percent of the Uzbekistan's territory, 31.5 percent (over 8 million) of the population resides, with an average density of 218 persons per square kilometer.¹ Another 10 million people inhabit the rest of the country, with an average population density of 49.8 persons per square kilometer in Dzhizak Province and 83 persons per square kilometer in Kashkadarya Province. The lowest population density is in Navoi Province and the Karakalpakstan Republic where only 7.3 to 9.5 persons per square kilometer were living during the year 2006.

The average population density of Uzbekistan increased from 55.5 persons to 61.5 persons per square kilometer between 2001 and 2005. The population density of Ferghana Province has increased from 404 persons per square kilometer in 2001 to 431.5 persons per square kilometer in 2006. During the same period the population density of Namangan province increased from 264.8 to 285.1 persons per square kilometer. The population density of Andizhan Province increased from 529.2 to 567.1 persons per square kilometer before, 2001 and 2006. The lowest increase in population density was recorded in Navoi Province as it did increase by just 0.1 percent from 2001 to 2006.

Changes in Population Growth

The population of Uzbekistan has increased from 20.5 million in 1990 to 26.6 million in 2005. The country witnessed a crude birth rate of 34.5 per thousand and a crude death rate of 6.2 per thousand in the

Table-II
Population Density and Rural Population Distribution (2001-2006)

Region	2001		2002		2003		2004		2005		2006	
	Persons/ Km ²	% Rural	Persons/ Km ²	% Rural	Persons/ Km ²	% Rural	Persons/ Km ²	% Rural	Persons/ Km ²	% Rural	Persons/ Km ²	% Rural
Uzbekistan	55.5	62.8	56.2	63.0	56.9	63.3	57.5	63.5	58.2	63.7	58.8	63.9
Karakal- pakstan	9.2	51.6	9.3	51.1	9.3	51.0	9.4	51.3	9.4	51.3	9.5	51.6
Andizhon	529.2	70.0	536.5	70.0	544.2	70.1	551.2	70.2	559.2	70.4	567.1	70.5
Bukhara	35.38	69.2	36.2	69.5	36.7	69.8	37.1	70.0	37.5	70.3	38.0	70.5
Dzhizak	47.0	69.9	47.7	70.0	48.3	70.2	48.9	70.1	49.5	70.0	49.8	70.1
Kashkadarya	77.5	74.7	78.9	74.9	80.3	75.1	81.8	75.2	83.3	75.2	84.7	75.3
Navoi	7.2	59.7	7.2	59.9	7.2	60.1	7.3	60.2	7.3	60.3	7.3	60.5
Namangan	264.8	62.5	268.7	62.5	272.9	62.5	275.3	62.5	281.0	62.7	285.1	62.8
Samarkant	161.8	73.2	164.2	73.5	166.5	73.8	168.7	74.1	171.2	74.3	173.6	74.5
Surkhandarya	88.3	80.3	89.2	80.4	91.5	80.5	92.9	80.6	94.5	80.7	96.0	80.8
Syrdarya	152.0	68.0	153.7	68.2	153.3	68.5	157.3	68.6	157.2	68.7	158.3	68.8
Tashkent	291.1	59.9	292.3	60.1	293.8	60.3	294.8	60.5	296.2	60.6	297.5	60.7
Ferghana	404.4	71.1	409.2	71.2	414.6	71.4	419.6	71.6	425.8	71.8	431.5	71.9
Khorezm	221.3	76.5	224.9	76.8	228.4	77.1	231.1	77.4	235.3	77.6	238.7	77.8

Source: National Human Development Report Uzbekistan, 2006/2007.

year 1991, thus, registering 28.2 per thousand natural change in the population (Table-III). During the year 2006 the crude birth rate had declined as low as 20.6 per thousand and the crude death rate had come down to 5.2 per thousand, thereby, giving a natural change of just 15.4 per thousand population. The annual growth of population dropped from 28.2 per thousand in 1991 to 21 per thousand in 1996. The country registered a decline in annual growth of population from 1996 to 2006 as well but the decline from 1996 to 2001 was very steep as compared to the period between 2001 and 2006. During the period 1991 to 1996 the live births declined from 723, 420 babies to 634,842 babies, but the number of deaths increased from 130,294 to 144, 829 persons. From 1996 to 2001 there was a decline in both annual birth rate as well as annual death rate. From 2001 to 2006 the annual birth rate witnessed an increase whereas the annual death rate registered a slight decrease. The economic conditions of the country during 1990's had deteriorated which had negative influence on the annual growth of the population. However, after a decade of economic transmission the economy of the country did stabilize which had a positive impact on the demography of the country as well.

Table-III
Population Growth in Uzbekistan (1991-2006)

Indicator	1991	1996	2001	2006
Average Population (000)	21,009	23,319	25,090	26,947
Live births	723,420	634,842	512,950	555,946
Deaths	130,294	144,829	132,542	139,622
Natural change	593,126	490,013	380,408	416,324
Crud birth rate (per thousand)	34.4	27.2	20.4	20.6
Curd death rate (per thousand)	6.2	6.2	5.3	5.2
Natural change (per thousand)	28.2	21.0	15.1	15.4

Source: CIA, World Fact Book, 2006.

The average annual population growth rate in Uzbekistan fell from 1.5 percent in 2001 to 2003 and reached 1.2 percent between 2003 to 2005. The fertility decreased in all provinces. In 2004 the lowest fertility was registered in Tashkent city (16 person1000); the highest rate was registered in Surkhandarya (22.1) followed by Kashkhadarya (22.7) Dzhizak (22.7) Samartkand (22.5) and Khawarezm (22.0) provinces. The number of births is expected to increase in the next few years as women born during the baby boom will reach reproductive age.

Status of Life Expectancy

The life expectancy in Uzbekistan in 1990 was 69.71 years which dropped as low as 67.47 in 1994 and has since then followed an upward trend.² A thorough examination of Table-IV reveals that the longevity in Uzbekistan increased from 69.1 years in 1995 to 71.8 years in 2005. Uzbekistan's relatively high life expectancy reached 72.5 years in 2004 (compared with 69.3 in 1990), while between 1990 and 2004 the nationwide difference between life expectancy for men and women dropped by an average of 1.9 years to 6.3 years and 4.4 respectively.

Table-IV
Trends of Longevity and Literacy in Uzbekistan (1995-2005)

Indicator	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Life expectancy at birth (years)	69.1	69.2	70.1	69.9	70.1	70.8	71.3	71.2	71.6	71.2	71.8
Mean years of schooling	11.4	11.4	2.74	11.4	11.4	11.4	11.5	11.6	11.6	11.7	11.5
Literacy rate	98.96	99.06	99.1	99.2	99.2	99.2	99.2	99.2	99.2	99.3	99.4
Literacy Level	2.74	2.74	2.74	2.74	2.74	2.74	2.74	2.74	2.76	2.75	2.75
Gross first, second & third enrolment ratio (%age 7-22)	76.0	76.0	70.6	70.1	70.6	76.0	76.0	76.0	77.3	76.5	76.5

Source: State Statistical Committee, Uzbekistan, 2006.

However, the life expectancy in Uzbekistan is higher than in other CIS countries but lower than developed realm whose life expectancy ranges from 75 to 82 years. The total morbidity and mortality rates need to be brought down and child mortality rates need to be brought down significantly in order to bring about an increase in the life expectancy at birth in Uzbekistan. Though the life expectancy of males has increased from 66.1 in 1990 to 70 in 2004 but the female life expectancy has reached from 72.4 in 1990 to 74.7 in the year 2004.

Changes in Sex Ratio Scenario

In Uzbekistan the sex ratio increased from 97.8 in 1990 to 98.2 in 1995 but remained very constant from 1995 to 2005. Since more than 3.5 percent population of Uzbekistan belongs to the Russian, Ukrainian, Belorussia and German ethnicity with comparatively lesser sex ratio (males per 100 females) the overall sex ratio is, therefore, lesser than other republics of Central Asia and also shows a declining trend. Uzbekistan is having a very high sex ratio because of both biological and economic reasons. The infant mortality among the female children is universally lesser than among the male children. Secondly, after the disintegration of former Soviet Union, the male specific migration to other CIS countries like Russia and Kazakhstan, increased very much that had led to an increase in the sex ratio of Uzbekistan.

Changes in Age Structure

The age structure of the population reflects a high birth rate over the last few decades. During the year 1995 children aged 0-18 years represented 48.7 percent population of Uzbekistan. In 2006 children aged 0-18 years represented only 42 percent of the country's population. The share of the working population in Uzbekistan was 49.1 percent in 1990. It has risen to 59.5 percent or over 10 percentage points by 2007. During the year 1990, the share of women entering child bearing age was only 23.4 percent, but by 2007 it has risen to 28.3 percent. Uzbekistan's birth rate had been in decline since the mid-1990's which has caused the current slow growth in the share of people under 16 years of age, is thus, set to rise again. This will presumably lead to an eventual increase in the share of the total population under 16 years of age and could depreciate the 'demographic dividend.'³ The proportion of people in the age group of 65 and above formed 4 percent of Uzbekistan's total population in the

year 1990. The proportion of elderly people is constantly on increase over the last 15 years but it could not surpass 4.7 percent of the total population of the country by the year 2005.

Literacy and Employment Trends

The literacy rate in Uzbekistan has remained very high during the entire post-independence period. During the year 1995 as high as 98.96 percent population was classified as literate. The literacy rate of the country in 2005 has reached 99.4 percent. The average years of schooling was 11.4 years in 1995 which increased to 11.7 years by the year 2004 though it dropped to 11.5 years in 2005. The gross enrolment ratio of students in first, second and third level as a percentage of people in the age group of 6 to 22 years was 76 percent in 1995 and reached 76.5 percent by the year 2005 (Table-V). There are, however, male-female and rural – urban variations in the literacy rate and literacy levels in Uzbekistan.

Table-V
Trends of Employment in Uzbekistan (1991-2006)

Indicator	1991	2000	2001	2002	2003	2004	2005	2006
Able bodied working age population (millions)	10.2	10.9	13.4	13.8	14.2	14.7	15.1	15.5
Able bodied working age people (% of total population)	49.1	52.5	53.5	54.5	55.6	55.6	57.5	58.3
Employment rate (% of able bodied working age population)	80.6	69.4	68.4	67.7	67.5	67.7	67.7	67.7

Source: State Statistical Committee, Uzbekistan, 2006.

The regional variations in literacy rate and literacy levels are also very much present in Uzbekistan. The proportion of able bodied working age people within the population of Uzbekistan has been growing over the last 15 years, creating considerable pressure on the labour market. The working age population accounted for 58.3 percent of the total population of the country in 2006 compared to just 49.1 percent in 1991. In the year 2006 alone the working age population grew by 9 percent. The employment rate expressed as the percentage of the able bodied working age population has registered a declining trend from 1991 to 2006. The employment rate of the able bodied working age population of Uzbekistan was 80.6 percent in 1991 but in 2003 it dropped to the lowest level of 67.5 percent. However, it remained constantly higher

by 0.2 percent than the previous year in 2004 to 2007. The employment rate during the first decade of independence in Uzbekistan dropped from 80.6 per cent in 1991 to 68.4 percent in 2001. The employment rate over the next five years, from 2001 to 2006, continued to remain lower though the gradient of declination remained by and large smooth during this period.⁴

There is evidence that a section of the employed population is engaged in low productivity and low wage jobs, often in the informal sector. These jobs do not always secure enough income to ensure the employed and their dependents with a decent standard of living. Thus the problem of many is not unemployment but under-employment. In the formal sector there has been a marked decline in employment in the agricultural sector. Agricultural sector represented 42 percent of all formal employment in 1991 compared to only 28.3 percent in 2006. The sharp decline in formal agricultural employment has been largely due to the process of transforming the previous collective forms into cooperatives (*shirkats*), and more recently into private farms. Since early 2000's the process of converting *shirkats* into private farms has taken place.

Incidence of Poverty

Since poverty is directly / indirectly related to some demographic variables, so covered in this study. The poverty line in the government of Uzbekistan's Household Budget Survey is defined as a daily caloric consumption of less than 21,00 kcal. The incidence of poverty in Uzbekistan has declined from 31.5 percent in 2001 to 23.6 percent in 2006. The decline in urban poverty has been steeper than the rural poverty. In 2001 the incidence of urban poverty was 27.8 percent which has declined to 17.6 percent in 2007, whereas the rural poverty has declined from 33.6 percent in 2001 to 27.1 percent in 2007.

The rural-urban distribution of poverty is highly uneven. During the year 2005 the poor people constituted 25.8 percent of the total population in Uzbekistan. The incidence of rural poverty was 30 percent, which represented 64.4 percent of the total population and 74.7 percent of the poor population of Uzbekistan in the year 2005.⁵ The urban poor formed 18.3 percent of the total urban residents 35.6 percent of the total population and 25.3 percent of poor population of Uzbekistan in the year 2005 (Table-VI).

Table-VI
Regional Distribution of Poor Population in Uzbekistan (2005)

Oblast / Region	Poverty headcount (%)	Share of total population (%)	Share of poor population (%)
<i>Total</i>	<i>25.8</i>	<i>100.0</i>	<i>100.0</i>
<i>Urban</i>	<i>18.3</i>	<i>35.6</i>	<i>25.3</i>
<i>Rural</i>	<i>30.0</i>	<i>64.4</i>	<i>74.7</i>
Karakalpakstan	44.0	5.1	8.7
Andizhan	23.1	9.5	8.5
Bukhara	20.8	6.4	5.1
Dzhizak	29.6	3.7	4.3
Kashka darya	41.0	8.5	13.5
Navoi	26.3	3.9	3.0
Namangan	33.4	7.9	10.2
Samarkand	23.9	11.2	10.4
Surkhandarya	34.6	7.3	9.8
Syrdarya	32.6	2.4	3.0
Tashkent Oblast	20.4	10.1	8.0
Ferghana	15.8	11.6	7.1
Khorezm	31.0	5.1	6.1
Tashkent city	6.7	8.2	2.1

Source: National Human Development Report, Uzbekistan, 2007.

The regional distribution of poverty in Uzbekistan was still more non-ubiquitously concentrated in Uzbekistan in the year 2005. It is clear that the headcount ratio of poverty varied from 6.7 percent in Tashkent city to 44 percent in Karakalpakstan in the year 2005. The other provinces with high incidence of poverty included Kashkadarya (41%), Surkhandarya (34.6%), Namangan (33.4), and Syrdary (32.2%). The provinces having less than the national average concentration of the poor people include Ferghana (15.8%), Taskhent (20.4%), Bukhara (20.8%), Andizhon (23.1%) and Samarkand (23.9%).

Conclusion

The impact of post-independence socio-economic transformation in Uzbekistan had serious consequences for the people of the country. The demography of Uzbekistan was negatively impacted due to the

decline in the standards of living in the country during the early years of its transition from the command to the market economy. The birth rate declined very sharply and death rate registered net increase with the result the annual growth of population almost halved from 1990 to 2005. The proportion of poor people increased in the early years of independence but during the last five years 2001 to 2005, the poverty showed a declining trend. The proportion of the urban population also decreased from 1995 to 2005. The employment rate also reduced in the country from 90.6% in 1991 to 67.7% in 2006.

The regional variations in the density and distribution of population, rate of urbanization, unemployment and incidence of poverty have increased during the post-independence period. The high concentration of population continues to remain in the Ferghana region and most of the country is sparsely populated except Tashkent and its adjoining areas because of the very harsh geo-ecological conditions. Due to the decline in industrial production and labour absorption in cities the people have either remained mostly confined to their rural habitats or have migrated to other CIS countries like Russia and Kazakhstan to work as the migrant labourers to earn livelihood for themselves and their families.

The planners and policy makers of Uzbekistan have to pay special attention to the issues of high levels of child mortality, maternal mortality and under-employment as well as to the low level of skill formation, counter-urbanization and labour migration in the country. The region-specific, age-specific and gender-specific human development strategies need to be devised for addressing the demographic issues of the country, in general, and the target groups and target areas, in particular.

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