THE POPULATION OF THE ARAB REPUBLIC OF EGYPT*

(PART 1)

Dr. ATEF M. KHALIFA *

Institute of Statistics, Cairo University

ACKNOWLEDGEMENTS

To Dr. A. E. SARHAN, the Dean of Institute of Statistical Studies and Research, I express my indeptedness for his inspiring guidance and continous support of this project.

To Dr. BINDARY, Chairman of the Board for Population and Family Planning, Dr. A. OMRAN, Carolina Population Centre, Dr. A. NASSEF, Institute of National Planning and Dr. M. HEREZE, Expert in the Board for Family Planning, I would like to express my gratitude for the time and interest they took in answering my questions and making data available which made my task easier.

To Mrs. Hoda Rachad and Mr. M. G. El-Rouby, I would like to express my thanks for their help and assistance that made this work possible.

^{*} This study was done through the sponsership of CICRED, Paris.

CHAPTER I

POPULATION GROWTH

The Arab Republic of Egypt (A.R.E.) occupies the Northeastern corner of the African continent and her area is approximately 386,100 square miles, but about 95 percent of this area is desert. and the Nile not only describe the physical characteristics but also set the pattern of the Egyptian population living in the Delta and in the narrow fertile strip of land bordering the Nile, which is called the Valley. The total area under cultivation is approximately 3 % of the total area.

The population of Egypt during ancient and medieval times has been variously estimated from 3 to 24 millions. However, it is doubtful that it exceeded 7 or 8 millions at any point in those periods. 1 Either the long centuries of Mamluks' misrule combined with the diversion of the trade routes linking Europe with India caused population to drop greatly to estimated 2.5 millions by the end of the eighteenth century,

or the previous earlier estimates were exaggerated.

In 1846, an estimate based on a census of Houses showed Egypt's population to be 4.5 milions 3 This suggests that there might have been an increase of roughly 2 milions over the population of the preceding century. If so, it was due to the economic growth and the law and order that prevailed in Mohamed Ali's reign in the first half of the nineteenth century.

The first national population census was taken in 1882 and the second in 1897; census followed every ten years up to 1947. censuses have been taken since then, one in 1960 and the other in 1966. Table (I-1) below shows the distribution of the total population by sex and annual rate of increase in intercensus years.

From the table (I-1) we notice that the population of Egypt has increased steadily from about 10 to 30 millions in a period of about 70 years. It can be seen that the annual rates of growth are quite consistant, and from 1907 to 1937 are nearly constant. A sudden rise is

^{1.} C.V. Kiser, «The Demographic Position of Egypt», Dem. Studies of Selected Areas of Rapid Growth, N. Y.: Milbank Mem. Fund, 1944.

^{2.} C.H. Issawi, «Population and Wealth in Egypt», in J. Spangler and O.D. Duncan (eds), Demographic Analysis: Selected Readings, Glencone, Ill: The Free Press, 1957.

^{3.} Institute of National Planning, «Problems of Under-employment in rural Egypt», Report A., Cairo, 1966, pp. 6.

observed for the period 1937-1947. Some demographers interpreted this rise by the existence of over-enumeration in the 1947 census. ⁴ The evidence provided by the censuses of 1960 and 1966 leads use to accept the 1947 enumeration as correcte ³ Assuming that the growth curve of the population of Egypt is approximately a parabola, it was found that the 1947 total population as estimated from a parabola fitted total populations in 1937, 1960 and 1966 is very nearly the same as the enumerated 1947 population. ⁶

It should also be noted that aliens constitute a very low percentage of total population about 0.77%, 0.55% in 1947 and 1960 respectively).

TABLE (I-1)

Egyptian population in the census Years and its Rates Growth in Intercencus Years*

Annual rate of	s)	population (000	1	37
growth	Total	Female	Male	Year
**	6712	3367	3345	1882
2.9	9669	4755	4914	1897
1.6	11191	5573	5917	1907
1.3	12718	6349	6369	1917
1.1	14178	7120	7.57	1927
1.2	15921	7954	7967	1937
1.9	18967	9575	9392	1947
2,9	26085	12967	13118	1960
2.6	30076	14900	15176	1966

^{*} Source: Central Agency for Statistics, Stat. Yearbook, 1969, pp. 14.

^{**} The 1882 census was carried out during the hazardous and unstable period in which there was nationalistic movement with a strong opposition to the new British occupation of Egypt. Furthermore, it was Egypt's first attempt in modern times to make an official count. It is usually regarded as an undercount.

^{4.} M. A. El Badry, «Some Demographic Measuremnts for Egypt Based on Stability of Census Age Distribution», Milbank Memorial Fund Quarterly, 1955, pp. 268—305.

M. S. Khodary, «Use of Census Age Distribution for Estimating Basic Demographic Parameters of the U. A. R.», in Demographic Measures & Population Growth in Arab Countries, Cairo Demographic Center, No. 1, 1970.

^{6.} Ibid. pp. 251.

Projections of the future estimates assert that the population will jump to about 40, 45 and 52 millions in the years 1975, 1980, and 1985 respectively. 7 This means that the population will almost double every 25 years. Fertility then must decline or population increase will put an excessive burden on all modernization plans. Continuing decline in mortality makes fertility decline even more imperative in the short as well as the long run. Table (I-2) below shows both rates in different years (1906-1968). The same data have been presented graphically in Figure (I-1).

From table (1-2) and Figure (I-1) below, we notice that the birth rates are fluctuating around the rate of 41 or 42 per thousand with no significant change since the beginning of the present century. However, a small but possibly significant decline can be noticed starting in the year 1960, when the birth rate started to decline from 43.9 in 1961 to 38.2 per thousand in 1968.

while the birth has shown this relative stability, the death rate has rapidly declined from 26 per thousand in the first decade of the century to about 15 per thousand in the 1960's. The really sharp decline started in the late 1940's (see Figure 1). of course, this led to a sharp increase in the rate of natural increase which reached its maximum level in 1961 (28 per thousand).

The main reason for this decline of crude death rates is the sharp decline in infant mortality. The latter rate has declined from 289 in the period 1906 - 1909 to about 128 per thousand in the period 1955 - 1960. In 1961, the rate reached the level of 108 per thousand and the decline is expected to continue further.

The apparent decline in the later years in the birth rates is mainly due to the spread of the use of birth control methods and also to the continuing spread of modernization among the population.

^{7.} Central Statistical Committee, «Population Trends in the U. A. R. », Cairo, 1962.

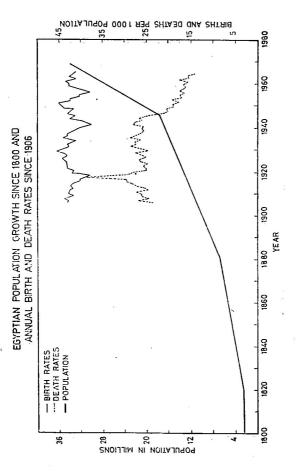


TABLE 1-2
Birth and Death Rates in Egypt (1906—1970)

Years	Birth rates	Death Rates	Growth Rates
1906—1909	43.0	25.5	17.5
1910—1914	42.0	26.2	17.5
1915—1919	39.8**	31.6**	8.2**
1920 - 1924	42.8	25.8	17.4
1925—1929	43.9	26.5	17.4
1930—1934	42.7	27.0	15.7
1935—1939	42.8	26.9	15.9
1940 - 1944	39.6	26.8	12.8
1945—1949	42.4	23.0	19.0
19501954	43.6	18.7	24.9
1955—1960	40.6	17.2	23.4
1961	43.9	15.8	28.1
1962	41.3	17.9	23.4
1963	42.8	15.4	27.4
1964	42.0	15.7	26.3
1965	41.4	14.0	27.4
1966	41.0	15.8	25.2
1967	39.2	14.2	25.0
1968	38.2	16.1	22.1
1969	36.8	14.4	22.4
1970	35.6	15.0	20.6

^{*} Source: The period 1906—1919 is from Kiser, op. cit. The period 1920—1960 is from the U. A. R. Yearbook for Vital Statistics. The individual years 1961—1969 are from the Yearbook of Statistical data 1952—1968, Cairo 1969.

^{**} This period is exceptional, they were the years of influentza epidimic that account for the high death and low brith rate.

CHAPTER II

COMPONENTS OF GROWTH

The present chapter includes analysis of the components of growth, namy, fertility, mortality and international migration.

A) FERTILITY

i) Trends: Since the beginning of this century, the crude birth rates have been fluctuating around a relatively high level of more than 40 per thousand. However, a clear downward trend can be noticed starting with year 1967. The crude birth rate dropped below 40 then, and gradually reached its lowest level in 1972 (33.2 per thousand).

Table (II-1) below shows the age specific fertility rate in Egypt in the period 1966-1969.

TABLE (II-1)

Age Specific Fertility Rate, Crude Birth Rate and Percentage

Change in Egypt (1966—1969)

A	AS	ER	Chan	ge
Age group	1966	1969	Absolute	Relative
15—19	42.6	29.8	12.8	-30.1
20—24	324.9	211.2	-23.7	-10.1
24-29	276.0	251.6	-24.4	8.8
30-34	290.4	258.5	-32.0	-11.0
3539	215.8	198.0	17.8	— 8.2
40—44	118.1	110.7	— 7.3	— 6.2
4549	54.8	50.6	4.2	— 7.6
Total fert, rate	6162	5552	_	_
Crude birth rate	41.2	36.8	4.4	-10.7
Stand. B. R.	41.5	37.3	- 4.2	10.1

Source: Population Studies & Research, Vol. 1, No. 1, 1971.

From table (II-1), we notice that there are significant changes in fertility levels between 1966 and 1969. All rates for each age group have declined. For the first age group (15 - 19) there is an absolute change of 12.8 which means a percentage change of over 30 percent. Furthermore, there is a clear decline in all other age - specific fertility rates.

The total fertility rate has declined from 6162 per thousand women in the age group 15-49 in 1966 to 552 in 1969. A percentage decrease of about 10% was achieved in the crude birth rate during the same period. Standardizing the CBR for the changes in age composition showed the same results.

Table (II-2) below summarizes some fertility indicators for the period (1958-1969) in Egypt.

From table (II-2) we notice that the general fertility rates show a downward trend from 1963 to 1969 as they declined from 184 to 159 per thousand which equals to a 13% decrease. The values of the total fertility rates and gross reproduction rates decreased steadily since 1963.

The mean order of new born decreased steadily since 1966. It fluctuated around 4.5 during the proceeding period. The mean and median order were 3.4 1966. (See detailed in table (1) in the appendix).

TABLE (II—2)
Indices of Fertility in Egypt 1958—1969

YEAR	GFR %	TFR	GRP
1958	174	5.66	2.61
1959	183	5.95	2.77
1960	185	6.05	2.84
1961	189	6.17	2.93
1962	178	5.80	2.76
1963	184	6.01	2.87
1964	181	5.91	2.87
1965	179	5.84	2.85
1966	177	5.95	2.88
1967	169	5.70	2.76
1968	164	n.a.	n.a.
1969	159	5.55	n.a.

^{*} Source: M. Issa, «Recent Fertility Trends in Egypt», in Ferfility Trends and Dimerentials in Arab Countries Research Memo., No. 2, Cairo Demographic Center, Cairo, 1971.

ii) Differentials: The 1947 population census was the first to include data on reproduction by age of mother and duration of marriage. 1 El Badry attempted to utilize these results as well as those offered by the vital statistics to investigate whether there exists any fertility differentials between urban and rural population. 2 One of the major findings of his study was that no evidence was found to support the hypothesis of lower fertility in urban than in rural Egypt. El Badry in another study utilized 1960 population census data and found that regional fertility differences in 1960 are strikingly similar to those of 1947. 3 Regarding fertility differentials by education, it was stated that:

«It is thus perhaps well-established that with the exception of rural illiterates, fertility decreases with education. The observed decrease among rural illiterates, if it is not entirely due to deficient reporting of children ever born may well be due to worse health and environmental conditions which raise the incidence of miscarriage 4

Utilizing data from a sample survey that were collected from urban, semi-urban, and rural areas of Egypt, Rizk 5 found that there was an inverse relationship between socio-economic class and fertility level in urban areas but not in rural areas, and with weak differentials in semi-urban areas. He found that ideal number of children was also inversely related to class. In other studies 6 based on the same data, it was found that family limitation practice in rural areas was nil, the frequency of attempted birth control increases as the educational level increases both in urban and semi-urban areas 7 and finally, that the proportion of controllers was larger in urban than in semi-urban areas in each educational level.

M. A. El Badry, «Some Aspects of Fertility in Egypt», Milbank Mem. Fund Quarterly (1965), Vol. 34, pp. 22—43.

^{2.} Ibid, pp. 22.

M. A. El Badry, «Trends in the Components of Population Growth in the Arab Countries of the Middle East: A Survey of Present Information», Demography, Vol. 2, 1965, pp. 140—186.

^{4.} Ibid.

H. Rizk, «Fertility Patterns in Selected Areas in Egypt», Ph.D. dissertation, Princeton Naiversity, 1959.

^{6.} H. Rizk, «Social and Psychological Factors Affecting Fertility in U. A. R.», Journal of Marriage and Family Living, Vol. XXV, Feb 1953. Also M. A. El Badry and H. Rizk, «Regional Fertility Differences among Socio-economic Groups in United Arab Republic», United Nations World Population Conference, 1965, Vol. II, pp. 137—141.

^{7.} Ibid, El Badry, pp. 141.

Another study by Khalifa s in 1971 showed that there is a clear inverse relationship between modernization and fertility behaviour. All variables namely, wife's and husband's education, family income, husband's occupation, wife's status, ownership of modern durables, and access to mass media, all contributed significantly to fertility differentials.

It was found in 1960, that the age-sex adjusted birth rate in urban was 46.6 against 47.2 for rural areas. This indicates that urban fertility is slightly lower than rural fertiaity. The differences is only 0.6 birth per 1000 population. This index, perhaps, measures correctly the nature of rural-urban differences in Egypt.

Table (II-3) below shows the average number of live births by educational attainment of mother and duration of married life in Egypt in 1960.

From table (II-3) we find a significant difference between educational groups, especially after the first five years of marriage, these differences show that there is an inverse relationship between education and fertility level as measured by the average number of children everborn. This relationship becomes stronger as duration of marriage increases.

TABLE
Average Number of Live Births by Educational Attainment of Mother and Duration of Married Life in Egypt (1960 Census)

Educational	D	uration o	of Marrie	d Life		m-4-1
Attainment	Less than	5 5—9	10—19	20—29	30 or more	Total
Illiterate Able to read	.7	2.5	4.8	6.3	6.7	4.2
& write Intermediate	.8 e	2.9	5.0	6.2	6.0	3.7
certificates	.8	2.4	3.6	4.4	4.7	2.1
Univ. degree	e .7	2.1	2.9	3.1	3.7	1.0
Total	.8	2.6	4.8	6.3	6.7	4.1

^{*} Source: C.A.P.M.A.S. Population and Development, Cairo, June 1973.

^{8.} Khalifa, A. M., «Differential Fertility in Egypt: A multi-variate Analysis», an unpublished Ph. D. dissertation, U. N. C. Chapel Hill, 1971.

^{9.} K. C. Zachariah, «Geographic Variations of Fertility Rates in Arab Countries», in op. cit., CDC, Cairo, 1971.

(B) MORTALITY

As indicated in chapter one, the crude death rates were decreasing up till 1945, then started to decline due to the improving of medical services and public health.

Egypt, then can be considered in the second phase of the demographic transition, i.e., declining death rates without being accompanied by a corresponding decline in the birth rates, and hence this has led to a steady increase of the population.

The age and sex pattern of mortality can be shown in table (II-4) and Figure (II-1) below. (See detailed table in appendix).

From table (II-4), we notice that there has been an obvious and gradual drop in the death rates among the different age groups during the period 1945-1970 and a further decreases especially in the younger age group and particularly among infants as a result of the increased medical care, preventive hygiene, and improved nutrition for mother and child.

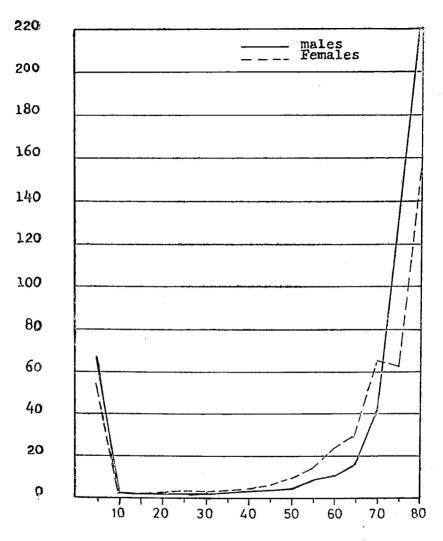
The pattern of mortality by age shows that mortality levels reach its minimum in the age group (10-14), then gradually increases till the age group (60-69), then rises sharply thereafter.

As usually expected, mortality rates for males are relatively higher than that for females. This is true for almost all age groups Table (3) in the Appendix shows the crude death rates in Egypt from 1930 till 1970 for each of males and females.

	TA	BLE	(II	4)		
Age Specific	Death	Rates	in	Egypt	(1930-	-1970)

Years	Infant mortali	ity 1—24	25—44	4565	64 more
1930	151 .	17.5	8.1	18.8	93.9
1940	162	19.4	8.6	18.8	115.5
1945	153	19.9	10.1	23.7	105.8
1950	130	12.1	5.6	12.4	90.0
1955	136	12.2	3.1	10.2	90.0
1960	109	10.9	3.8	11.8	103.4
1965	113	7.2	3.1	10.9	86.1
1970	116	8.4	3.5	14.0	108.0

^{*} Source: C. A. P. M. A. S., «Vital Statistics for A.R.E. from 1930, Cairo. July 1968.



Measures of Mortality Around Birth.

In Egypt as in most developing countries, the first year is one of the periods of life in which mortality is highest; it is also the period in which real improvement should be possible. At the beginning of this century the infant mortality rate reached 400 per thousand due to this ill health and the spread of epidemics and poverty, but it decreased to 151 in 1930, then to approximately 120 in 1965-1970 and it reached 116 in 1970. Infant mortality is proved to be correlated with age, it has its maximum just after birth, then it decreases rapidly in the next weeks and months.

Neo-natal and still-birth death rates had not shown much change from 1930 till 1970, as may be noticed from table (II-5), but we should note that the data in this respect in Egypt suffer a great deal of misreporting and under-registration.

TABLE (II-5)

Neo-natal and Still-birth Death Rates
in Egypt (1930-1970)

Years	Neo-natal death rates	Still-brith rates
1930	20.1	7.6
1940	18.4	7.7
1945	21.4	7.7
1950	20.2	6.9
1955	20.9	8.5
1960	19.3	7.9
1965	22.2	8.3
1970	19.9	7.7

^{*}Source: «Vital Statistics for A.R.E. from 1930», C. A. P. M. A. S., Cairo. July 1968.

It must also be noticed that the life expectancy is increasing for al age groups for both males and femals. This can be shown in Table (II-6) below.

TABLE (II—6)
Life Expectancy by sex and some Selected Years of Age *

Census Y	ears		Males	3	F	'emales			
	0		5	10	20	0	5	10	20
1937	35.7	50.4	47.4	39.8	4.21	5.83	45	.5	46.1
1947	39.6	51.8	48.6	40.6	42.5	54.0	50	.8	43.0
1960	46.2	55.6	51.9	45.9	57.2	57.8	54	1.2	45.9
1966	48.5	56.9	53.1	44.5	48.5	59.3	55	.5	47.0

^{*} Source : Ibid, C. A. P. M. S. S. 3 C. S. C., op. cit. U. A. R., 1962.

From table (11-6) above, we can see that the longevity record for females has always been longer than that for males. Furthermore, we notice that the life expectation for those who reached the ages 5 or 10, and sometimes 20 is more than that of the new born. This is a fact in most developing countries and the reason for it is the higher infant mortality rates. (See details in Table (5) in Appendix).

(C) INTERNATIONAL MIGRATION

International migration has never been an important factors in population growth throughout the modern areas in Egypt.

Data about international migration began to be collected systematically in 1965. The available data (1966-1970) show a clear upward trend. Table (II-7) below shows emigration during the period 1965-1970 for the main emigrants and their accompaning ones.

TABLE (II—7)
External Migration during 1965—1970

Year	Main	Emigrants	Accompaning Emigrants	Total
1965		715	754	1469
1966		1129	1235	2364
1967		1152	1437	2589
1968		1775	1861	3636
1969		3118	2527	5645
1970*		1707	1170	2877

^{*}Provisional

From Table (II-7), we notice that the year 1969 was the most active. The trend shows that increasing numbers of Egyptians prefer to emigrate and settle abroad. We shall concentrate on studying their differentials on the year 1969 where most data are available.

i) Emigrants by Age and Sex: Table (II-8) below shows a distribution of emigrants by sex and type in 1969.

TABLE (II—8)

Distribution of Emigrants in 1969 by Sex and Type*

Type	Males	Females .	Total	%
Main	2625	493	3118	55.2
Accompaning	. 816	1711	2527	44.8
Total	3441	2204	5645	100
%	61	39	100	-

^{*} Source: Public Mobilization and Statistics, by C. A. P. M. A. S., No. 75, 1970.

From Table (II-8) above we notice that, in 1969, main emigrants constituted a little more than one half of total emigrants, this means that each emigrant accompanies about one other person on the average.

As expected most of the main emigrants are males and most of accompaying emigrants are females. For total emigrants about 60% are males and less than 40% are females.

Regarding age of emigrants we notice that about 60% of the total emigrants were less than 30 years old. About 25% of them were in the age group 30-39, a very low percentage were more than 40.

ii) Emigrants by Receiving Countries: United States, Australia, and Canada were in that order the most preferable countries by Egyptian enigrants in 1969. About 99% of the emigrants in 1969 chose these three countries as their destination as compared to 90% in 1968.

The main change is the changing order for these three countries. U.S.A. became first only in 1969, where as Canada was always first for the previous seven years. Australia became second in 1969, where as it was third during the previous seven years.

iii) Emigrants by Marital Status: Though most emigrants of 1969 were singles (56%), married emigrants constituted about 41% of them. The remaining small percentage of them (3&) were either divorced or widowed.

TABLE (II—9)

Percentage of Emigrants Distribution by Country of Destination for each Education Attainment

(1968 - 1969)

Qualification	United	United States	Australia	ralia	Canada	ıda	Brazil	zil	Others	I.S	uotal	al
	1968	1968 1969	1968	1969	1968 1969	1	1968 1969	1969	1968	1968 1969	1968	1969
Post-Higher Education	62.0	62.0 86.9	9.8	7.4 21.7	21.7	5.7	6.5		1	1	100.0	100.0
Higher Education	49.2	84.8	13.4	7.1	20.5	7.8	9.91	0.3	0.3	1	100.0	0.001
Intermediate Education	7.3	25.3	27.8	46.0	54.7	27.0	9.6	1.1	9.0	9.0	0.001	0.001
Below Intermediate Education	6.9	21.1	27.5	48.9	56.5	27.9	6.1	2.1	3.0	1	100.0	100.0
Others	12.7	22.8	28.1	47.4	46.5	29.8	12.7]	1	1	0.001	0.001
Unqualifified Persons	7.6	16.0	28.9	47.2	58.2	34.5	5.0	1.0	0.3	1.3	0.001	100.0
Total of Main Emigrants	29.7	61.0	20.4	22.1	37.6	0.91	11.7	9.0	9.0	0.3	29.7 61.0 20.4 22.1 37.6 16.0 11.7 0.6 0.6 0.3 100.0 100.0	100.0

* Source: C.A.P.M.A.S., Population and Development, op. cit.

iv) Emigrants by Educational Status: From Table (II-10) below we can notice that most main Egyptian emigrants are highly educated — more than 60% had a university degree or more. Only 12.7% were uneducated. The U.S.A. has the highest share of educated emigrants (85%), followed by Australia, then Canada. Most of the uneducated emigrants go to other countries, mainly to Europe. The same conclusions apply to accompanying emigrants. The educational status of the Egyptian emigrant was increasing between 1962 and 1970 on the average. This evidenced by the increasing percentage of university-educated (or more) emigrants from less than 10% in 1962 to more than 60% in 1970.

TABLE (II—10)

Precent Distribution of Main Migrants According, to Education and Country of Destination in 1969

Country	Above Univ. Level	Univ. Level	Others	No. for— mal Edu	Total
U.S.A.	5.6	81.2	9.9	3.3	100
Australia	1.3	18.7	5.3	2.7	100
Canada	1.4	28.6	42.8	27.2	100
Others		21.4	46.5	32.1	100
Total	3.9	. 58.4	25.0	12.7	100

^{*}Source: C.P.M.A.S., Pop. and Dev., op. cit.

CHAPTER III

POPULATION COMPOSITION

(A) AGE AND SEX COMPOSITION

The composition of the population according to age and sex reveals several important aspects and characteristics of the country. It shows. among others, the size of labour force, the burden presented by children and aged persons on the productive portions of the population and on the government and the percentage of females in the reproductive ages. In fact categories by age and sex have their special needs of consumtion goods and social and medical service of all kinds. centration will be made on the analysis of age and sex compositions obtained from census tables. A sufficiently large period of time is permitted, beginning with the 1917 population census and ending at the last complete census undertaken in 1960. In addition, the estimated age-sex distribution in 1970 will be considered. It should be noted that census data related to that period suffered many deficiences. must be aware of these deficiences. It was preferred in the present context to deal with data as it is taken from adjusted census tables except for the slight change occurring as a result of reclassification of age groups to be of five years intervals in all censuses considered.

Regarding the relative age distribution of the total population, we notice that the proportion of population at the young ages (0-14) fluctuated a little during the period 1917-1947. It ranged around forty percent of the total population. The biggest change that happened in that proportion was 1960, where it reached about 43 percent. However, the proportion of children under ten years old declined regulary, though very slightly, with the exception of 1960 where the proportion of this proup acquired a 3.3 percent increase above the average of the preceding censuses. This pattern of change in the proportion of children is attributable to the steady decline in the infant mortality rate and the relative stability of the birth rate.

In 1970, we notice that the estimated proportion of children is below that recorded in 1960 with about one-half percent. But it still has a higher level than in other censuses. For further explanation of this difference between the levels of 1960 and 1970, we see that the proportion of children less than five years of age in 1970 exceeds the corresponding proportion of 1960. But the amount of decrease in the proportion of children in the age group 5-14 was higher than the amount of increase in the proportion of children in the first age group (0-4).

On the other hand, the proportion of population at the oldest ages (sixty-five years and over) was always decreasing during the period 1917-1947. It started at a maximum of 5.28 percent and reached a minimum of 3.10 percent. But the percentage of aged persons in 1960 was higher than that of 1937 and lower than the corresponding percentages in the preceding years. In 1970, the estimated proportion of old individuals has a value less than those attained in the censuses under consideration, except of 1937 where it was at a minimum level as mentioned before. This low level of that proportion in 1970 was mostly attributed to the drop in the proportion of persons in the age category seventy and over age categories.

The pattern of change in the proportion of population at medium ages (15-69 years old) was nearly the same as that taken place in the proportion of population at young ages but in opposite directions, i.e., when the proportion of children decreases, that adults increases and vice versa. More specifically, small fluctuations in the proportion of adults were observed during the period 1917-1947. The largest amount of change in this proportion took place in 1960 where it reached a minimum level of about 45 percent during the whole period 1917-1960. The relative decline pertained in this age category was almost equal to the relative increase in the young age category in the same year 1960.

When considering the age composition estimated for 1970, we find that the proportion of individuals in the age group 45-69 was lower than that of 1960. Since the amount of decrease in the second age group (45-64) was lower than the amount of increase in the first age group (15-44). Then the recorded level of the percentage in the whole age group 15-64 in 1970, was over the corresponding level of 1960.

In general, it could be noticed that the age composition of the population of Egypt has remained more or less the same throughout the period 1917-1970 with minor fluctuations. It is said to have a rather stable shape and this is the case of all developing countries with rather highly constant birth rates and rather slightly decreasing death rates.

The consequences of the mentioned slight changes in the relative age distribution appeared in the levels of the median age of population. The fluctuations in the median age consistent with those occurred in the relative age distribution during the same period. In 1960, the median age was at its lowest level of 19.37 years. That resulted when the proportion of children reached a maximum, the proportion of adults reached a minimum, and that of aged persons was very close to minimum. The median age of population at the year 1970 did not vary much a slight excess in the median was computed for 1970.

TABLE (III-I)

Percentage Distribution by Broad Age Categories and Median Age in Egypt
(1917-1970)

Years -	Pere	Madian Am		
iears -	0—14	15—64	65 ÷	Median Age
1917	39.01	55.71	5.28	20.97
1927	38.68	56.83	4.49	21.38
1937	39.20	56.50	4.30	21.67
1947	38.07	58.83	3.10	21.28
1960	42.75	53.78	3.47	19.37
1970	42.40	54.40	3.20	20.01

It is noteworthy that the ratio of males to females is almost on par under ordinary conditions. However, the number of males for every hundred females, which is termed sex ratio diffens in respect to every age-group. Thus in the early age-group it is above one hundred, on account of the bigger number of new-born males.

When considering the relative age distribution of population by sex in Egypt during the same period 1917-1970, we notice that the proportion of female children under fifteen years of age was always below the corresponding proportion of male children.

As shown in table (III-2), the sex ratio for the young age group was 107 in 1960. On the other hand, the proportion of female adults (15-64 years old) was higher than the corresponding proportion of male adults. The sex ratio was decreasing throughout the whole period. period. The percentage of old women was always higher than that of old men, but they were less fluctuating than those of other age groups. Consequently, the female population had always a median age over that of male population, though the median for both sexes has rather lowering trends throughout the period studied.

The age composition of the population in rural regions differ from under 15 is less in rural areas by 1.3% than in urban areas. This its correspondent in urban areas. Thus the proportion of the group difference is due to the decrease of the proportion of females in rural areas below the urban areas. The contrary, being with respect to males. It is quite likely that the low proportion of females in rural areas, in comparison with males and their low rate in comparison with urban areas, is due to omissions of recording in the census operations. It is only a superficial decrease and may be due to a certain degree, to less hygienic care for new-born females than for males, which may be attributed to certain regional beliefs. It may also be due to emigration of females to the cities for work in household service.

TABLE (III-2)
Sex Ratios by Principal Age Groups in Egypt (1960)

ge Groups	E G	18	
ge Groups	Rural	Urban	Tota
Less than 15	109	104	107
15 — 44	96	102	98
45 — 64	91	111	97
65 & over	82	96	. 86
All age	82	96	86

The proportion of the 15-44 age-group is likewise less in rural areas than in towns, being 39.8% in rural areas against 41.47 in towns. This is also probably due to emigration of males of working age from rural areas to towns. This is compensated by the slight decreases in the proportion of males to females in rural regions.

(B) MARITAL STATUS

In Egypt the minimum legal age for marriage is 16 for females and 18 for males. The majority of females get married below the age of 20 and males between 20 and 30. The average age at marriage of females was 20.1 and for males was 26.3 in in 1969, as compared to 19.8 for females and 26.7 in 1963.

According to the 1966 census about 19% of the population of marriagable age were never married as compared to almost 70% married, 1.2% divorced and about 10% widowed. Generally speaking, the percentage of never married males is higher than that for females (24.3% and 14.6% respectively). We also notice that there were more widowed (16.6%) than widowers (2.0%). Furthermore, from table (III-3) we notice that the percentage of married and widowed persons are higher in rural than urban, while the percentage of never married is higher in urban than rural areas.

Table (III-4) below shows the percentage distribution of females of marriageable age by age groups and marital status according to the 1966 census.

TABLE (III-3)

Numerical and Percentage Distribution of the
Population of Marriageable Age by Marital Status and
Sex in Egypt in 1966

Mouito S	Status	Urban		Rural		Total		
Marita S	otatus —	Number	%	Number	%	Number	%	
Never M	I ales	917940	29.2	894275	20.7	1812215	24.3	
Married	Females	659964	19.9	556626	11.1	1216590	14.6	
	Total	1577904	24.4	1450901	15.5	3027705	19.2	
	Males	2147365	68.4	3294136	76.3	5441501	73.0	
Married	Females	2155136	64.8	3447071	68.6	5602207	67.1	
2000	Total	4302501	66.5	6741207	72.2	11043708	69.9	
	Males	22998	-0.7	39177	-0.7	52175	-0.7	
Divorced	Females	60972	1.8	79054	1.6	140026	1.7	
	Total	83970	1.8	79054	1.6	140026	1.7	
	Males	52809	1.7	97210	2.3	150019	2.0	
Widowed	l Females	449317	13.5	938090	18.7	1537426	9.7	
	Total	502126	7.8	1035300	11.1	1537426	9.7	
	Males	3141112	100.0	4314798	100.0	7455910	100.0	
Total Fe	emales	3325389	100.0	5020941	100.0	8346230	100.0	
	Total	6466501	100.0	9335639	100.0	15802140	100.0	

From Table (III-4) we notice that almost 81% of females were married before the age 30, only 16% were never married. The percentage of widowed females is increasing by age, for women 60 or more, more than 72% were widowed.

According to 1966 census, as shown in Table (III-5) we find that more than 72% of illiterate population in marriageable age are married as compared to 37% for those with intermediate education and about 62% for those with university education or more. The highest percentage of widowed is among the illiterates (12.7%). Only 13.4% of the illiterates were never married as compared to 24%, 62%, and 37% for those who read and write, with intermediate and university education or more, respectively.

TABLE (III-4)
Percentage Distribution of Females of Marriageable
Age by Age Groups and Marital Status (1966)

Age Groups	Never Married	Married	Div	orced	Widowed
Less than 20	69.78	29.29	0.76	0.17	100.00
20 —	15.96	80.86	1.94	1.24	100.00
30	3.14	89.91	1.93	5.02	100.00
40	2.06	80.05	1.84	16.05	100.00
50 —	2.11	58.21	1.74	37.94	100.00
60 or more	2.46	23.85	1.31	27.38	100.00

TABLE (III-5)
Percentage Distribution of the Population of Egypt
by Marital Status (1966)

Marital Status	Illiterates	Read	&	Write	Intreme- diate Edu- cation	E	niversity lucation
Never Married		13.4		24.0	61.5	4	36.8
Married		72.5		72.2	37.1		61.5
Divorced		1.4		0.9	0.6		0.7
Widowed		12.7		2.9	0.8		1.0
Total		100.0		100.0	100.0	•	100.0

Egypt is characterized by relatively high rates of marriage and divorce. The crude marriage rate was 9.7% on the average during the period 1952-70. With the exception of 1961, 1962, and 1967 in which rates were 8.6%, 8.5% and 7.3% respectively, the rates ranged between 9.1% and 10.8%. In the preceding ten years 1942-1951, it had varied between 13.1% and 15.6% with an average of 14.5%. These figures show a declining trend of marriage rates in recent years. This may be due to increasing urbanization and education. Tabl (9) in the appendix shows marriage and divorce rates in Egypt during the period 1947-1970.

(C) HOUSEHOLD AND FAMILY

In Egypt, the male is recognized, where the referent of lineage tracing is patrilineal. It is common, to some extent that nuclear families units along the husband's family of orientation. Patrilocality, though diminishing, is still common, though neolocality is more prevalent to day in Egypt.

According to a sample survey in 1973, it was faund that extended families constitute only 9% of the Egyptian families.

On the average, a mother ends her reproductive period by 6.94% ever born alive children. The family tends to be nuclear and the number of children still alive tends to decrease as the education of wife increases. (Table (10) in the Appendix).

TABLE (III-6)

Average for Family and Household Sizes in Egypt (1966) *

Areas	Aver. family size	Aver.household size
Metropolitan	5.09	5.45
Upper Egypt	5.00	4.60
Lower Egypt	5.67	5.56
Frontier Gov.	9.00	8.80
Total	5.28	5.16

^{2.} Khalifa, A. M., «Status of Women in Relation to Fertility and Familty Planning in Egypt», NCSCR, Cairo, 1973, (memograph).

^{3.} Ibid, pp. 119

Table (III-6) below shows the average family size and the average household size in some selected areas in Egypt.

According to 1960 census we find that about 34% of households were small (3 or less persons) while about 41% of the households were ranging between 4 to 6 persons, only 26% of households were 7 or more persons. In rural areas 31% of the households were large as compared to 31% of the small households.

TABLE (III-7)
Distribution of Households According to
Size in Egypt 1960

	Size	Drban	Rural	
•	1—3	33.5	30.6	
	4—6	40.5	38.3	
	7 or more	26.0	31.1	

(D) EDUCATION

Education is one of the most important indices for the progress and modernization of a society. Most developing countries suffer from the fact that a high proportion of the population is illiterate. In Egypt. the situation is gradually improving. Table (III-8) below shows the trends of the proportion of illiterates since 1937 census by sex.

TABLE (III-8)

Percentage of Illitrates to Total Population

10 Years and Over

•	Census	Males	Females	Total	
	1937	76	94	85	
	1947	65	84	75	
	1960	56	83	71	
	1966	52	79	65	

From Table (III-8), it is clear that illiteracy is far more prevelant among females than among males throughout the whole period 1937-1966. While almost 94% of females were illiterates according to 1937 census, only 76% of males were illiterates. The downward trend of the proportion of illiterates is faster among males than among females, during the 30 years period, illiteracy decreases from 76% to 52% among males while it decreased from 94% to 79% among females. In general the illiteracy rate is very high in Egypt and it is more severe among females than among males.

It is also evident that the rate of illiteracy is lower in urban areas than in rural ones. The rate of illiteracy in urban areas was about 45% in 1966, while it was as high as 80% in rural areas.

Egypt now goes through an educational revolution in regard to number of students enrolled or number of schools. In about 5 years (1966-66, 1970-71) the number of pupils in all the stages of education increased at a rate of 120%. However, the increase in the school enrollment was not accompanied by a similar increare in the number of teachers. We find that the number of pupils per teacher has a tendency to raise up. For example, for preparatory schools this index was 21 in 1955 against 30 in 1970-71. Females do enroll in all education stages in increasing proportions.