

# Analysis Of Development in Trends of Population Indicators in Egypt and The Factors Affecting Them During The Period (2004-2020)

By

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## Abstract

This study analyzes the development of the trends of population indicators in Egypt during the period 2004-2020, as one of the most important and serious problems facing the Egyptian economy, because these indicators are testimony to huge upturn during the above-mentioned period, which necessitates securing more resources to meet the growing population needs to achieve the well-being of the Egyptian citizen. In fact, this depends to a large extent on the rate of population growth and the characteristics of the population, together with the Egyptian citizen's awareness of the problem of population growth and its implications. The importance of the study is based on the role of population indicators in the formulation of the economic and social policies that face this increase through the integration of population policies with developmental policies that meet the urgent current and future needs of the population, as the study found a negative impact of the population increase on the various economic sectors in Egypt. The population is also on the rise.

**Keywords:** Population problem, population growth, births and deaths, migration.

## Introduction

Population growth is closely linked to economic and social variables and directly affect development areas, where the population problem reflects the irregular increase in population. The accelerating population growth is gutting any development developments, whether industrial, agricultural, or food (Sunny & Brimlow, 2013). Population information in terms of size, growth rate, age and quality distribution, geographical distribution, economic and social characteristics, etc., is also important for decision-making to build development strategies (e.g., parchment, year, page number).

As regards Egypt, there has been a steady rise in the population and its growth rates over the period 2004-2020, and demographic indicators have witnessed significant changes during this period, resulting in an increase in the birth rate, a decrease in the mortality rate and an improvement in economic and social conditions.

### *Research objectives*

#### *The research aims to*

1. Analysis of development in trends of population size and growth in Egypt over the

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- period (2004-2020)
2. following demographic changes in Egypt during the study period
  3. know the reasons affecting the population growth in Egypt

### ***The problem of searching***

Egypt is suffering from a steady increase in its population, which requires a lot of resources to meet its needs. It therefore needs to design population policies that help to control population growth and meet the demands of population growth

### ***Hypothesis***

The development of a structured population policy and its integration with development policies will have a positive impact on population indicators in Egypt.

## **Research Methodology**

In order to achieve the objectives, the researcher used the descriptive analytical approach to study and analyze the relevant indicators.

### ***First: Analysis of the development in population size and growth rates in Egypt during the period 2004-2020***

Egypt is one of the most densely populated Arab countries, with the highest number of "Arab" countries, and the third among African countries after Nigeria and Ethiopia, ranked 14 (14) globally," at 1.31 percent of the world population, and this increase in population is one of the most serious problems Egypt faces. As a result of its negative impact on different sectors, the increase in population is closely linked to economic and social variables and directly affects the efforts made in the various areas of development, Population information in terms of population size, population growth rate, age and quality distribution, geographical distribution, economic and social characteristics, living conditions, spatial distribution and natural resources of the State is of paramount importance for the making, decision-making, implementation and planning of policies and for the building of development strategies in general and population strategies in particular (Abdulaziz Ahmed al-Baqli, 2017).

This can be seen from the table (1) in its follow-up, the development in Egypt can be seen as a result of a general increase in the size of the population during the study, as the population rose from 74172073 persons at an annual growth rate (1.80%) in 2004 to 10233403 persons per year and at a growth rate of that reached 10233403 persons (1.90) for the year 2020, the average population<sup>1</sup> for the entire period was 87211332, but the annual growth rates ranged between rising and falling and the highest annual growth rate (2013, 2014) was (3.2%). The lowest annual growth rate was in the years 2004-2008, which resulted from Egypt's launch of the family planning initiative during that period, while the period between 2009-2014 witnessed an increase in population growth ranging between 1.90% and 2.30%. This resulted in an increase in the number of births and a decrease in the number of deaths, due to the decline in the rates of family planning, the influence of conservative religious trends, and the increase in the rates of marriage (Mohamed Abdullatif,2020:148).

While we witnessed the period between 2015 and 2020, the annual population growth declined by 1.9% to 2.4% due to the Egyptian government's introduction of several family planning initiatives, including the Ministry of Social Solidarity initiative (Sufficiency 2) in

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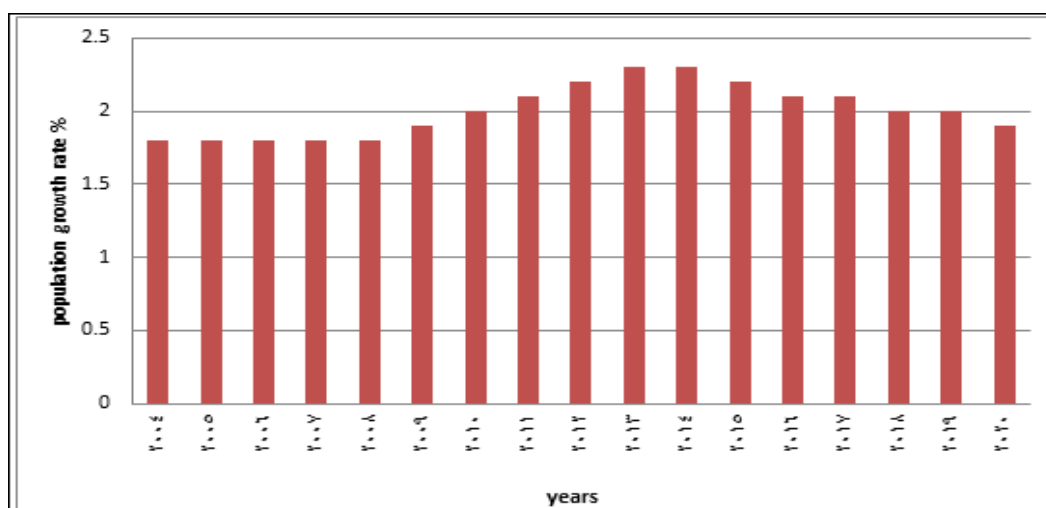
<sup>1</sup> (Average annual population size): The researcher collected the total number of years and divided it by the number of years during the study period.

2017. These programs are linked to the Solidarity and dignity Program, which aims at raising citizens' awareness of the importance of family planning, as well as launching the National Strategy for Population and Development (2015-2030). In 2014, which seeks to improve the living standards and quality of life of the Egyptian population by reducing the population growth rates, improving the characteristics of the population, addressing the occupation in the distribution of the population and reducing the disparities between geographical areas. In addition to the Executive Plan (2015-2020), which focused on five themes for achieving the goals of the Strategy, the most important of which is family planning and reproductive health, which aims at achieving a balance between population growth and available resources and covering investment in human capital within the framework of sustainable development (National Population,2019:141)

**Table (1).** Analysis of evolution in population size in Egypt for the period 2004-2020

Annual population growth rate of %	Total population (population)	Years
1.80	74172073	2004
1.80	75523576	2005
1.80	76873670	2006
1.80	78232124	2007
1.80	79636081	2008
1.90	81134789	2009
2.00	82761244	2010
2.10	84529251	2011
2.20	86422240	2012
2.30	88404652	2013
2.30	90424668	2014
2.20	92442549	2015
2.10	94447071	2016
2.10	96442590	2017
2.00	98423602	2018
2.00	100388076	2019
1.90	102334403	2020

Source: The researcher worked on the World Bank database.  
(2 sufficiency) \*: (It means being satisfied with having two children).



**Figure 1.** Analysis of the evolution in the rate of population growth in Egypt over the period 2004-2020

Source: The researcher works on the basis of the data of the table (1).

***Second: Analysis of the development in the age and quality structure and spatial distribution of the population in Egypt during the period 2004-2020***

Age and sex are important variables in the study of the population and their social, economic and demographic characteristics. Each country is specialized in a composition that differs in terms of sex and age from other countries, and therefore the demographic composition data allow for determining the percentage of the active and teaching population, as well as the underlying needs and problems of different age groups, defined by age and gender, and thus working to integrate demographic variables into international development policies and programs. By following the table and form (2), we note that the Egyptian society is a young society. This is because the age group, which represents less than 15 years of age, represents more than one third of Egypt's population, and its percentage ranged between 32% and 33% of the total population. The increase in the population and proportion of this group is a burden on society, as it is a consumer group that needs services to become productive, as it consumes a large part of the materials to provide the necessary food, drink, health and educational services, and if it is well invested in education, training and rehabilitation. It will contribute to the industry of the future of any country (Egypt ArabiaM2017:15)

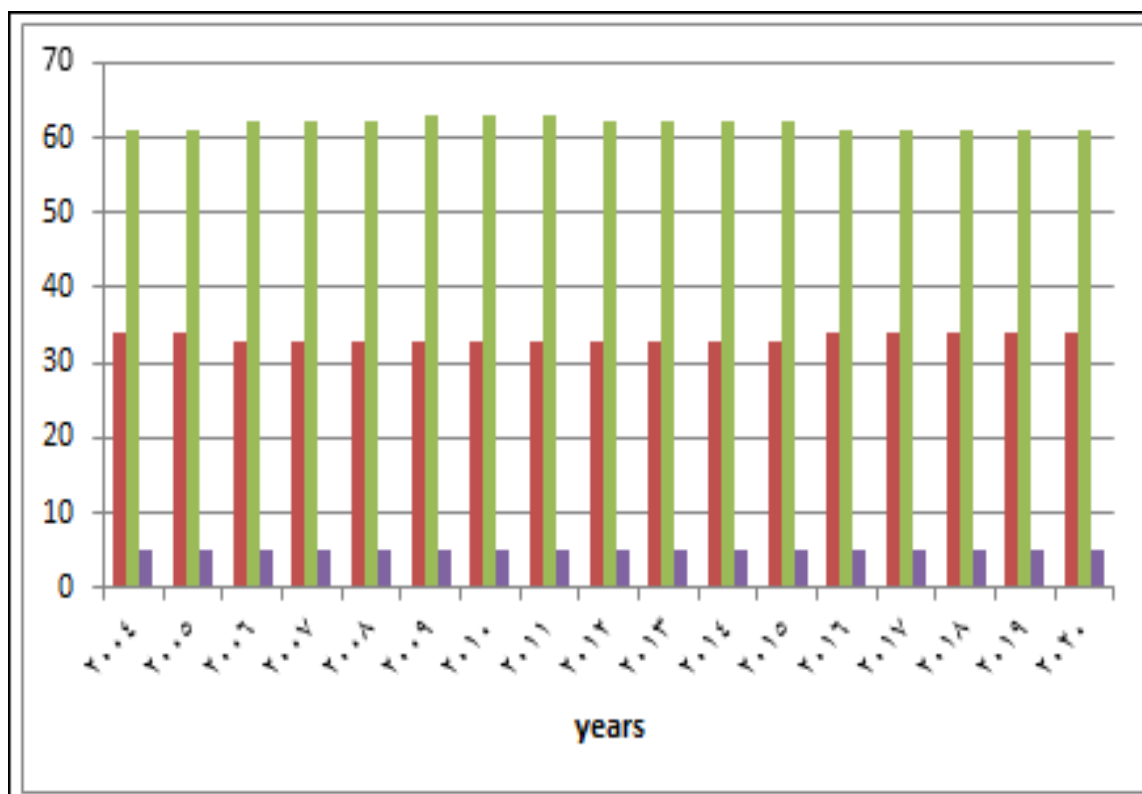
The population in the 15-64 age group ranged from 61-63% of the total population, which indicates an increase in working-age persons, requiring the adoption of a set of policies aimed at strengthening human capital indicators, particularly in the areas of empowerment, education and employment, especially for young people." (Abdulaziz,2018:15)

The population group (65 and above) represented an average of about 5% of the total population over the entire course of the study and was also unproductive and required more special services, which affected overall dependency rates.

**Table 2.** *Analysis of the evolution in the distribution of population by age group and annual growth rate in Egypt over the period 2004-2020*

Age groups / year	NO. 0-14	0-14 %	NO. 15-64	15-64 %	NO. 65	%65	Total population
2004	25490171	34	45029397	61	3652505	5	74,172173
2005	25560699	34	46265950	61	3696926	5	75,523675
2006	25677963	33	47445205	62	3750501	5	76,873769
2007	25861929	33	48580885	62	3789310	5	78,232124
2008	26123315	33	49685560	62	3827206	5	79,636181
2009	26477282	33	50774503	63	3883004	5	81,134890
2010	26943890	33	51850640	63	3966714	5	82,761345
2011	27520562	33	52908712	63	4099977	5	84,529352
2012	28266115	33	53904414	62	4251711	5	86,422335
2013	29119814	33	54872338	62	4412500	5	88,404752
2014	29983715	33	55871428	62	4569525	5	90,424768
2015	30795829	33	56930105	62	4716615	5	92,442649
2016	31777147	34	57809111	61	5003376	5	94,589734
2017	32574004	34	58865210	61	5147337	5	96,586651
2018	33265918	34	60010346	61	5296809	5	98,573173
2019	33966135	34	61125132	61	5296809	5	100,388176
2020	34712880	34	62165379	61	5456144	5	102,334503

Source: The researcher works on the basis of World Bank data



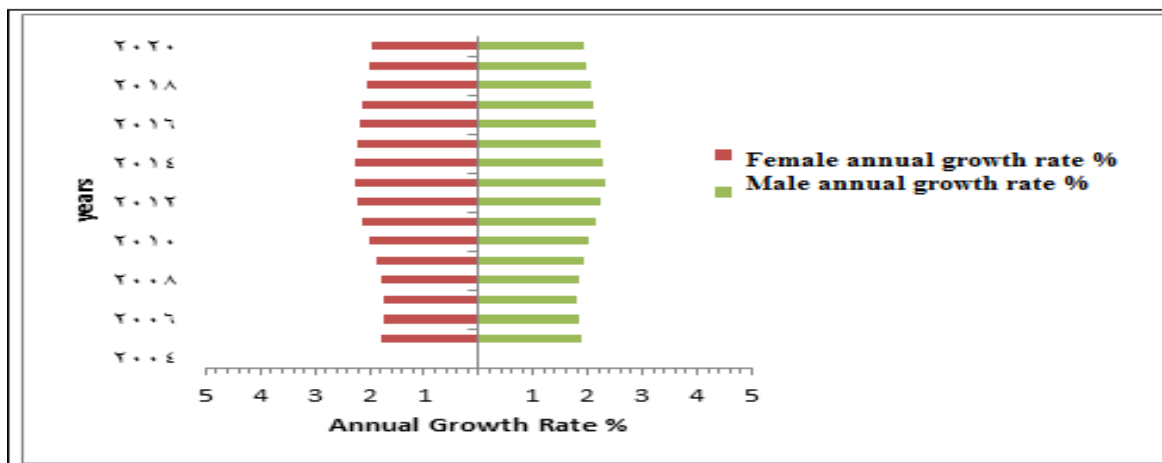
**Figure 2.** Analysis of the evolution in the distribution of population by age group and annual growth rate in Egypt during the period 2004-2020  
Source the researcher worked on the basis of the data table (2).

As for the change in the qualitative structure of the population, it is noted from table and figure 3 that the qualitative composition of the population does not show a noticeable change. The percentage of males in the total was about 50.4% compared to (49.6%) females, while the annual growth rates for males over the course of the study ranged from (1.80% to 2.30%), and the annual growth rates for females between (1.73% to 2.28%) (2021:170, Bet).

**Table (3).** Analysis of development in population size by sex in Egypt over the period 2004-2020.

Percentage of males in total	Annual growth rate for males	Male population	Female percentage of total	Annual growth rate for females is 1%	Female population	Year
50.4		37399737	49.6		36772336	2004
50.4	1.87	38097625	49.6	1.78	37425951	2005
50.4	1.82	38792844	49.6	1.75	38080826	2006
50.4	1.80	39490813	49.6	1.73	38741311	2007
50.4	1.82	40210318	49.6	1.77	39425763	2008
50.6	1.91	40976505	49.4	1.86	40158284	2009
50.6	2.02	41806220	49.4	1.98	40955024	2010
50.6	2.15	42706357	49.4	2.12	41822894	2011
50.6	2.25	43668307	49.4	2.23	42753933	2012
50.6	2.30	44674003	49.4	2.28	43730649	2013
50.6	2.29	45697164	49.4	2.28	44727504	2014
50.6	2.23	46717678	49.4	2.23	45724871	2015
50.6	2.17	47729770	49.4	2.17	46717301	2016
50.6	2.11	48735775	48.4	2.12	47706815	2017
50.6	2.05	49733474	49.4	2.06	48690128	2018
50.6	1.99	50722599	49.4	2.00	49665477	2019
50.6	1.93	51702862	49.4	1.95	50631541	2020

Source: Researcher's work based on World Bank data.



**Figure 3.** Analysis of the evolution of age structure and gender distribution of population in Egypt over the period 2004-2020.

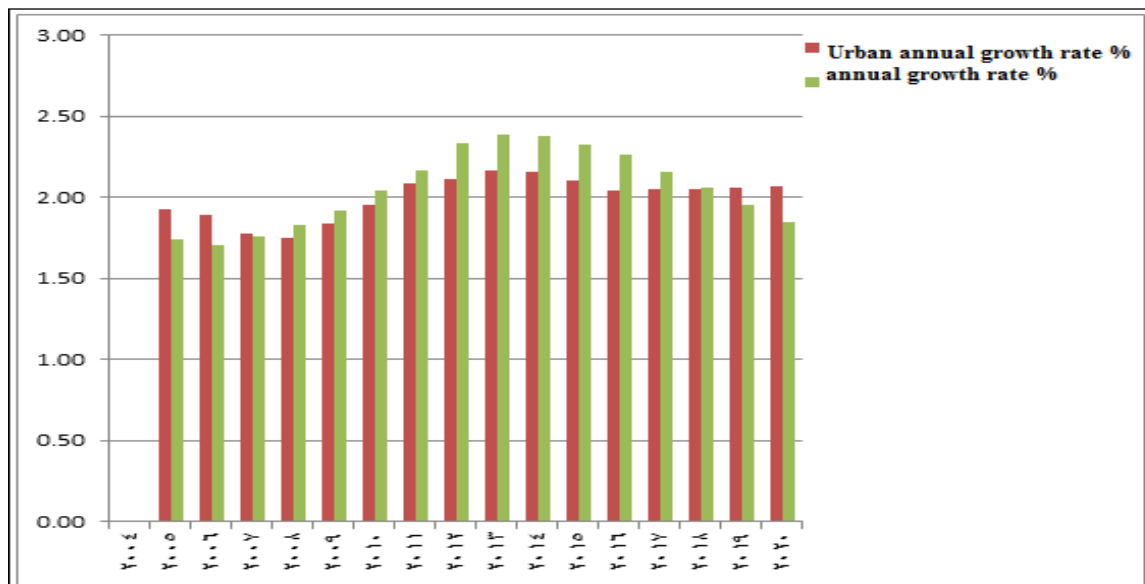
Source: Researcher working on the data of the table (3)

In the context of the spatial distribution of the population, we have to tackle the issue of urbanization, which means the migration of the population from the countryside to cities in search of education, jobs, entertainment, services, adequate housing and improvement of income. National statistics show that 57.22% of Egypt's population live in the countryside, while 42.7% live in Egyptian cities and cities. While the entire world saw a "steady population" growth in urban populations and a continuous" decline in rural populations. The number of rural people rose from 42292174 in 2004 to 58552,657 in 2004 The reason for this is that the Egyptians, though they did not abandon the farming profession, did not abandon the villages. This has changed the nature of the Egyptian village from what it used to be, and agriculture is no longer the only activity of its inhabitants, after it had been inhabited by employees, teachers, technicians and traders, selling goods and providing services that were the preserve of" cities until recently". Therefore, urbanization in Egypt has increased, as in the rest of the developing world. In addition, the natural growth rates of the population are usually low compared to the rural areas, which are factors that have made Egypt characterized by a pattern of stable urbanization growth in terms of demographic transition in the country (2020:37-11, Esawa: Yunesi).

**Table (4).** Analysis of the evolution in the distribution of population by rural and urban Egypt for the period 2004-2020

Years	Urban population Persons	Annual growth rate%	Ratio Urban population to total	Rural population Persons	Annual growth rate %	Rural population ratio to total
2004	31879899.00		42.98	42292174.00		57.02
2005	32495529.00	1.93	43.03	43028047.00	1.74	56.97
2006	33111796.00	1.90	43.07	43761847.00	1.71	56.93
2007	33700834.00	1.78	43.08	44531290.00	1.76	56.92
2008	34289704.00	1.75	43.06	45346377.00	1.83	56.94
2009	34919602.00	1.84	43.04	46215187.00	1.92	56.96
2010	35603060.00	1.96	43.02	47158184.00	2.04	56.98
2011	36347578.00	2.09	43.00	48181673.00	2.17	57.00
2012	37114895.00	2.11	42.95	49307345.00	2.34	57.05
2013	37919407.00	2.17	42.89	50485245.00	2.39	57.11
2014	38737024.00	2.16	42.84	51687644.00	2.38	57.16
2015	39551545.00	2.10	42.79	52891004.00	2.33	57.21
2016	40359122.00	2.04	42.73	54087949.00	2.26	57.27
2017	41185808.00	2.05	42.70	55256782.00	2.16	57.30
2018	42030815.00	2.05	42.70	56392787.00	2.06	57.30
2019	42895825.00	2.06	42.73	57492251.00	1.95	57.27
2020	43781728.00	2.07	42.78	58552675.00	1.84	57.22

Source: Researcher's work based on World Bank data



**Figure 4.** Analysis of the evolution in the distribution of population by rural and urban Egypt for the period 2004-2020.

Source: The researcher worked based on the data of the table (4).

**Third''': - Analyze the factors affecting the growth of Egypt's population over the period 2004-2020**

**The natural factors, including births and deaths**

Population growth is mainly affected by the natural increase in population, which is represented in birth and death rates. According to the demographic transformation theory, which reflects the effect of births and deaths on the population growth rate and age distribution, the population of a country is shifting over a long period of time from the traditional demographic system, which is characterized by high rates of mortality and births, leading to "very slow" growth of the population. The first phase of the transition is the modern demographic system, characterized by very low levels of birth and high birth rates (Falih Ibrahim, 2016). In following up the development in the number and proportion of deaths and births in Egypt, table 5 shows that the number of births increased during the period 2004-2020 from 1780,000 in 2004 to 2330,000, a result of higher fertility rates and improved health in the country, while annual growth rates ranged In the period between (1.1 %- (3.0 -)%), during the period between 2004 and 2020, this increase achieved during the above-mentioned years has a tremendous impact on the quality of life and the basic services provided to citizens including education, the net birth rate reached growth in 2014 (28.5%). This is a result of the increase in the number of births that year, and the lowest rate of this index was in 2005 to reach 24.8% of births per 1000 inhabitants, a reflection of the decrease in the number of births that year, compared to the rest of the years, it witnessed a decrease from (2720) thousand in 2014. This resulted in a reduction in the reproductive rate resulting from the improved status of the family planning program and its ability to respond to increasing demand even in light of the slight decline in overall marriage rates (Abdulaziz,2017:6).

The number of deaths increased during the period 2004-2012, from (441) thousand deaths in 2004 to (530) thousand deaths in 2012, while the annual growth rate ranged from (2.2%-7.5%) during the period 2005-2012.

It is natural that the index is largely linked to the level of provision of health services for individuals. This is because health care and facilities are more concentrated in cities than

in rural areas, and adult mortality and neonatal mortality are increasing (Othman, 2014:14).

In the period between 2013 and 2020, the number of deaths varied from time to time, and the highest number of deaths in that period in 2015 was about 574 thousand deaths, which was reflected in the annual growth rates of this index, which ranged from (- 3.5 ). - 16.4) the net death rate per thousand inhabitants may range between (5.7%-1. The changes in the number of births and mortality rates have been reflected in the natural increase in the population, which reached its highest rate in 2011 (5.9%) due to the large increase in the birth rate in that year and its lowest rate in 2020. This resulted in a decrease in the number of births due to the circumstances of the coronavirus pandemic, the implementation of family planning programs and the decline in total marriage rates due to the economic and social conditions Egypt experienced after 2013. Its impact has been reflected in the natural increase of the population and hence its growth rates (Abdul Aziz,2017:6)

**Unit: In thousand persons**

**Table (5).** Analysis of evolution in natural population increase over the course of the study (2004-2020)

Years	Babies			Deaths			Natural increase	
	Number (In thousand persons)	Annual growth rate of births %	Net rate of births per 1000	Number	Annual growth rate of mortality %	Net mortality rate per 1,000	Number (In thousand persons)	Annual growth rate of natural increase %
2004	1780		24.9	441			1339	
2005	1801	1.1	24.8	451	2.2	6.4	1350	-1.0
2006	1854	2.9	25.0	452	0.2	6.3	1402	2.7
2007	1950	5.1	25.4	451	-0.2	6.3	1499	5.3
2008	2051	5.1	25.9	462	2.4	6.3	1589	2.7
2009	2217	8.0	26.6	477	3.2	6.3	1741	4.8
2010	2261	1.9	27.3	483	1.2	6.2	1778	0.7
2011	2442	8.0	27.9	493	2.0	6.2	1949	5.9
2012	2630	7.6	28.3	530	7.5	6.1	2100	0.1
2013	2622	-0.3	28.5	511	-3.5	6.1	2111	3.2
2014	2720	3.7	28.5	532	4.1	6.0	2188	-0.3
2015	2685	-1.2	28.2	574	7.8	6.0	2111	-9.1
2016	2600	-3.1	27.7	556	-3.1	5.9	2010	-0.0
2017	2557	-1.6	27.1	547	-1.6	5.9	1822	-0.0
2018	2382	-6.8	26.4	560	2.3	5.8	1734	-9.2
2019	2305	-3.2	25.7	571	1.9	5.8	1571	-5.1
2020	2235	-3.0	25.1	665	16.4	5.7	1415	-19.4

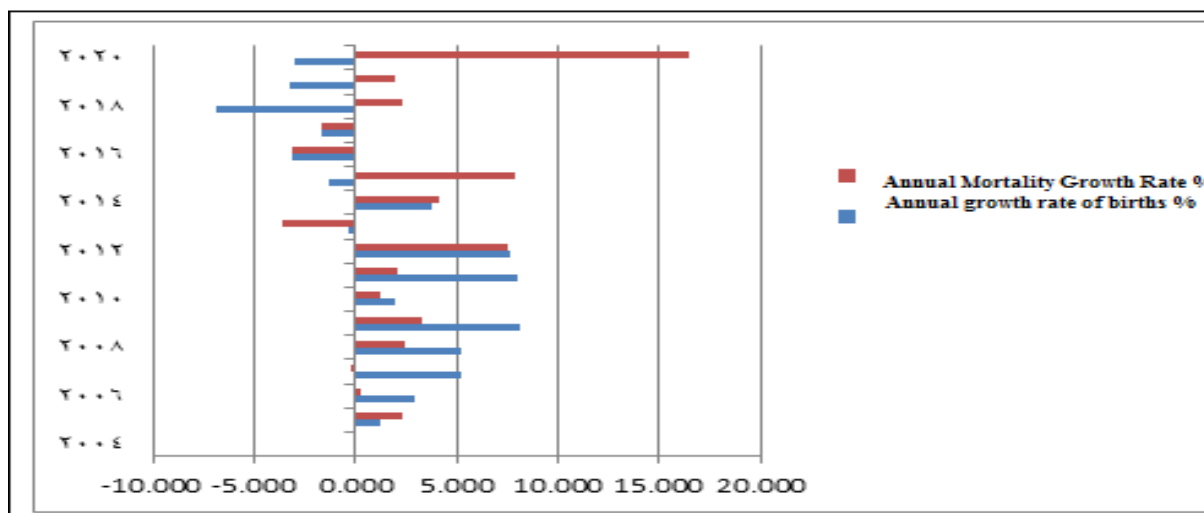
Source: The researcher works on the basis of World Data Atlas and Central Agency for Public mobilization and Statistics <sup>(1)</sup>

Growth rates the researcher worked on the basis of the data of the Central Agency for Public mobilization and Statistics and applied the annual growth rate equation as follows:  

$$\text{Current year} - \text{previous year} / \text{previous year} \times 100$$

Net birth and death rate Data taken from Atlas world data.





**Figure 5.** Analysis of the evolution in birth and mortality growth over the period (2004-2020):  
Source: The researcher works on the basis of the data of the table (5).

**Non-natural factors (migration)**

It also reflects the dynamic of population movement and the redistribution of population due to employment, education, and residence, as well as the importance of the gathering that attracts population migrations and its ability to attract the population and provide the necessary jobs and services, which affect the increase in population size and population growth rates (2019:89: Socio-economic changes).

Talking about Egypt, we find that through its long history it is a country that receives immigration if there are Greek, Italian, Jewish, Armisan and other communities that take Egypt as its home" in the period before the 1950s. For the time being, it is noticed that emigration to Egypt is mostly temporary asylum that increases and decrease according to" the political circumstances of neighboring countries without any hope of resettlement due to" the unwillingness of Egyptian countries to settle refugees as one of the prevailing international solutions to solve the problems of refugees. However, the immigration of Egyptians is dominated by temporary migration through the system of contractual labor and accounts for about 70% of the Egyptian emigration.

As for permanent migration, it does not represent a phenomenon that can be affected by the size of the population today or in the future." according to statistics from the Central Agency for Public mobilization and Statistics (CAPMS), the number of immigrants rose from 325 in 2010 to 350 in 2019 and fell in 2020 to 184 (2020: Central Agency for Public mobilization and Statistics). This decline was caused by the Corona pandemic, as shown in table and figure 6, and these small numbers do not represent a phenomenon that affects the size of the population

The number of immigrants (84.9%) and (53%) are accompanied by (15.1%), while the age group (40-44) is ranked first in terms of the number of immigrants (64%) and (18.3%) of the total. The number of persons with university qualifications is the highest in the number of immigrants (147) and represents 43.2% of the total number of immigrants of educational age (10) years and over, according to statistics from 2019.

The United States of America (124) and Canada (68), and in 2020 those who acquired immigrant status declined to 184 due to the Corona pandemic, the United States (184) The United States is the number one destination for immigrants, the Arab countries are the main



permanent emigration, has risen from 1807941 in 2005 to 3610461 in 2020. The proportion of the population rose from (2.4%) in 2005 to (3.5%), a small percentage whose impact on population growth is limited (2022: African migration trends).

**Table 7.** *shows the number of immigrants and their percentage of the total population in Egypt during the period 2005-2020:*

<b>Year</b>	<b>Number of immigrants</b>	<b>Percentage of the total population: 1</b>
2005	1807941	2,4%
2010	2586643	3,1%
2015	3151069	3,4%
2020	3610461	3,5%

## Conclusions

- 1-Egypt is one of the countries that suffer increases in population size and population growth, as it is considered one of the first countries on the Arab and international levels
  - 2- Natural factors are considered to be one of the main factors in influencing population indicators, whereas migration has had a limited impact on these indicators.
  3. The Egyptian society is one of the young societies that make up the youth group, the largest part of the population, which requires the existence of investment policies and policies that meet the needs of this group.
  4. The rural population constitutes the largest proportion of Egypt's population, unlike all the world's countries, which tend to be densely populated in cities and urban areas
- Egypt's formulation of many policies and strategies aimed at controlling population growth and improving its characteristics has played a role in reducing population growth rate

## Recommendations

- 1- the need to regulate the population in terms of spreading the culture of birth control through relying on modern scientific or medical means.
- 2- preparing for changes in the age structure of the population and making the best use of them by relying on the life cycle approach in analysis and policymaking, improving social protection systems and paying attention to the needs of each age group, the opportunities available to them, and the challenges that may be faced
- 3-redrawing the population map of Egypt through the spatial redistribution of the population in a way that will enhance the Egyptian national security measures and accommodate the needs of the planned national projects
4. Egypt can benefit from its demographic grant through investments that will improve the quality of health, education, economic policies and good governance A broad cross-section of Egyptian society international experience has shown that the most effective investments are those that focus on improving the health and well-being of girls and women, including their sexual and reproductive health.

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