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**The End of Egypt Population Growth in the 21<sup>st</sup>  
Century: Challenges and Aspirations**

by

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# **The End of Egypt Population Growth in the 21<sup>st</sup> Century: Challenges and Aspirations**

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## **1. Introduction:**

Egypt is the most populated Arab country, and, with a population of 74 million, ranks with Turkey and Iran, as one of the largest countries in the region. Its population was 10 million in 1897, it increased by almost six times since the beginning of the 20<sup>th</sup> century and by almost three times from 1950 to the present. The population grew slowly at an average rate of 1.3 percent per annum from 1897 to 1947, but accelerated greatly to reach around 2.5 percent from 1950 to about 1970 when it decreased to 2.2 percent due, in part, to postponement of marriage, reductions in fertility (because of the 1973 war), and to some changes in age structure echoing the effects of World War II. Once these temporary effects passed, the rate of population growth rebounded to 2.5 percent in 1975-1980 and 2.6 percent from 1980-1985. Since that period, it has begun to fall as decreases in birth rates have exceeded continuing decreases in the crude death rate. The current population growth rate of about 2 percent per annum is one of the lowest rates in the region.

This paper provides new ways of thinking about Egypt's population in the 21<sup>st</sup> century. While the 20<sup>th</sup> century was the century of rapid population growth in Egypt, the paper shows that the 21<sup>st</sup> century is likely to see the end of Egypt population

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growth and become the century of population aging. The new demography of the 21<sup>st</sup> century produces a new set of challenges for handling and understanding the consequences of population changes on different aspects of human lives.

## **2. Population Growth**

With a population of 70.3 million in 2002, Egypt has the 16<sup>th</sup> largest population in the world and the largest population in the Arab region. The rate of population growth increased from 1.3% per year in the first half of the 20<sup>th</sup> century to nearly 2.5% per annum between the early 1960s and the 1980s. Egypt's population growth rate was 1.9% from 1990 to 2005, placing Egypt well above the mean (1.56% for 1990-2000) for lower middle-income countries. At the rate of growth, Egypt's population would double in less than 40 years as shown from Table 1.

The rapid growth of Egypt's population has occurred during the course of its ongoing transition from a regime of high fertility and high mortality to one of low fertility and low mortality. As in many developing countries, this transition began with sharp fall in mortality rates, especially infant and child mortality, following the end of World War II. This fall occurred due to improvements in nutrition, medicine and public health (especially expanded programs for immunization against infectious disease, and improved access to safe water, sanitation and health services), as well as in other socio-economic arenas such as education and housing. For example, CDR which stood at the alarmingly high rate of 24.0 in 1950 was roughly halved by 1980 and was roughly halved again by 2000. Figure 1 shows this rapid decline in CDR, CBR and also shows that the decline in population growth.

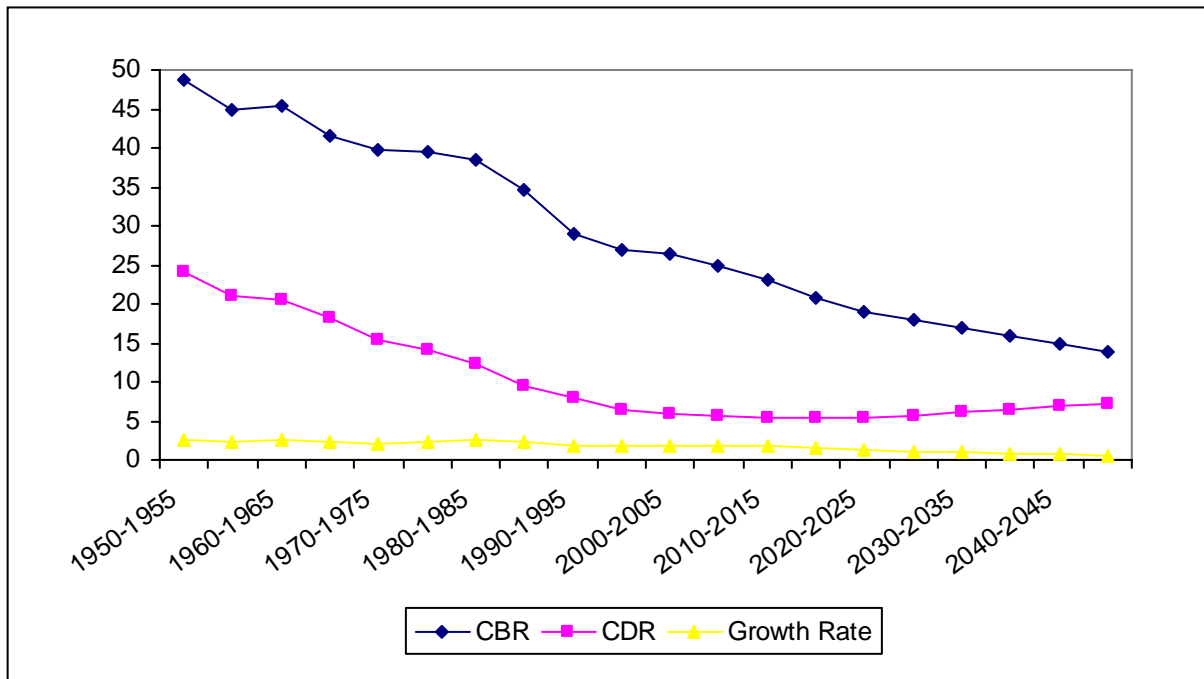
**Table (1): Egypt Crude Birth rate, Crude Death rate, and Population growth rate, Egypt 1950-2050**

Period	Crude birth rate	Crude death rate	Population growth rate
1950-1955	48.6	24.0	2.46
1955-1960	44.8	21.0	2.40
1960-1965	45.4	20.4	2.51
1965-1970	41.5	18.3	2.23
1970-1975	39.8	15.3	2.15
1975-1980	39.6	14.0	2.20
1980-1985	38.4	12.3	2.47
1985-1990	34.7	9.6	2.31
1990-1995	28.9	7.9	1.90
1995-2000	26.9	6.5	1.89
2000-2005	26.3	6.0	1.91
2005-2010	25.0	5.7	1.83
2010-2015	23.1	5.5	1.67
2015-2020	20.8	5.4	1.46
2020-2025	19.1	5.5	1.28
2025-2030	18	5.7	1.15
2030-2035	17	6.1	1.03
2035-2040	16	6.4	0.89
2040-2045	14.8	6.8	0.74
2045-2050	13.8	7.2	0.59

Source: <http://esa.un.org/unpp/>

Figure 1 shows the crude birth and death rates per thousand persons since 1950s; a major decline in death rates took place before 1950s. As with all countries, Egypt's rapid population growth has been due to the wide gap between birth and death rates. However, death rates are likely to stabilize over the next 25 years, so the decline in fertility rates will lead to a slowing of population growth. Despite these trends, population growth in Egypt will continue for some time due to population momentum the crude birth rate will remain high because while each woman may only have two children, there are a large number of women reaching childbearing age.

**Figure (1): Egypt Population growth rate (%) 1950-2050**



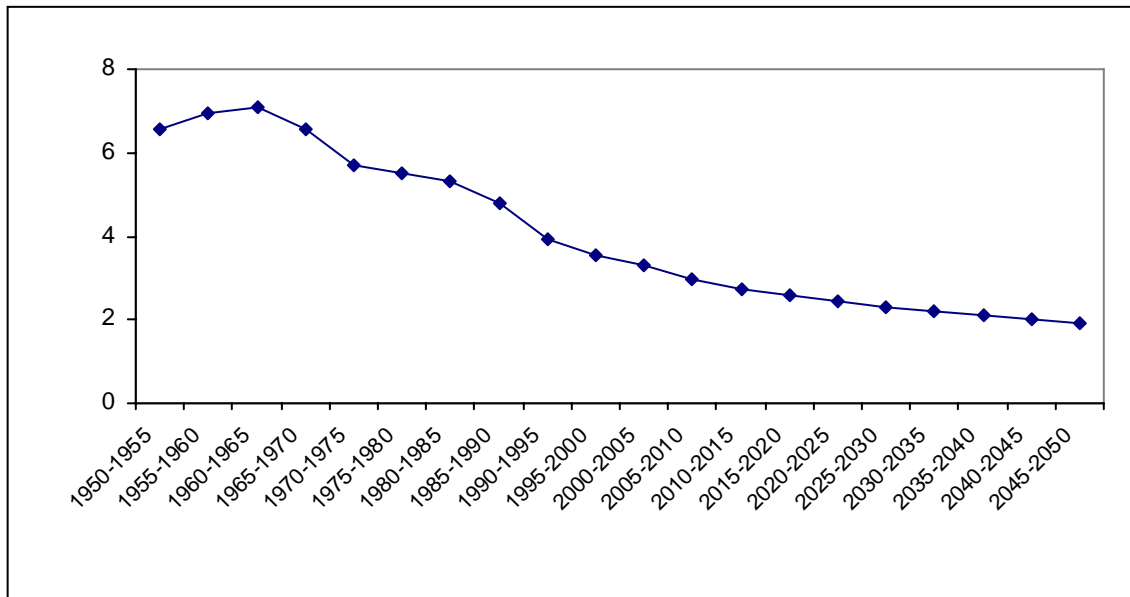
Egypt's population still grows each year by approximately 1.5 million people, and United Nations projections indicated that the population will grow from 60 million in 1996 to 95.6 million by 2026 and will reach 114.8 million before it stabilize in the year 2065. this increase will occur for two reasons: fertility rates are still high in many parts of Egypt, and momentum will cause the population to continue to increase even after fertility rates reach replacement level.

***Fertility rates are still high***

Egypt's population has grown rapidly over the past half century because its mortality and fertility declines have been asynchronous. Unlike mortality, which was falling during the 1950s, Egypt's fertility remained high through the 1960s with total fertility

rate at about 6.6. This rate fell nearly 50% over the ensuing three decades to give a current total fertility rate of around 3 children per woman (see table 2 and figure2).

**Figure (2): Egypt Total Fertility rate (%) 1950-2050**



According to Table 2 the total fertility rate in the period 1995-2000, the average Egyptian woman would give birth to 3.5 children in her lifetime – well above the rate needed to reach population stabilization. Fertility rate are especially high in the poor rural areas of Upper Egypt, which are least able to support rapid population growth. Total fertility is projected to fall just over two births per woman by 2040, but this is because the United Nations projections are based on the assumption of a stable population in the long run with fertility not going below the replacement rate (where exactly one female child per woman survives to reproductive age).

**Table (2): Total Fertility Rate, Egypt 1950-2050**

<b>Period</b>	<b>Total Fertility Rate</b>
1950-1955	6.56
1955-1960	6.97
1960-1965	7.07
1965-1970	6.56
1970-1975	5.70
1975-1980	5.50
1980-1985	5.30
1985-1990	4.80
1990-1995	3.91
1995-2000	3.53
2000-2005	3.29
2005-2010	2.99
2010-2015	2.75
2015-2020	2.57
2020-2025	2.42
2025-2030	2.29
2030-2035	2.19
2035-2040	2.10
2040-2045	2.02
2045-2050	1.94

Source: <http://esa.un.org/unpp/>

***Population Momentum will also contribute to population growth***

Even after the country reaches replacement level fertility – just 2.1 children per woman – the population of Egypt will continue to grow for a number of years. This is because of population momentum. Momentum occurs when a large proportion of women are in the childbearing years. When this is the case, the total number of births can increase even through the rate of childbearing per woman falls. Momentum is a

powerful demographic force, it is predicted to account for about half of Egypt's population growth over the next 100 years. The sooner fertility rates are reduced, the smaller will be the number of people added to the population through momentum.

### **3. Age Structure**

Even through the decline in fertility rates is expected to continue in Egypt, the population will continue to grow rapidly for several decades. Each generation of young people enters childbearing years in greater number. As shown in Table 3 and Figure 3 below, it is noticeable that the contribution of population below 15 years old started to decrease in the last decade of the last century after a persistent level of 40 percent of the overall population between 1950 and 1990. In the first half of the 21<sup>st</sup> century, the percentage of population less than 15 years old is going to decrease steadily to comprise a little higher than 20 percent of the population in 2050.

The expected decrease in the young age group of the Egyptian population will be associated with increases of the population in working age (15-64) which may have consequences on employment, labor relations and manpower planning and strategies. This increase in this category should be planned-for to avoid high rates of unemployment in the future.

Associated with the decreasing percentage of populations below 15 years old and the increasing percentage of population 15-64, is the increasing proportional share of the elderly population from 3 percent in 1950 to 4.5 percent in 2000, then to 13.3 in 2050.



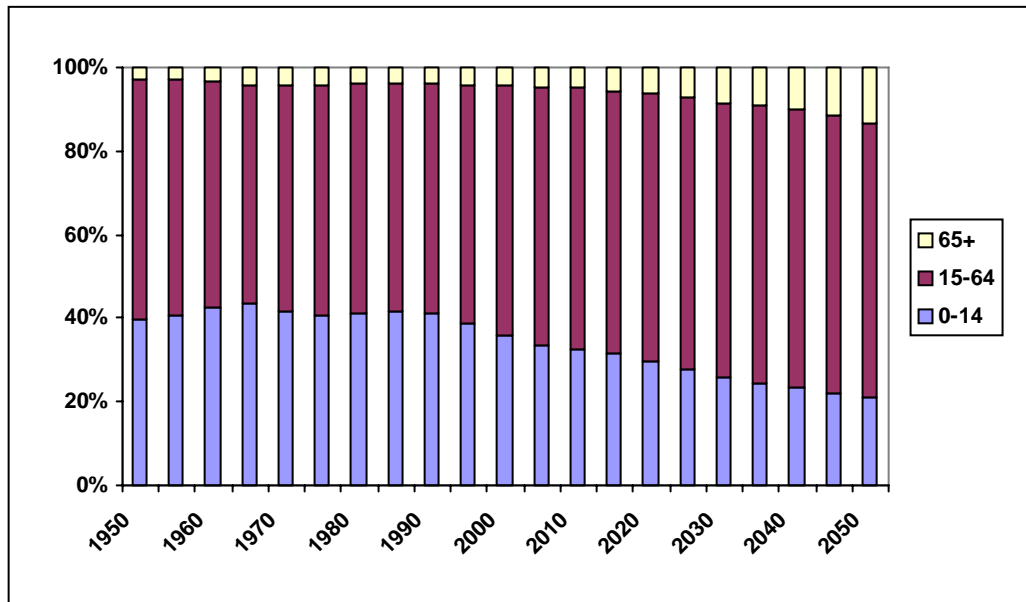
**Table (3): Population by broad age groups, Egypt 1950-2050**

Year	Broad Age Group (%)			Total
	0-14	15-64	65+	
1950	39.7	57.4	3.0	100.0
1955	40.9	56.1	3.0	100.0
1960	42.5	54.3	3.3	100.0
1965	43.5	52.3	4.1	100.0
1970	41.4	54.3	4.3	100.0
1975	40.9	54.9	4.2	100.0
1980	41.4	54.7	4.0	100.0
1985	41.8	54.4	3.8	100.0
1990	41.1	55.1	3.9	100.0
1995	38.8	57.1	4.2	100.0
2000	35.9	59.6	4.5	100.0
2005	33.6	61.7	4.8	100.0
2010	32.5	62.5	5.0	100.0
2015	31.4	63.0	5.5	100.0
2020	29.7	63.9	6.4	100.0
2025	27.6	64.9	7.4	100.0
2030	25.8	65.8	8.4	100.0
2035	24.4	66.6	9.0	100.0
2040	23.3	66.8	9.9	100.0
2045	22.1	66.5	11.4	100.0
2050	20.9	65.8	13.3	100.0

Source: <http://esa.un.org/unpp/>

Egypt's population age structure in 2050 is to be compared to the population of Western Europe countries nowadays where the share of the three broad categories of population in the United Kingdom – for example - is 19.1, 65.1, and 15.9 percent for age groups 0-14, 15-64, and 65+ Respectively. Does this mean that Egypt is 50 years behind Europe with respect to demographic transition? A relevant question with no relevant or concrete answer.

**Figure (3): Population by broad age groups, Egypt 1950-2050**



#### **4. Education**

Large efforts were made in recent decades to improve the quality of education in Egypt. The 1990-1999 was declared a decade for illiteracy eradication and adult education and consequently two national plans were set up for this purpose covering the periods 1992-2000 (El-Rouby, 2003). Overall illiteracy rate among population ten years of age and over decreased from 71.3% in 1960 to 39.4% in 1996. The decrease was greater for males than for females and in urban areas than in rural areas. The number of primary schools doubled and those of preparatory and secondary schools increased by 7 and 5 fold respectively during the second half of the 20<sup>th</sup> century. The number of classes in primary schools quadrupled during the same period. Index number for total enrollment in 1999/2000 was 38 at primary stage, 1333 at preparatory stage, and 966 at general secondary stage. Similar improvements were made as regards the number of teacher with reduction of students / teacher ratios

at different stages (23, 22 and, 13 in 1999/2000). However, efforts for improving education are hindered by the continuous growth of population and the level of education is still therefore, far from international standards.

## **5. LABOR FORCE**

Despite the fall in the rate of growth of the population, a change in the age structure has resulted in an increase in the working age population. Although this phenomenon (known as the demographic gift) is common in other Arab and developing countries as well, it presents serious challenges for the job market. Table 5 shows that the percent of population in the working age group 15-64 years decreased from 57.4 in 1950 to 54.4 in 1985, and then it is increased to almost 62 percent in 2005 and according to United Nation projection it seems to increase until reach the highest percent in 2050 (65.8 percent). It should be noted that entry into the labor market does not only occur at the completion of school or college education. There is also a large number of drop outs from school, with children usually going to work in the informal urban sector or in agriculture. The drop-out rate is correlated with poverty levels, with more children from poorer homes failing to complete their education and fewer of them going to school at all.

Unemployment in 1995 was estimated at 10.8 percent of the labor force, with the rate among females at 23.6 percent and among males at 7.2 percent. The underestimation of female participation rates and under-reporting of the employment of individuals aged under 15 and over 60 meant that the overall rate was probably nearer 15 percent. Unemployment was much higher among those with intermediate educational levels than among the illiterate or low educational level populations. In 1995, 33.3 percent of those with intermediate educational levels were unemployed compared with 0.4 percent of illiterates, 0.6 percent among those with reading and writing skill levels only. Those with advanced intermediate levels of education had a 19.4 percent unemployment rate and among those with university education, 11.8 percent. Why

was unemployment higher among those with more education than among those with less? Demand: those with low skills could find work or they left the labor market. Those with higher skills found it harder to find work and if they could not, they remained in the market looking for it. There were two reasons why the better educated were not in demand. The first was the structure of the economy and the second was the nature of their education and skills.

**Table (5): Population in the working age, Egypt 1950-2050**

<b>Year</b>	<b>Percent of population in the working age 15-64</b>
1950	57.4
1955	56.1
1960	54.3
1965	52.3
1970	54.3
1975	54.9
1980	54.7
1985	54.4
1990	55.1
1995	57.1
2000	59.6
2005	61.7
2010	62.5
2015	63.0
2020	63.9
2025	64.9
2030	65.8
2035	66.6
2040	66.8
2045	66.5
2050	65.8

Source: <http://esa.un.org/unpp/>

Between 1988 and 1998, unemployment rate increased from 5.4 percent to 7.9 percent of the labor force. The 1996 census recorded that unemployment was 1.535 million or 8.7 percent (these figures are based on restrictive definitions of unemployment). In order to halve the rate of unemployment by 2015, the rate of increase in employment will have to be increased from an actual average increase of 1.4 percent a year in 1973-94 to 3.6 percent in 2002-2015.

## **6. AGING**

The decline in fertility levels, reinforced by continued declines in mortality levels, is producing fundamental changes in the age structure of the population of most societies, most notably record increases in the proportion and number of elderly people. In most of the developing countries, that have experienced very rapid decline in their level of fertility, women, who live longer than men, continue increasing to constitute the majority of the elderly population and, in many of these countries, elderly poor women are especially vulnerable (ICPD, 1994). While, the Egyptian situation indicates that 4 percent of the population were 60 years and over in 2000. This percentage is expected to be close to 8% by the year 2017, in which the majority of the elderly population will be women.

The steady increase of population in older age groups, both in absolute numbers and in relation to the working-age population, has significant implications particularly with regard to the future viability of existing formal and informal modalities for assistance to elderly people. The economic and social impact of the "aging of population" is both an opportunity and a challenge. Policies in the light of the principle that elderly people constitute a valuable and important component of a society's human resources should be re-examined. Also, how best to assist elderly people with long-term support needs should be identified (ICPD, 1994).

Government should develop social security systems that ensure greater intergenerational equity and solidarity, provide support to elderly people through the multigenerational families, and provide long-term support and services for the growing numbers of old people. Government should also help elderly people and facilitate their continued participation in the society. Government should ensure that their necessary conditions are developed to reach health and productive life and to make full use of the skills and abilities they have for the benefit of the society. The valuable contribution that elderly people make to families and societies especially as volunteers and caregivers should be encouraged. Government in collaboration with non-governmental organizations and the private sector should strengthen formal and informal support systems for elderly people and eliminate all forms of violence and discrimination against them with special attention to the needs of elderly women (ICPD, 1994).

## **7. CONCLUSION**

The 1994 International Conference on Population and Development (Cairo Conference) is considered as a landmark that differentiates between two main phases of demographic thoughts and tendencies. The pre-Cairo phase and the post conference phase are quite different, while the pre-conference phase was characterized by the prevalence of family planning programs and target-oriented policies and strategies to slow down population growth, the second phase – post-Cairo focuses on population as an integral aspect in a long development process to enhance the lives of populations in developing countries. The terminologies, policies, and strategies of the second phase are closely related to gender, woman, economic development, human rights, international migration, urbanization, and many other aspects of human development. The second phase witnessed the United

Nations; adoption of what is called Millennium Development Goals and the linkages between the ICPD Program of Action and these MDGs. Family planning programs became a part of the pre-Cairo demographic history.

The results of this study shed some light on the new directions and fields of interventions as related to the new population policies countries are committed to adapt after ICPD 1994. The end of family planning programs and target setting population policies does not mean the end of contentious work in the field of population; new challenges are ahead. Demographers should re-direct their efforts to study new trends and challenges caused by the slackening growth of population. Issues related to age structure due to the decline in fertility, ageing, and the changes in age structure of the population should be addressed and explored. Population and demographic-related fields of study such as education and labor force are of the important topics that demographers should address.

Egypt's population problems in the 21<sup>st</sup> century can not be handled the same way as handling the overpopulation growth in the last century. Demographers should be aware of this and be prepared for new challenges and perspectives.

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