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THE POPULATION OF EGYPT

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THE POPULATION OF THE ARAB REPUBLIC OF EGYPT

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The views expressed in this publication are these of the authors and not necessarily those of either the United Nations or the authorities concerned in the Arab Republic of Egypt.

THE POPULATION OF THE ARAB REPUBLIC OF EGYPT

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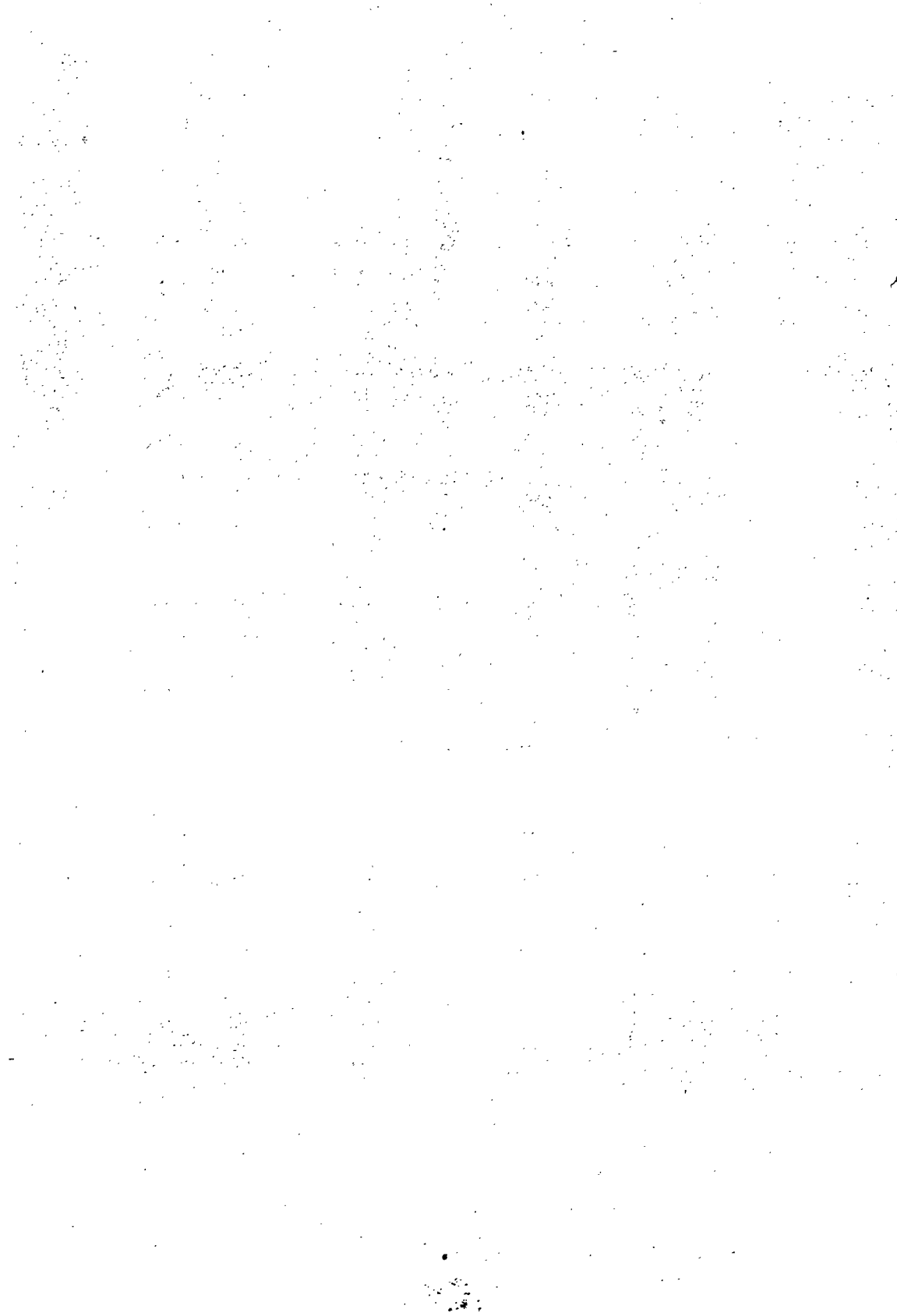
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ATEF M. KHALIFA



THE POPULATION OF ARAB REPUBLIC OF EGYPT

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FOREWARD

The population problem is now one of the most acute one in the world. People who are concerned with the economic and social development of nations are at the same time concerned with population growth.

When CICRED invited us to write the present monograph, we welcomed the idea. In fact, we felt for long that the population issue needed a systematic look within an international framework. We also feel very happy that we are contributing to the World Population Year (1974).

The present monograph was written by our staff in the Demography Unit of the Institute of Statistical Studies & Research. Dr. Atef Khalifa has presented a systematic and comprehensive view of the population growth trends in the past and its projections in the future. The present monograph deals with many issues in regards to population composition, population distribution and internal migration, the labour force, population projection, and finally economic and social implications and policy.

Our appreciation and thanks, must go to CICRED and in particular Professor JEAN BOURGEOIS-PICHAT, Chairman, who offered us the chance.

A.E. SARHAN, Dean
Institute of Statistical
Studies & Research.

Oct., 1973.

Chapter VII

ECONOMIC & SOCIAL IMPLICATIONS & POLICY

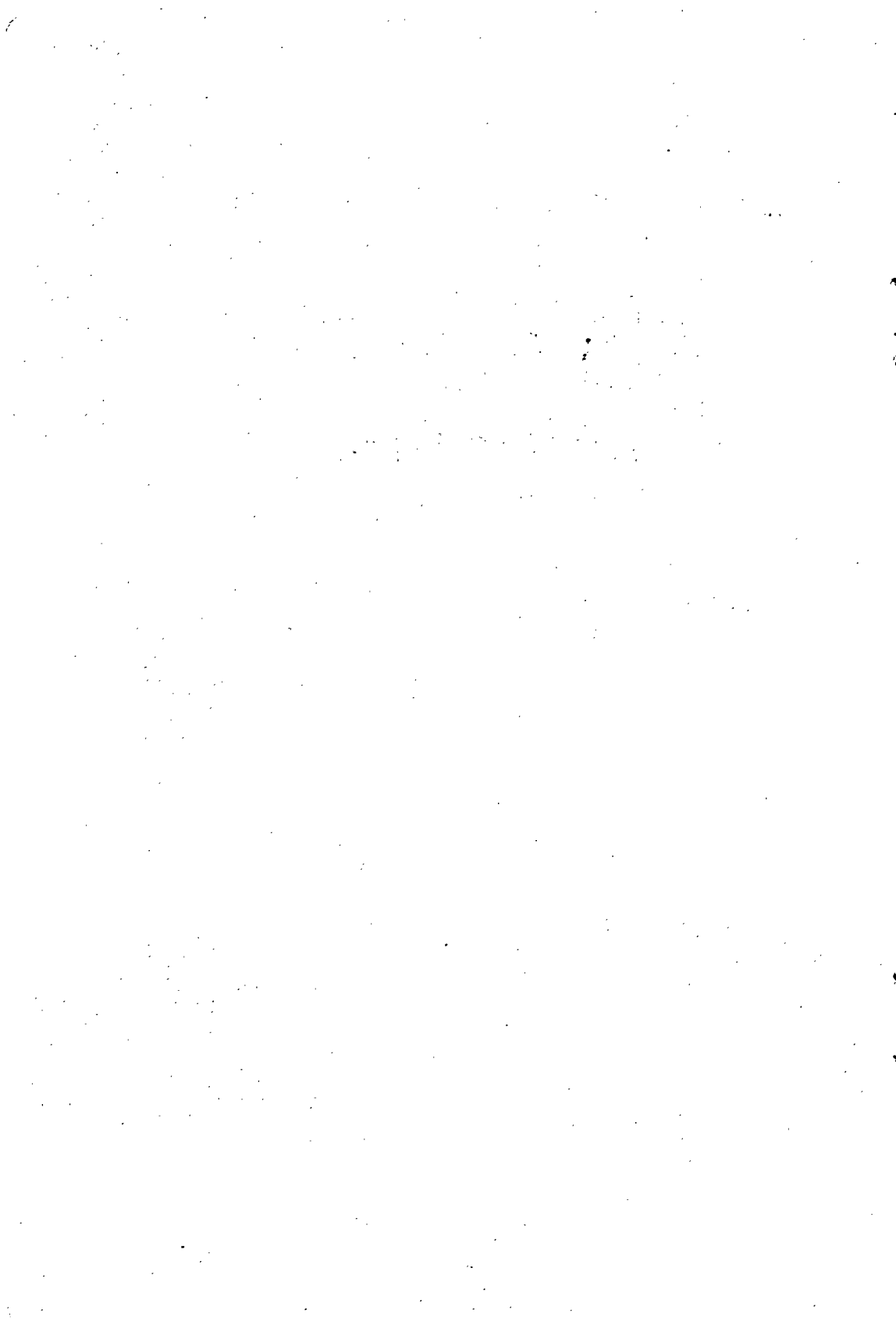
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CHAPTER I

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. The 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. 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,^{2/} or the previous earlier estimates were exaggerated.

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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. Spengler and O.D. Duncan (eds), Demographic Analysis : Selected Readings, Glencoe, Ill : The Free Press, 1957.

In 1843, an estimate based on a census of houses showed Egypt's population to be 4.5 millions.^{3/} This suggests that there might have been an increase of roughly 2 millions 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. Two more 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 consistent, and from 1907 to 1937 are nearly constant. A sudden rise is 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 us to accept the 1947 enumeration as correct.^{5/} Assuming that the growth curve of the population of Egypt is approximately

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3. Institute of National Planning, "Problems of Under-employment in rural Egypt", Report A., Cairo, 1968, pp.6.
 4. M.A. El Badry, "Some Demographic Measurements for Egypt Based on Stability of Census Age Distribution", Milbank Memorial Fund Quarterly, 1955, pp.268-305.
 5. 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.

a parabola, it was found that the 1947 total population as estimate from a parabola fitted to 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 Intercensus Years***

Year	Population (000 s)			Annual rate of growth
	Male	Female	Total	
1882	3345	3367	6712	-----**
1897	4914	4755	9669	2.9
1907	5917	5573	11191	1.6
1917	6369	6349	12718	1.3
1927	7057	7120	14178	1.1
1937	7967	7954	15921	1.2
1947	9392	9575	18967	1.9
1960	13118	12967	26085	2.6
1966	15176	14900	30076	2.6

*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.

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 (I-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 43.8 in 1961 to 38.2 per thousand in 1968.

While the birth rate has shown this relative stability, the death rate has rapidly declined from 28 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).

7. Central Statistical Committee, "Population Trends in the U.A.R.", Cairo, 1962.

The main reason for this decline of ~~gross~~ 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.

Table I-2

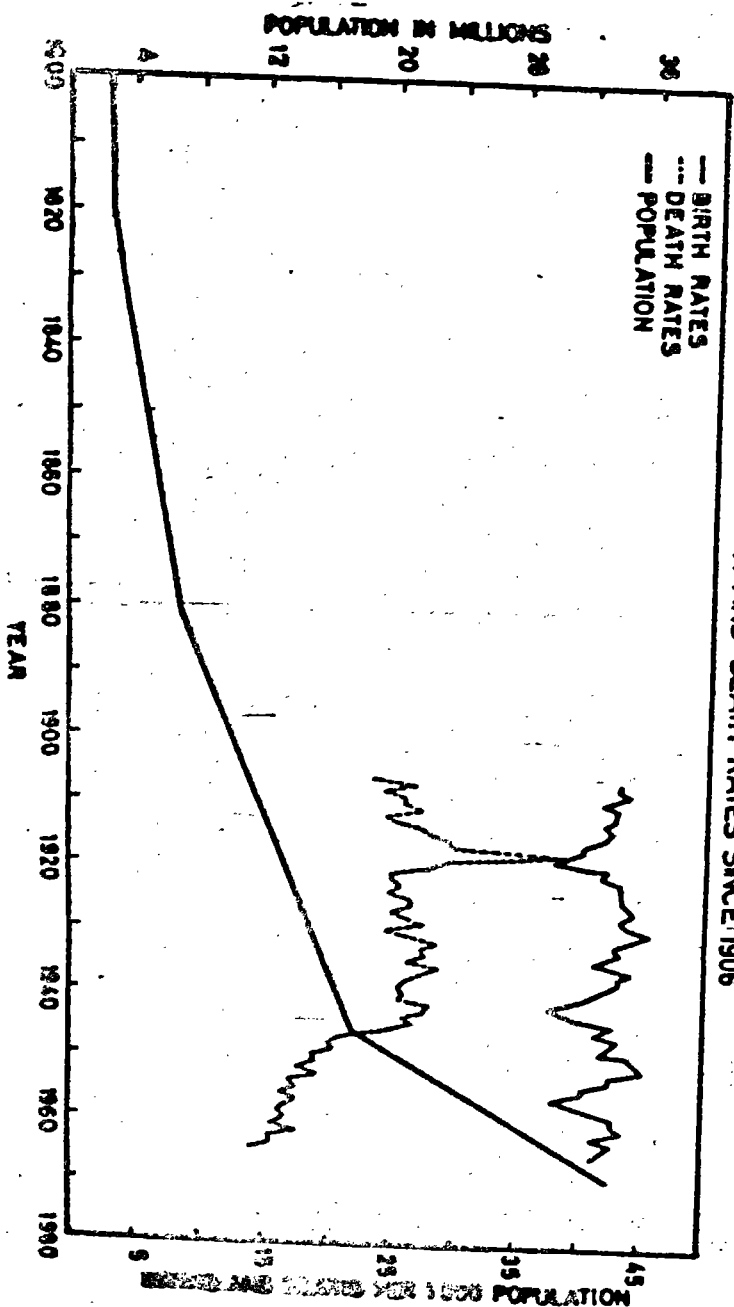
Birth and Death Rates in Egypt (1906-1970)

Years	Birth rates	Death Rates	Growth Rates
1906-1909	43.0	25.5	17.5
1910-1914	42.0	26.2	15.5
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
1950-1954	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 influenza epidemic that account for the high death rate and low birth rate.

EGYPTIAN POPULATION GROWTH SINCE 1800 AND ANNUAL BIRTH AND DEATH RATES SINCE 1906



Source: Abdel N. Omran, "The Epidemiological Transition", *SPREN*, Vol. 6, No. 2, 1972

CHAPTER II

COMPONENTS OF GROWTH

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

A) FERTILITY

- 1) 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 the 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)

Age group	ASFR		Change	
	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
35-39	215.8	198.0	-17.8	-8.2
40-44	118.1	110.7	-7.3	-6.2
45-49	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 has 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 5552 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 preceeding period. The mean and median order were 3.4 in 1966. (see detailed in table (1) in the appendix).

Table (II-2)
Indices of Fertility in Egypt

1958 - 1969

Year	GFR ‰	TFR	GRR
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 Fertility Trends and Differentials 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

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

2. Ibid, pp.22.

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 inefficient 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/}

3. 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.

5. H. Rizk, "Fertility Patterns in Selected Areas in Egypt", Ph.D. dissertation, Princeton University, 1959.

6. H. Rizk, "Social and Psychological Factors Affecting Fertility in U.A.R.", Journal of Marriage and Family Living, Vol.XXV, Feb. 1963. Also M.A. El Badry and H. Rizk, "Regional Fertility Differences among Socio-economic Groups in the United Arab Republic", United Nations World Population Conference, 1965, Vol.II, pp. 137-141.

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.

Another study by Khalifa^{8/} 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 fertility. The difference is only 0.6 birth per 1000 population. This index, perhaps, measures correctly the nature of rural-urban differences in Egypt.^{9/}

7. Ibid, El Badry, pp.141

8. Khalifa, A.M., "Differential fertility in Egypt : A multi-variate Analysis", an unpublished Ph.D. dissertation, U.M.C. Chapel Hill, 1971.

9. K.C. Zachariah, "Geographic Variations of Fertility Rates in Arab Countries", in op. cit., CBC, Cairo, 1971.

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 ever-born. This relationship becomes stronger as duration of marriage increases.

Table (II-3)

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

Educational Attainment	Duration of Married Life					Total
	Less than 5	5-9	10-19	20-29	30 or more	
Illiterate	.7	2.5	4.8	6.3	6.7	4.2
Able to read & write	.8	2.9	5.0	6.2	6.0	3.7
Intermediate certificates	.8	2.4	3.6	4.4	4.7	2.1
Univ. degree	.7	2.1	2.9	3.1	3.7	1.8
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.

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.

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

Years	Infant mortality	1-24	25-44	45-65	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	105.3
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 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.

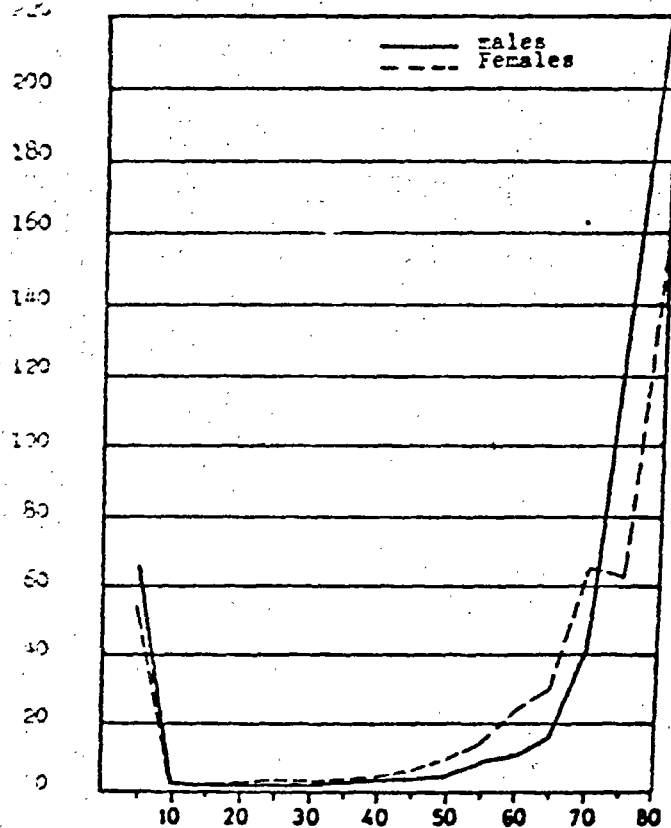


Fig. (II-1)

Age Specific Death in Egypt in
1968

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 all age groups for both males and females. This can be shown in Table (II-6) below.

Table (II-6)

Life Expectancy by Sex and some Selected Years of Age*

Census Years	Males				Females			
	0	5	10	20	0	5	10	20
1937	35.7	50.4	47.4	39.8	42.1	58.3	45.5	46.1
1947	39.8	51.8	48.6	40.6	42.5	54.0	50.8	43.0
1960	46.2	55.6	51.9	45.9	46.2	57.8	54.2	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.A.S. & C.S.C., op.cit. U.A.R., 1962.

From table (II-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 factor in population growth throughout the modern areas in Egypt.

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

Table (II-7)

External Migration during 1965-1970

Year	Main Emigrants	Accompanying 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.

1) 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
Accompanying	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 accompanying emigrants are females. For total migrants 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 emigrants in 1969. About 99% of the emigrants in 1969 chose these three countries as their destination as compared to 90% in 1962.

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.

- 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

Table (II-9)

Percentage of Emigrants Distribution by Country
of Destination for each Education Attainment
(1968 - 1969)

Qualification	United States		Australia		Canada		Brazil		Others		Total	
	1968	1969	1968	1969	1968	1969	1968	1969	1968	1969	1968	1969
Post-Higher Education	62.0	86.9	9.8	7.4	21.7	5.7	6.8	-	-	-	100.0	100.0
Higher Education	49.2	84.8	13.4	7.1	20.5	7.8	18.6	0.3	0.3	-	100.0	100.0
Intermediate Education	7.3	25.3	27.8	46.0	54.7	27.0	9.8	1.1	0.6	0.6	100.0	100.0
Below Intermediate Education	6.9	21.1	27.5	48.9	56.5	27.9	6.1	2.1	3.0	-	100.0	100.0
Others	12.7	22.8	28.1	47.4	46.5	29.8	12.7	-	-	-	100.0	100.0
Unqualified Persons	7.6	16.0	28.9	47.2	58.2	34.5	5.0	1.0	0.3	1.3	100.0	100.0
Total of Main Emigrants	29.7	61.0	20.4	22.1	37.6	16.0	11.7	0.6	0.6	0.3	100.0	100.0

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

the increasing percentage of university-educated (or more) emigrants from less than 10% in 1962 to more than 60% in 1970.

Table (II-10)

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

Country	Above Univ. Level	Univ. Level	Others	No. for- mal Educ.	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	59.4	25.0	12.7	100

*Source: C.P.h.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 labor 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 consumption goods and social and medical service of all kinds. A concentration 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 1953. 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 deficiencies. One must be aware of these deficiencies. 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 regularly, though very slightly, with the exception of 1960 where the proportion of this group 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.

Table (III-1)
Percentage Distribution by Broad
Age Categories and Median Age
in Egypt (1917 - 1970)

Years	Percentage distribution			Median Age
	0-14	15-64	65 +	
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	21.57
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

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.

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 differs 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. 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 its correspondent in urban areas. Thus the proportion of the group under 15, is less in rural areas by 1.3% than in urban areas. This 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

Table (III-2)

Sex Ratios by Principal Age Groups in Egypt (1960)

Age Groups	E G Y P T		
	Rural	Urban	Total
Less than 15	109	106	107
15 - 44	96	102	98
45 - 64	91	111	97
65 & over	82	96	86
All age	100	104	101

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.

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.^{1/}

1. C.A.P.M.S., Population and Development, Cairo, June 1973, pp.32-33.

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 1969, as compared to 19.8 for females and 26.7 in 1963.

According to the 1966 census about 19% of the population of marriageable 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 percentages 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.

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

Table (III-3)

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

Marital Status	Urban		Rural		Total	
	Number	%	Number	%	Number	%
Never Married						
Males	917940	29.2	894275	20.7	1812215	24.3
Females	659964	19.9	556626	11.1	1216590	14.6
Total	1577904	24.4	1450901	15.5	3028805	19.2
Married						
Males	2147365	68.4	3294136	76.3	5441501	73.0
Females	2155136	64.8	3447071	68.6	5602207	67.1
Total	4302501	66.5	6741207	72.2	11043708	69.9
Divorced						
Males	22998	-0.7	39177	-0.7	52175	-0.7
Females	60972	1.8	79054	1.6	140026	1.7
Total	83970	1.3	108231	1.2	192201	1.2
Widowed						
Males	52809	1.7	97210	2.3	150019	2.0
Females	449317	13.5	938090	18.7	1387407	16.5
Total	502126	7.8	1035300	11.1	1537426	9.7
Total						
Males	3141112	100.0	4314798	100.0	7455910	100.0
Females	3325389	100.0	5020841	100.0	8346230	100.0
Total	6466501	100.0	9335639	100.0	15802140	100.0

*Source: Census Data (1960).

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	Divorced	Widowed	Total
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	Inter- mediate Edu- cation	University Education
Never Married	13.4	24.0	61.5	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 preceeding 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. Table (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 unite along the husband's family of orientation. Patri-legality, though diminishing, is still common, though neolocality is more prevalent to day in Egypt.^{2/}

According to a sample survey^{3/} in 1973, it was found that extended families constitute only 9% of the Egyptian families.

On the average, a mother ends her reproductive period by 5.94% over 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).

2. Khalifa, A.M., "Status of Women in Relation to Fertility and Family Planning in Egypt", MCSER, Cairo, 1973, (memograph).

3. Ibid, pp.113

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

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

*Source: A.R.E. Annual Statistics for 1970, Cairo 1970.

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	Urban	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 Illiterates to Total Population
10 Years and Over

Census Year	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 prevalent 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 (1965-66, 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 increase 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 1955-56 against 30 in 1970-71. Females do enrol in all education stages in increasing proportions.

CHAPTER IV

POPULATION DISTRIBUTION AND INTERNAL MIGRATION

Internal migration can be defined as the mobility of citizens from a certain geographical unit to another within the boundaries of the country, seeking for permanent residence in the new locality. This pattern of mobility affects to a great extent population growth, its age and sex composition, its social, economic and cultural structure and all other demographic characteristics of that population. The effects of internal migration on both the expelling and the attracting localities completely depend upon the characteristics of the migrants themselves. In the present chapter a description of population distribution and internal migration in Egypt will be presented. In addition description of the past and present trends in internal migration will be briefed.

Available data show that population growth has not been even in different geographical areas in Egypt. On the contrary, regional growth rates varied markedly resulting in a significant amount of population redistribution during this century. This can be seen from the regional population distribution. For instance, the proportionate share of lower Egypt increased from 59 to 64 percent of the total population between 1927 and 1966. The corresponding figures of Upper Egypt are 46 and 41 percent, respectively. The small share of frontier governorates increased from 0.6 to 1.1 percent. However, it may be added that within lower Egypt, the share of urban governorates increased from 13 to 23 percent, whereas the share

of non-urban governorates of the region decreased from about 47 to 41 percent during the same period. Table (IV-1) shows the increase in urban and rural population in census years 1907-1966.

Table (IV-1)

Population in Urban and Rural

Areas in Egypt in Census Years 1907-1966

Years	Urban Population	%	Rural Population	%	Total
1907	2125000	19	9058000	81	11183000
1917	2640600	21	10029700	79	12670300
1927	3715840	26	10367436	74	14083276
1937	4332093	28	11429001	72	15811094
1947	6202316	33	12603510	67	18805826
1950	9651097	37	16120368	63	25771465
1966	12036787	40	17687312	60	29724099

From table (IV-1) we notice the upward trend of urban population from 19% in 1907 to about 40% in 1966. A higher proportion of the increase is in metropolitan areas, and in particular Cairo and Alexandria. In 1927, Cairo's share of the total population was 7.6% it increased gradually to reach 14% in 1966. Similarly, Alexandria's share increased from 4.2% in 1927 to 6.0% in 1966. (See table (2) in Appendix for details).

Taking 1907 as a base = 100 we find that Cairo's size is 157 in 1927 and 617 in 1966. Similarly, Alexandria increased from 162 in 1927 to 509 in 1966. As shown in table (IV-2), the increase in other governorates was moderate. In Sharkia in Lower Egypt, it

became only 248 in 1966, and Menia (Upper Egypt) became 261 in 1966. This shows a more moderate increase as compared to that in metropolitan areas. The main reason is internal migration from rural to urban areas and in particular to the two main metropolitan areas of Cairo and Alexandria.

Table (IV-2)

Indices of Population Size in Cairo, Alexandria and
some Selected Governorates in Egypt in Census
Year (1927-1966)

Governorates	1927	1947	1960	1966
Cairo	127	308	494	617
Alexandria	162	266	429	509
Lower Egypt:				
Dakahlia	123	161	230	266
Sharkia	119	151	213	248
Upper Egypt:				
Menia	128	160	239	261
Qena	117	143	175	191
Total Egypt	126	169	231	267

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

Thus, Cairo and Alexandria's growth was more than twice the national growth. This means that Cairo, which is about 0.6% of the total inhabited area, has more than 14% of the population, while the two largest governorate of Sharkia (13.2%) and Behara (12.9%) contain only 7.1 and 6.6% of the total population respectively.

Metropolitan growth can then be shown through the very high po-

population densities. The population density in Cairo in 1971 was about 6584 per square kilometer. This density increased gradually to 19594 per square kilometer in 1966 which constitutes one of the highest densities in the world.—(See table (13) in Appendix). The next highest density is Alexandria which had a density of 6221 per square kilometer in 1966. Most of the other governorates had a density below one thousand. The total population density in Egypt had almost doubled from 410 in 1927 to 845 in 1966.

According to 1960 census data, approximately 22% of the total population live in cities of 100,000 and over. Egypt is dominated, in terms of the concentration of her population, by a few large cities are growing at a faster rate than the smaller ones.

From table (11) in Appendix, we see that during the decade 1927-1937, the average annual increase of the metropolitan areas was twice as large as that of the provincial capitals (20,000 and over) of the North, and South. They are 50% higher than those of Middle Egypt. During the period 1947-1960 the superiority of the increase in population of the metropolises was 80% greater than that of middle and north Egypt and 64% greater than that of south Egypt's provincial capitals. (See Figure A-2 in Appendix).

From the above discussion we conclude that the metropolitan areas are the centers of immigration. Although these large cities, therefore, do offer so many purely economic advantages, the attractive power of them lies in their capacity to provide jobs.

The total amount of population redistribution can be measured by the sum of positive or negative difference between the actual size of population for each governorate and the expected size if the governorate experience the same rate of growth as the whole population at a final date. The calculated amount between 1927 and 1966 was about 3,631,000. The urban governorates shared with about 2,927,000 out of this total. The rural governorates of Lower and Upper Egypt showed negative differences of 1,279,00 and 1,718,000 respectively. The frontier governorates showed a positive difference of 151,000. It is worth mentioning that population redistribution is a function of differentials in the rates of natural increase of the different geographical areas in a given society as well as the movement of population. In Egypt, the regional differentials in the rates of natural increase are inconclusive in a manner that they do not much explain the problem. In addition, international migration is of minor effect on the Egyptian population where it is considered a closed population. Therefore it is the internal migration that has the major effect on population redistribution in the country.

INTERNAL MIGRATORY MOVEMENTS

There are many different types of internal movements in Egypt. These movements may take the following forms: ^{1/}

1. U.N., Economic and Social Council, Economic Commission for Africa. Population Distribution and Internal Migration and Urbanization in Africa, 1962, pp.10-20

1. The movements of nomads: The seasonal movements of tribes living in arid or semi-arid areas. Such movements are noticed among the Arab Bedouins in the Eastern and Western deserts.
2. Migration based on labor contracts: This type of movement is sometimes sponsored by the responsible authorities, but in the majority of cases, they are outside any form of control.
3. Migration from rural to urban areas: This type of migration involves those working in the traditional sector of family and subsistence, agriculture and handicrafts, who move to the modern sector of organized agriculture, commerce and industry. It covers a big proportion of the population. The fact that a large group in the traditional sector is unemployed encourages migration on a big scale. This type of migration in Egypt can be considered as the main form of migration.
4. Movements of temporary and seasonal nature: To a considerable extent, they represent an adjustment of labor to the unequal distribution of population in relation to resources. The volume of these movements is vaguely known, but their direction is mainly from subsistence rural areas to cash-crop areas, from rural areas to urban areas as temporary workers during the seasons where there is little to do on the land.
5. Movements between and within urban areas: This type of movement is very hard to measure, however it occurs sometimes on a big scale, especially short distance movements within the same metropolitan area.

Actually, the migration from rural to urban areas is the most

important type, not only because it represents a large proportion of the population, but also because of its serious implications on population distribution and economic problems in the country.

Nowadays in Egypt there is a pronounced tendency toward a large proportion of the population to concentrate in few big cities. This phenomenon has been termed by Davis and Golden^{2/} over-urbanization. Egypt, judged by her industrial employment, is an over-urbanized country, i.e., the size of labor force engaged in the industrial sector and related activities is relatively small, as compared to western countries in their early growth period.^{3/}

MIGRATION BETWEEN GOVERNORATES

Although data on migration based on a complete registration system are not available for Egypt, we shall use the scanty and limited information available from the censuses of population of 1927, 1937, 1947, and 1960. Data were collected in these censuses on movements of population during the previous ten years by place of birth and place of residence. Out-migrants are considered those enumerated outside the governorate of birth, while in-migrants are those who were born outside the region of enumeration.^{4/}

2. Davis, K. & Golden, H., "Urbanization and the Development of pre industrial Areas," Cities and Societies (ed. by P. Holt and A. Peirs) Glencoe, Ill., The Free Press, (1957), pp.131.
3. I.N.P.C., op. cit. Report A, pp.16-17.
4. El-Kamash, Magdi, Economic Development and Planning in Egypt, Frederik A. Praeger, N.Y., 1968.

It should be pointed out in this connection, that the direct methods based on the use of a sample or on the registered population data, has never been used in Egypt.

According to this method, it could be said that a migrant is the person residing in a place different from the place of birth. Accordingly, by using the data of the population census 1960, we can get table (IV-3). Table (IV-3) shows the computation procedures and the net migration and its percentage. Index of migration (last column) is the percentage of net migration to the total number of migrants (in and out) for each particular governorate; it is a measure of the efficiency of migration.

The following findings can be drawn:

1. The pull governorates are the metropolitan or urban governorates, or at least those with more job opportunities.
2. The push governorates are predominantly rural, with less job opportunities.
3. Cairo is the largest receiver of the migrants (30.7% net migration), and Menofia in North Egypt loses the most (-25.3% net migration).
4. The most mobile governorate is Aswan with only -11.5% net migration, but about 14% and 25% in-and out-migration respectively.
5. One exception is the Red Sea governorate with about 47% net migration. The reason is the great job opportunities in this new governorate especially in mining and oil extraction.

Table (IV-3)

Internal Migration between Governorates
According to 1960 Population Census

Governorate	Pop. Present	Net-Migration Size	%	Index
1. Cairo	3 348 779	1 027 742	30.7	68.0
2. Alexandria	1 516 234	240 319	15.9	54.5
3. Port-Said	245 318	43 680	17.8	39.4
4. Ismailia	384 115	84 037	29.6	59.3
5. Suez	203 610	73 809	36.2	64.8
6. Damiet	387 962	- 12 962	- 3.3	- 14.3
7. Dakaliya	2 014 883	- 164 362	- 8.2	- 42.6
8. Sharkiya	1 819 788	- 112 310	- 6.2	- 42.6
9. Qulyubia	988 055	- 33 820	- 3.4	- 14.3
10. Kafr Elsheikh	973 019	3 260	0.3	2.8
11. Gharbya	1 715 212	- 128 051	- 7.5	- 36.7
12. Menufia	1 347 953	- 340 177	- 25.3	- 81.1
13. Behera	1 685 679	- 19 432	- 1.1	- 7.9
14. Giza	1 336 418	203 188	15.1	52.2
15. Beni Suef	859 832	- 43 509	- 5.0	- 39.6
16. Fayum	839 163	- 36 208	- 4.3	- 40.1
17. Minya	1 560 311	- 29 277	- 1.9	- 22.6
18. Asyut	1 329 588	- 147 997	- 11.1	- 65.3
19. Souhage	1 578 858	- 233 468	- 14.7	- 75.0
20. Kena	1 351 358	- 186 803	- 13.9	- 74.6
21. Aswan	385 350	- 44 100	- 11.5	- 29.1
22. Red Sea	25 452	11 941	46.9	66.8
23. New Valley	33 932	- 14 694	- 43.4	- 82.3
24. Matrouh	103 453	- 20 125	- 19.5	- 51.0
25. Sinai	49 769	2 278	4.5	6.8

In general, from Table IV-3, two main directions of migration are clear. The first is from rural to urban governorates and the second is from where low to high job opportunities can be. (See Figure A-3 in Appendix).

Another study on internal migration movement in Egypt in the period 1960-1970 revealed several important facts. First, for the

period 1960-1966, the more attracting areas in Egypt were the urban governorates of Cairo, Giza, Alexandria, Suez, Port Said and Ismailia. The reason is that these governorates are characterized by a large degree of development in industry and public services. On the other hand, the more pushing governorates are those of Menoufia, Sohage, Assiut and Kena. Menoufia governorate is considered as the first pushing one, about 20 percent of births of the governorate do not live in it. The number of out-migrants from Menoufia to Cairo governorate is about two millions. The factors behind such position of Menoufia are (1) its high population density, (2) the pattern of land ownership only $\frac{5}{12}$ feddan on the average caused the migration of agricultural manpower, (3) the high educational level caused by the migration of students to other governorates particularly to Cairo. Another example is the case of Aswan which has changed from a sending area in 1960, to a receiving one in 1965. That may be attributed to the construction of High Dam.

When estimating the internal migration in Egypt from 1966 to 1970, on the basis of survival ratio method, we notice the following. The governorates of Cairo, Alexandria and Giza are still considered the most attracting ones. The governorates of Port Said, Suez and Ismailia became sending areas as a result of the policy of compulsory migration after the aggression of 1967. It follows that most of the governorates of Lower Egypt, except Menoufia, became receiving areas. Menoufia governorate is still the first among the sending areas, concealing canal governorates owing to their special

conditions. Furthermore, most governorates of Upper Egypt are still considered as sending areas except Giza and Aswan governorates as shown in table (IV-4) below. (See details in tables (13) and (14) in Appendix).

Table (IV-4)
Population Movement in Receiving and Sending
Governorates in 1966 Census

Governorate	In-migrants	Out-migrants	Total migration	Net migration	Migration index
<u>1. Receiving Gov.</u>					
Cairo	1171228	244635	1425863	936593	.66
Giza	300713	67786	368499	232927	.63
Alexandria	401901	95582	497483	306319	.62
Suez	100536	15577	116113	84939	.73
Port Said	62014	32796	94810	29218	.31
Ismailia	92886	26871	119757	66015	.55
<u>2. Sending Gov.</u>					
Menoufia	25818	355783	381601	-329965	-.87
Sohag	19360	260502	279862	-241142	-.86
Kena	22286	187648	209934	-165362	-.79
Assiut	29034	176323	205417	-147229	-.72

Due to the lack of data available, it is difficult to apply any of the direct methods of measuring migration between rural and urban areas in Egypt. However, the balancing equation method can be applied. We can set the following balancing equation:^{5/}

5. Assuming that international migration is negligible.

Urban (or rural) population in 1960 minus the urban (or rural) population in 1947 equals the natural increase in the urban (or rural) population plus or minus the net migration.

By using the urban population, the equation gave the figure of 957,627 which constitutes the size of migration to urban areas. Although by using rural population, the figure was 773,630 which constitutes the size of migration from rural areas.

The inequality of these figures may be due to lack of registration in the data of the vital statistics and other accumulated errors.

In general, it could be said that a large scale migration from rural to urban areas during the period 1947-1960 amounted to between the range of three quarters to one million persons. (See Figure A-4 in Appendix).

Table (IV-5) below shows a summary of rural to urban net migration in Egypt during the period 1960-1970.

Table (IV-5)

Net Internal Migration from Rural to Urban
in Egypt during the Periods 1960-1965 and 1965-1970

Period (000)	Males	Females	Total
1960 - 1965	- 381	- 370	- 751
1965 - 1970	- 208	- 181	- 389

The table shows that net migration in the first five years in the decade 1960-1970 was almost double that in the second five years.

MIGRATION TO CAIRO

Ordinarily, the primate city is at least twice as large and more than twice as significant as the second most important city.^{6/} According to this definition, Cairo can be considered as Egypt's primate city. According to 1960 population census, Cairo as the largest city has more than 3.4 million persons. Alexandria, the second largest has about 1.5 million people, which is less than one half of Cairo's population.

As will be shown in chapter seven, Cairo swallows up investment, absorbs labor force, dominates the cultural pattern, has a deleterious effect on the development of other areas and tends to have a high consumption rate as compared with production rate.

As shown before, Cairo absorbs most of the migrants. Although Cairo as a big city does not in fact offer so many purely economic advantages, its attractive power lies in its capacity to provide jobs. The metropolises grow most rapidly when job opportunities are greatest. There is an unusual influx into Cairo because it renders more available service employment in connection with commerce.

6. Thomlinson, R. Population Dynamics, Random House, N.Y., 1960

tourism and as a center of all government administrative ministries. Most of the industrial centers are located within its boundaries or in its suburbs. Moreover, charity and welfare organizations are more accessible in the cities than in the countryside.

As indicated earlier about 31% of Cairo's population are migrants and the percentage of the in-migration far exceeds to percentage of out-migration, 37.9% and 7.2% respectively.

We have concluded before that the most pushing governorate is Menoufia which contributes most to Cairo's population. It contributed about 18% of the total migrants to Cairo, up to 1950.

There rural migrants to Cairo are drawn from two extreme types. Abu-Lughod has distinguished these two types as follows:

1. Qualitively the cream but numerically the less significant, consists of bright youths who migrate in search of education or wider opportunities. These have both the drive and the facility for rapid assimilation into the culture of the city.
2. The second type are drawn primarily from the have-not's of the village. Numerically dominant, they are as much driven from the village by dearth of land and opportunity as they are attracted to the city.^{7/}

These migrants settle in particular areas. There are usually some social agencies in Cairo to help assimilate their members.

7. Janit Abu-Lughod, "Migrant Adjustment to City Life: The Egyptian Case", Amer. Journal of Soc., Vol. XVII, No.1, July 1961, pp. 22-33.

Abu-Loghed mentioned that there are vast quarters within the mosaic of Cairo where, physically and socially, the way of life and characteristics of residents resemble rural Egypt.^{8/}

These previously mentioned factors explain why some sociologists consider migration to Cairo as the process of ruralization of the city.

The typical migrant, to Cairo as elsewhere, is a young, unskilled male, whose first contact in the city is often with a friend or relative from his original village, with whom he may even spend the first nights.

MIGRANTS BY AGE AND SEX

When the attention is directed to the study of net migration by age and sex, we conclude that for urban governorates the largest numbers of migrant males are those in the groups 0-9, 20-29, and 30-39 after which they decrease with the growing of age. Most of male migrants in the first age group 0-9 are children who accompany their parents or those who go to cities for house serving. Most of migrants in the age group 10-19 are students and the rest are those coming from rural areas seeking work. The migrants in the ages 20-30 are the basic manpower migrating from rural areas, (see table 16 in Appendix). Regarding females, we notice that most of the female migrants are in the age group 20-29, often representing the

8. Ibid, pp. 25.

wives of male migrants. Female migrants in the age group 10-19 are either wives of male migrants or work in house-serving.

For non-urban governorates, Giza is the only attracting governorate for male migrants in all ages, a total of about 22,500. The rest of non-urban governorates are considered as sending areas of male migrants, at the top are the governorates of Menia, Menoufia, Kena and Beni-Suef. Some of the governorates showed a net migration in the age group 20-49 such as Kalyoubia and Behira while Sohag attracted male migrants in the ages less than twenty. The governorates of Sharkia, Kalyoubia, Behira and Assiut attracted females migrants in the age group 20-49. The rest of the governorates showed a negative net migration.

CHAPTER V

THE LABOUR FORCE

The objectives of the present chapter is to investigate activity rates in Egypt up to latest available date. Furthermore, we intend to study differentials in activity rates by age, sex, rural/urban, economic activities, occupations, and educational status.

The background data for this chapter were obtained from population censuses 1937, 1947, 1960 and 1966. In addition, labor force sample surveys data were available to us.

The Egyptian labor force grew from about 5.8 millions in 1937 to 7.8 millions in 1960, then to 8.2 millions in 1966. This represents an average exponential rate of growth of about 1.27 per year. The contribution of population growth to the changing size of the labor force overshadowed that attributable to the change in socio-economic factors reflected by the rate of participation in economic activities. In fact, the latter had a negative effect during the 1937-1960 period. The proportion of the total population in the labor force is relatively low, implying a heavy load of dependency. A primary factor in this regard is the young age composition of the population resulting from the high levels of fertility.

The tempo of growth of the labor force varied in the two intercensal periods and for each sex. For instance, the overall annual rate of growth decreased from 1.34% in the intercensal period (1937-1947) to 1.22% in the following period (1947-1960). The correspon-

ding rates were 1.29% and 1.49% for males, and 1.72% and 1.29% for females respectively.

The crude activity rates decreased from the level of 36.5% in 1937 to 30.1% in 1960, to 26.4% in 1966 resulting in increase in the average number of dependents per 100 of economically active persons, i.e. dependency ratio, increased from 147 to 232 then to 281 during the same period. The crude activity rate remained constant during the period 1966-1970. Moreover, the decline in activity rate was faster between 1947 and 1960 than in the preceding intercensal periods, this may be seen from the following table

Table (V-1)

Crude Activity Rates by Sex

Years	Crude activity rates (%)		
	males	females	both sexes
1937	65.1	7.9	36.5
1947	62.8	7.8	35.0
1960	55.2	4.8	30.1
1966	52.2	3.6	26.4

Table (V-2) below shows the activity rates in different regions of Egypt in May 1970.

From table (V-2) we notice that total activity rates are about the same in different regions in Egypt. Though, the activity rates of females are higher in metropolitan and urban areas than in rural areas or governorate in Lower or Upper Egypt. One clear observation is the very low participation rates for females.

Table (V-2)

Percentage of Labour Force to Total

Population by Regions in Egypt (1970 May)

Region	Males	Females	Total
Cairo	43.5	5.8	24.4
Alexandria	45.6	6.1	25.6
Total Urban Gov's	44.1	5.9	24.7
Lower Egypt	49.0	3.2	25.9
Upper Egypt	53.3	2.6	28.0
All Areas	49.4	3.6	26.4

The crude activity rate is simply the weighted average of age specific activity rates, where the proportions of the total population in different age groups are used as weights. Hence, the study of the age profile of activity rates and the trends of its components provides further insights and perhaps partial explanation of the level and trends of crude activity rate.

Age patterns of activity for Egyptian males and females for the census years between 1937 and 1966 show in general, certain degree of similarity. For males, the rates are lowest at young ages, increase rapidly during adulthood to reach a maximum level, and then decline slowly at first then faster at the old ages. The rates for females, on the other hand, increase in the teens, decline in the twenties, increase in the thirties and forties, and finally decline again at the old ages.

LABOUR FORCE BY AGE AND SEX: (1960-1969)

Table (V-3) below shows the age-sex activity rates for the

period 1960-1969.

Table (V-3)
Age-Sex Specific Activity Rates in Egypt
(1960-1969)

Age Groups	1960		1969	
	Males	Females	Males	Females
6-11	17.8	6.7	10.9	2.0
12-14	29.2	8.8	39.3	5.3
15-19	68.0	9.5	57.0	5.2
20-29	89.8	6.0	86.3	7.0
30-39	97.2	4.5	98.8	5.8
40-49	97.2	4.9	96.6	4.5
50-59	94.9	3.9	96.2	4.1
60-64	84.7	3.9	85.1	4.1
65-6 over	62.2	1.9	63.7	2.0
CAR (6 & over)	51.6	3.6	51.6	3.6

From table (V-3), we notice the very low participation rates of females in all age groups. The majority of Egyptian labour force (94%) are males. We notice also, that age specific male activity rates reach a maximum in the middle ages (20-49) and decrease sharply towards the margins.

Rates for age group (6-11) are decreasing, and this may mean that Egypt is developing to a large extent in the field of education since enrollment of pupils in primary education determines the participation rate in labour force for this age group. For ages 65 years and over, the rates increased through the period from 62.2%

in 1960 to 63.7% in 1969. As will be seen, this increase is evident in rural areas in agricultural sector, these rates were 63.3% in rural and 38.7% in urban in 1969, and they were 71.0% in rural and 48.3% in urban areas in 1966. That increase in rural areas may be attributed to migration of young males from rural areas leaving a higher proportion of old persons in farms, and inflating this category in rural areas.

It should be noted that the levels of age-specific activity rates for Egyptian males are significantly higher than those of industrialized and semi-industrialized countries both around the same times. On the contrary, the female rates are among the lowest.

A summary of the labour force trends in the sixties is shown in the following table.

LABOUR FORCE BY ECONOMIC ACTIVITIES

The agricultural sector has always been the dominating economic activity in Egypt. About 70% of the labour force was engaged in agriculture according to the 1937 census data. The proportion of the agricultural labour force has been gradually decreasing since then. It reached about 62% in 1947 and declined to only 56% in 1960 (See table 17 in the Appendix). In general, the period 1937-1960 has witnessed a considerable structural change where the share of agriculture decreased by about 13% and the share of manufacturing increased by about 3%. Services share has also increased by more than 5%.

Table (V-4)

Trends in some Labour Force Parameters
during 1960-1969 (Males only)

Parameters	1960	1966	1969
Crude Economic Activity Rates (5 & over)	%	%	%
Total	54.6	52.2	51.6
Urban	47.8	47.8	45.1
Rural	85.6	55.2	56.1
Distribution of age group (5-11)			
Age-specific activity (Rate)	17.8	9.2	10.9
Out of labour force (Rate)	10.1	10.4	3.1
Enrolled at the primary school (Rate)	72.1	80.4	86.0
	100.0	100.0	100.0
Agriculture Workers			
- Percentage of groups (20-49) to labour force in the same age groups	52.6	49.7	=
- Percentage of age group (5-11) to all agriculture workers	8.5	4.6	=
- Percentage of age group (5-11) to all economic activities in the same age groups	87.9	72.8	=
Other Rates			
- Age specific activity rate (65 & over)	62.2	63.3	63.7
- Percentage of age groups (20-49) in manufacture sector to labour force in the same age groups	10.7	14.6	=
- Percentage of labour force in urban (5 & over)	32.6	37.3	35.2
- Percentage of illiteracy in labour force (15 & over)	63.9	61.0	63.1*

= Not available.

* For the age groups (12-49)

Source: Population Studies and Research, by C.A.F.H.A.S., No.3, pp. 25.

labour force analysis. Before describing the occupational structure in Egypt and its trends during the 1937-1971 period, it should be noted that the data for 1960-1971 refer to persons 15 years of age and over, while those of earlier dates are given for ages 5 and above. In 1960 and 1971 the proportion of workers in white-collar occupation amounted to slightly less than 17 percent of economically active population. (See table V-6).

Table (V-6)

Percent of Labour Force in each Occupation,

Egypt 1937-1971

Occupation Year	1937	1947	1960	1971
White-Collar	11.7	12.4	16.6	17.06
Professional	2.5	2.7	3.7	4.91
Administrative	.7	.9	1.1	1.40
Clerical	1.8	2.0	3.7	4.64
Sales	6.7	6.8	8.1	7.12
Blue-Collar	12.2	15.7	19.3	18.69
Miners	.1	.1	.2	-
Transport workers	2.3	2.4	3.1	-
Craftsmen	9.8	13.2	16.0	-
Farmers	68.6	60.5	53.1	52.63
Service workers	7.2	9.0	8.9	9.06
Not-Classified	.3	2.5	2.2	1.25
Total	100.0	100.0	100.0	100.00

The increase in the proportion of white-collar workers was shared by all the four occupational groups comprising this broad occupational category. This observation remains valid when difference in the lower age limit is taken into account. (When profes-

sional, administrative, clerical and sales workers 15 of age and over are related to the total labour force 6 years of age and over in 1960, their shares are 3.7, 1.0, 3.3 and 7.2 percent respectively). The shares of the blue-collar occupations as well as service and sport workers also increased during the same period, though the increase in the share of the latter group was less impressive.

Regarding females occupational structure, the sixties have witnessed a dramatic change in their occupational pattern. As mentioned earlier a big shift from agriculture to other sectors was observed. From table (V-7) below, we can see a large increase in the proportion of female white collars in 1969 as compared to 1961. Also an increase is observed in their proportion as blue collars. The only sharp decline was in the female agricultural service occupations.

Table (V-7)

Percentage Distribution of Female Labour Force
According to Occupations (1961-1969)

Occupations	1961	1969
White collar	19.4	38.3
Services	27.6	24.4
Agriculture	43.0	22.4
Blue collar	6.7	11.0
Unstated	2.3	4.9

*Source: C.A.N.P.A.S., op. cit., Women in 20 years.

EMPLOYMENT STATUS

The employment status of economically active population reflects the organizational framework of the economy. Thus, it is often true in the early stages of development in many less developed countries, that most activities are carried out in small owned and operated enterprises. As the level of development increases, this system gives way to more complex types of economic organization characterized by large-scale and mass-production enterprises. These shifts are reflected by changes in the employment status structure of the labour force, the proportionate shares of self-employed persons, unpaid family workers, and perhaps, employers decline, while the proportion of the paid workers increases.

The important role of family enterprises in the Egyptian economy is illustrated by the fact that 40.8 percent of the labour force in 1960 were in the categories of self-employed persons and unpaid family workers as compared to the share of employees which was 49.5 percent. In 1970, the proportion of self-employed and unpaid family workers was 37.56%, as compared to 46.8% for employees. The available data for the 1937-1970 period show a decline in the relative share of employers, self-employed persons and unpaid family workers compensated by an increase in the proportion of employees.

Employment status of the labour force varies significantly between the two sexes as well as by age. Table (V-8) below shows

that females, as compared to males, have lower proportion in group of employers and self-employed, and higher proportions of unpaid family workers. However, the trend for each sex follows the same pattern with varying rates of change.

Table (V-8)

Percentage Distribution of Labour Force
by Status and Sex, Egypt, 1937 - 1970

Status	Males		Females		Both Sexes			
	1947	1960	1947	1960	1937	1947	1960	1970
Employers	12.1	7.8	5.1	1.9	13.6	11.3	7.4	12.6
Self-employed	23.9	23.6	24.0	8.2	22.8	23.9	22.4	19.8
Employees	43.9	49.0	43.8	55.3	62.4	43.9	43.5	46.7
Family Workers	18.7	17.6	26.7	28.2		19.6	18.4	18.0
Others	1.4	2.1	.4	6.4	1.2	1.3	2.4	2.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The patterns of status structure by age are quite illuminating. Employers and self-employed persons, i.e., the entrepreneurial groups, prevail among old age groups. In 1960, seven out of ten of economically active persons 65 years of age and over were either employers or self-employed. In contrast, the proportion of both groups was less than one percent of the labour force below 15 years of age. In fact, the proportion of each of these two groups rises from a minimum at young ages to a maximum in the oldest age group. Unpaid family workers, on the other hand, are dominant among children in the labour force. For instance 80 percent of economically active persons aged 6-9 were

family helpers. This proportion declines continuously to a minimal level at the oldest age groups. Employees tend to be concentrated in the adult age groups, where above average proportion are found in the age range 20-50.

In general, male and female employment status patterns by age are similar. However, in 1960 the proportions of unpaid family workers among females were lower than those among males in ages below 25, and higher at older ages. The higher proportion for females at ages over 25 were largely due to the number of wives reported as family workers. The under-reporting of economically active females is likely to be highest among adult females helping in family enterprises then the sex differentials of employment by age may be larger than indicated.

The above discussion implies that family enterprises have higher proportions of young and old workers than non-family enterprises have. The decline in the role of such enterprises which accompanies economic development is an important factor in the decline of activity rates in young and old age groups.

Differences between the agricultural and non-agricultural sectors patterns of employment status are clear. The data for Egypt bear out the typical differences between the two sectors. In 1960 the proportion of employees in the non-agricultural sector was roughly twice as much as that in agriculture, the proportion of independent workers was significantly lower in the non-agricultural sector than

in agriculture, while the proportion of unpaid family workers in agriculture was nine times that in non-agricultural industries. Therefore, the decline of the agricultural share in the labour force contributed to over-all trend of status structure. In addition, a marked shift in the status distribution within the non-agricultural industries not only influenced the trend but also resulted in a widening gap in the organizational pattern between the two sectors.

EDUCATIONAL STATUS

The rate of illiterate males 10 years and over in labour force was about 64% in 1960, and 61% in 1966. Literacy rate had increased from 28.3% in 1960 to 31.1% in 1966. We notice that the majority of illiteracy is concentrated in agriculture, that is mostly in rural areas. The percentage of illiteracy in urban areas was 24.0% in 1966 and 23.7% in 1969, the constancy of this percentage may be due to the illiterate migrants from rural to urban areas, seeking higher standard of living. Also the percentage of participation in labour force for age group (6-11) had decreased from 17.8% in 1960 to 10.9% in 1969, and at the same time, the percentage of the enrolled pupils in primary education had increased during the same period from 72.1% to 86%. Consequently, those out of the labour force in that age group had declined from 10.1% to 3.1%.

Comparing educational pattern of the female labour force between 1960-1969, we find a large decrease (about 20%) in the illiterate group and a corresponding increase for females who had some years of schooling.

Table (V-9)

**Percentage Distribution of Labour Force
(Males & Females) by Education Status 1960-1969
(10 Years and over)**

Education Status	1960		1969	
	Male**	Female**	Male*	Female**
Illiteracy	63.9	79.5	63.1	53.7
Read & Write	28.3	6.9	27.2	10.6
Official Schooling	7.8	13.6	9.7	29.7
Total	100.0	100	100	100.5

* (12-64) years age range.

** 10 years and above

Source: op.cit., Population Studies and Researches, No.3, Vol.1,
and Women in 20 years (by C.A.P.M.A.S.)

CHAPTER VI

POPULATION PROJECTIONS

INTRODUCTION

It is very important for the countries making efforts for economic and social development to have a full picture of what is projected to be in the future concerning composition, size, and other characteristics of their population. The calculation of future population trends or the making of an outline of unknown course of the vital characteristics, is generally termed by population projections. Thus, a projection is an illustrative calculation initiated from certain given assumptions. We start from an initial time point and proceed to any other desired point permitting the assumed conditions to operate throughout the time of projection.

There are numerous possible methods of calculating such future population estimates, we shall concentrate on the component method. The calculation of a population projection by the component methods requires the establishment of base figures for the population classified by sex and age groups at the date from which the projection departs. With these figures at the starting point, the projection is carried out by means of fertility and mortality rates and assumptions as to their future levels.

Five assumptions concerning the future levels of fertility and mortality were investigated. ^{1/}

1. Khalifa, A.M. & El Rouby, G., "Population aging in Egypt: Past and future trends", Egyptian Population & Family Planning Review, Vol. 6 No. 1, 1973.

First, we assumed that a gradual decline in mortality would occur while fertility would remain unchanged at the level of 1960. The estimated decline in mortality was as follows:

1. A reduction in the specific death rate for ages less than one by the amount of five percent of its initial level.
2. A reduction in the specific death rate for ages 1-4 by the amount of two percent of its level of 1960.
3. A reduction in the remaining age-specific death rates by the amount of one percent of their initial levels.

All these reductions were assumed to take place five years for a period of fifty years, after which the rates were fixed at their last levels.

Second, the age-specific death rates were assumed to be constant at their levels of 1960, while fertility rates were reduced by the amount of five percent of their starting levels. This reduction in fertility also occurred every five years for a period of fifty years from 1960, after which the rates settled at their last levels.

Third, we studied a more realistic case in which both fertility and mortality were subjected to a simultaneous decline in their levels. In this case, the reduction in mortality was similar to that occurring in case one, while the reduction in fertility was the same as that of case two.

Fourth, we had to study the impact of constant fertility and

mortality conditions by fixing them at the levels prevailed in 1960 all over the whole period.

Finally, the attainment of a replacement level i.e., reducing the net reproduction rate to one, was the last assumption tested and manipulated in this work. It was assumed that the population of Egypt would achieve a replacement level at about the year 2000, i.e., after forty years of the starting point 1960. The age-specific fertility rates were thus assumed to be represented in a straight line relationship, within the period 1960-2000, having a negative slope equal to -0.75 . In addition, the age-specific death rates were subject to a gradual decline, similar to that experienced in cases one and three.

These five assumptions will be denoted sim (1) to sim (5) according to the above order.

PROJECTION OF THE TOTAL POPULATION

Table (VI-1) below shows a summary of population size projected according to the different five alternative assumptions.

PROJECTIONS BY BROAD AGE GROUPS

Regarding projections by functional age and sex groups, we found the following under each assumption (detailed tables are in the Appendix). It has been noted that a decline in mortality had only a minor effect on the age composition. A small amount of decrease in the proportion of population under fifteen years old, and

a small amount of increase in the proportion of population at older ages, were observed. The initial levels were 42.50, 54.39 and 3.12 percent for children, adults and aged persons, respectively. After a period of fifty years, they became 41.22, 45.98 and 3.80 percent see table (VI-2).

Table (VI-1)
Projected Total Population Size for Egypt in the
Period 1970-2000 According to Five
Different Assumptions

Year	Projected Pop. Millions									
	sim (1)		sim (2)		sim (3)		sim (4)		sim (5)	
	M	F	M	F	M	F	M	F	M	F
1970	16.8	16.6	16.6	16.4	16.7	16.4	16.7	16.5	16.6	16.4
1975	19.1	18.6	18.6	18.3	18.7	18.4	18.9	18.7	18.4	18.2
1980	21.7	21.4	20.6	20.3	20.8	20.5	21.6	21.1	20.4	20.0
1985	24.9	24.4	22.8	22.3	23.2	22.7	24.5	23.9	22.3	21.9
1990	28.6	27.7	24.9	24.2	25.5	25.0	27.7	27.0	24.2	23.7
2000	33.9	33.7	29.0	28.3	30.2	29.5	34.2	34.1	27.1	26.6

Table (VI-2)
Projected Percentage Age Distribution by Broad
Groups after a Period of 50 Years According
to Different Assumptions

age groups	Initial (M 60)	Sim(1)	Sim(2)	Sim(3)	Sim(4)	Sim(5)
0 - 14	42.5	41.2	38.5	30.1	39.4	25.0
15 - 64	54.4	45.0	56.1	64.6	56.7	28.9
65 more	3.1	3.8	5.4	5.3	3.9	6.1
Total	100.0	100.0	100.0	100.0	100.0	100.0

The case of declining fertility showed larger changes in the age composition than those recorded in the case of reduced mortality. The proportion of population at the mentioned age categories became 28.49, 66.14 and 5.36 percent. From these figures, we can see that a large decline in the proportion of children compared with a large rise in the proportion of people at other ages would, under this assumption take place.

The recorded age composition, in the case of simultaneous decline in fertility and mortality, was 30.09, 64.62 and 5.29 percent for the three broad age categories.

But when mortality and fertility conditions were fixed at their levels of 1960, as made in case four, we did not observe any significant changes in the relative age distribution. The differences between the level at successive time points were negligible. The Egyptian age composition was nearly stabilized at levels of about forty, fifty-six, and four percent for children middle-aged and aged persons respectively.

The most notable change in population age composition occurred in case of producing $NRR = 1$. The proportion of children was at its lowest level while the proportions of people at both medium and old ages were at their higher levels. That was due to the larger amount of reduction in fertility levels maintained in this case rather in other cases. The composition attained the levels of 24.99, 68.83, and 6.18 percent after the passage of fifty years from the initial time point.

The distribution of individuals at different ages reveals several important aspects and characteristics of population. One of these characteristics is the burden presented by children and aged persons on the productive elements of the population. From the study of the various assumptions about the future fertility and mortality conditions, it was evident that the dependency load or one by the proportion of population in the productive ages fell significantly in cases of declining fertility. That was due to the fact that any reduction in fertility would reduce the number of young people. And since this number always constitutes a large proportion of population, then such reduction in fertility would produce a lighter burden of dependency. From the economic point of view, the increase in the proportion of children, resulting from a decline in mortality which has not been counterbalanced by a corresponding decline in fertility, would cause an increase in expenditure in public services, education requirements, social welfare, and such other costs. Moreover, the participation of both children and aged persons in economic activities is very limited compared with that of youth whose productive capacity is very high.

The drop in the dependency ratio was at most in case of reducing the net reproduction rate to one, owing to the larger decrease in the proportion of children and the larger decrease in the proportion of adults.

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2. Central Agency for Mobilization and Statistics, "The Increase of Population in the U.A.R. and its Impact on Development", (Ref. No.50-100, Cairo, September 1969).

PROJECTION OF THE LABOUR FORCE

It has been shown earlier, in chapter 5, that activity rates of males in the age group 20-60 are almost stable. Moreover, these rates are high enough to suggest that they would remain unchanged, at least in the near future. These basic observations may be utilized in the projection of the labour force by age group to the year 1985 as shown in table (VI-3) below. The figures presented in the table are computed by applying the activity rates to the projected population.

Table (VI-3)

Projected Labour Force up to Year 1985
for the Age Group (20-59)

Age Group	Activity Rate %	1970		1975		1980		1985	
		Pop. 000	Labour Force	Pop. 000	Labour Force	Pop. 000	Labour Force	Pop. 000	Labour Force
20-24	86.7	1573	1364	1868	1620	1856	1609	2147	1861
25-29	96.0	1126	1081	1550	1488	1840	1766	1829	1756
30-34	97.8	935	914	1105	1018	1522	1489	1808	1768
35-39	98.2	870	854	914	898	1081	1062	1489	1462
40-44	98.0	819	803	846	829	889	871	1051	1030
45-49	97.8	762	745	789	772	815	797	857	838
50-54	96.4	598	576	720	694	746	719	771	743
55-59	94.5	480	454	553	522	666	629	691	653

The decreasing rate of participation of the population in the age group 60 years or more during the period 1947-1960 may be extrapolated to obtain the projected activity rates for the period under study. These rates and the computed labour force are shown in table (VI-4)

Table (VI-4)

Projected Labour Force up to the Year
1985 for the Ages 60 or More

Year	Activity Rate %	Pop.	Projected Labour Force
1970	59.7	901	538
1975	53.4	1064	568
1980	47.0	1241	583
1985	40.7	1467	597

A similar procedure is followed to obtain estimates of the labour force in the age groups 12-14 and 15-19 as shown in table (VI-5) below.

Table (VI-5)

Projected Labour Force up to Year 1985
for the Age Groups (12-14) and (15-19)

Years	12 - 14			15 - 19		
	Activity Rates %	Pop. 000	Labour Force (000)	Activity Rates %	Pop. 000	Labour Force (000)
1970	68.1	1139	776	50.6	1891	1100
1975	64.0	1318	844	57.0	1879	1071
1980	60.0	1385	832	53.6	2172	1165
1985	56.5	1513	855	50.4	2288	1153

fore, all efforts exerted for the development of the national economy and the promotion of the standard of living would be impeded by the accelerated population growth unless it is placed within the framework of the resources and possibilities available.

In order to meet the needs of the country, the Egyptian economy should provide for improving the production capacity and the economic level of the people. Practically, this means raising the labour productivity, which can be fulfilled through the promotion of the health standards of the people. This, in turn, necessitates the adoption of a sound policy for the propagation of sanitary services, medical treatment and combating the diseases which lead the inhabitants and weaken them physically and mentally. It equally necessitates taking the necessary preventive measures which aim at improving the physical health of the inhabitants and save them from diseases by providing them with the essential nutritive ingredients.²

In the following analysis, we shall concentrate more on the last twenty years 1952-1972.

B) ECONOMIC BACKGROUND

Egypt has realised considerable economic progress during the last few years, especially in the field of industrialization. Agriculture is still the main source of living for the majority of the population in Egypt. During the last 20 years elapsed since 1952

2. op. Cit., "Population and Development"

There has been a strong push to the economy and efforts for modernization in Egypt.

Agriculture

During the seventy years since the beginning of the present century, the cultivated area has increased from about 5.1 to 6.0 million feddans. This accounts for less than .8% increase, while the population has grown by more than 258% (from 9.7 to 34 millions). As indicated in table (VII-1) below, and as a result of this unbalanced increase, the per-capita share in the cultivated areas has dropped considerably, from about 0.53 to about 0.18 feddans during the last seventy years. Crop area, however, has increased relatively more due to the permanent irrigation system and use of fertilizers.

During the last ten years, an amount of L.E.350 million has been invested in the agricultural sector and irrigation excluding the High Dam investments (L.E.166 million). These investments covered vertical and horizontal expansion. As a result, the productivity per feddan has considerably increased. In 1952, the average production of the feddan of cotton was 4.5 kentars and in 1971 it reached 6.7 kentars. During the same period, that of wheat rose from 5.18 ardabs to 8.55 ardabs, maize from 6.3 to 11.0 ardabs. The crop area / ^{area} increased from 9.2 in 1962 to 10.9 million feddans in 1971.

Self-sufficiency is the major aim of development especially

in the field of agriculture. The realization of this aim is not far in Egypt as indicated by foreign trade data.

Table (VII-1)

**Cultivated Area and Crop Area in Egypt
in Census Years 1897-1970**

Years	Population (Millions)	Cultivated Area		Crop Area	
		Million Feddans	Per Capita	Million	Per Capita
1897	9.7	5.1	0.35	6.8	0.71
1907	11.2	5.4	0.48	7.6	0.67
1917	12.8	5.3	0.41	7.7	0.60
1927	14.2	5.5	0.39	8.7	0.61
1937	15.9	5.3	0.33	8.4	0.53
1947	19.0	5.8	0.31	9.2	0.48
1960	26.0	5.9	0.23	10.2	0.39
1966	30.1	6.0	0.20	10.4	0.34
1968	31.6	6.0	0.19	10.9	0.34
1969	32.4	6.0	0.19	10.9	0.34
1970	33.2	6.0	0.18	10.9	0.33

In the field of agricultural development certain factors should be taken into consideration such as the increase of the cultivated area, the expansion of the irrigated land, giving more care to promoting animal wealth, securing chemical fertilizers and insecticides, generalizing the cooperation system in agriculture development of mechanization in farming, improving administrative and organizational services including agricultural financing and farm management providing select seeds and organising marketing operations.

The High Dam project may produce electric power of ten thousand million K.W.H. annually at a very low price. Besides, it is increa-

sing the generating capacity of the actual Aswan Dam. This large amount of electric power helps increase the areas of reclaimed land irrigated by subterranean water. There will also be vertical expansion by increasing the yield per feddan.

Industry

During the last 20 years, industrial production has been increasing at a rate of 11.4% annually. In 1952, industrial production did not exceed L.E.232 million, while in 1970-1971 it surpassed L.E.2424 million.

Since 1952 the share of the industrial sector in the national income has risen from about 8% about 22% in 1970-1971.

Advancement of industry is considered as the most important means for economic growth in Egypt. Of the many advantages of industrialization is the raising of the standard of living, the diversification of the economy, the producing of industrial goods, the creation of more opportunities of work, not only in industry, but also in the subsidiary services attached to the development of industry, and raising the productivity of manpower.

Investments in industry (excluding electricity and construction) was L.E.362 during the period 1959/1960, 1969/1970. The most important existing industries at the beginning of the fifties were sugar, spinning and weaving, cement and fertilizers. Production in these industries have increased many times due to expansion and

the construction of new factories. Many important industries have been promoted such as chemical and plastics. Industrial planning takes into account the demands of heavy industrial products in addition to those for consumer goods.

Major industries are concentrated in the metropolitian area of Egypt. More than 22% of the industrial establishments are in Cairo alone. As early as the First Five Years Plan (1960-1965) one of the aims of industrial planning was to distribute industry whenever possible among different regions of the country. This was partly achieved in the first plan and thereafter.

Mining

The principal mineral products are petroleum, phosphate, manganese, asbestos, sodium carbonate, sodium sulfate, sodium nitrate and sodium chloride. Ironore has been discovered near Aswan and in Baharia Oasis in the Western Desert. There are still vast areas of the desert which have not yet been tapped. Petroleum was first extracted on a wide scale in 1968. In 1965 the raw oil production reached 7 million cubic meters and increased to 17 million cubic meters in 1971. Petroleum products are used on a wide scale for domestic as well as for commercial purposes.

C) SOCIAL BACKGROUND

Social development is an integral part of the modernization process. In fact, social, economic and demographic factors are interrelated. Many social services are offered to contribute to

the process of modernization.

Education

Before 1952 education was largely limited. During the last 20 years the number of primary stage pupils has increased from 1.6 million to 3.8 million, at an annual increase rate of 7.1%, which is about three times the rate of population growth. This has largely been due to free education in all stages and the fact that the primary stage is compulsory. In spite of free education, the absorption rates are far from complete especially for females as shown in table (VII-3). Absorption rates for males are much higher and reach about 85-90%.

Table (VII-3)

Females at Compulsory School Age
and Number Accepted (1960-1970)

Years	Estimates of Females (6 years)	Accepted	Rate of Enrolment
60-61	315.1	210.0	56.0
65-66	414.9	280.9	67.7
67-68	436.7	257.5	59.0
69-70	459.4	284.6	62.0

The number of preparatory and secondary school students has increased from 250 thousands to 1.5 million, that is, 6 times during the last 20 years. Furthermore, university education has witnessed a real revolution, the existing universities were enlarged and new ones were established. The number of university level students in-

creased drastically from 40 to 213 thousands between 1952 and 1970/1971.

Health Services

The number of beds in hospitals has risen to over 73,000 beds, that is, an increase of 150% during 20 years. Now there is 2.2 beds per thousands citizens. The number of practicing doctors rose to about 15,000 an average of one doctor to every 2300 citizens, despite Egypt's supplies of doctors to Arab and African countries.

Housing and Utilities

The state established an independent Ministry for Housing for the first time in the history of the country. During the period 1965-1966 to 1970-1971 the number of urban housing units built was 193,550 (economic dwellings were 134,218, i.e. 69%) and the number of rural housing units was 75,592. In 1966 the number of existing housing units in urban Governorates was 1,205,031, in lower Egypt 2,308,001, in Upper Egypt 2,269,390, i.e., the total housing units in Egypt was 5,522,427. During the last 11 years (1959/1960 - 1969/1970) the state invested about L.E. 408 million in the housing sector, excluding investments in public utilities which amounted L.E. 100 million in the same period.

Transportation & Communication Facilities

Railway service has been expanded and improved during the past 20 years. In 1951-1952 the railway passengers were 3002 million passenger/km, increased to 6773 million passengers/km, in 1970-1971.

The steam locomotives were replaced by diesel. The number of diesel locomotives was 37 in 1951-1952, but rose to 555 in 1970-1971.

D) SOCIO-ECONOMIC IMPLICATIONS AND POPULATION GROWTH

To sum up the previous findings, Egypt has a low average income, high rate of illiteracy, and small-scale agriculture is the usual occupation. Furthermore, birth rate are high 40 or more births per thousand population. Death rate are decreasing to their lowest level. The result is a high growth rate of more than 2 percent per annum. Egypt, then, has a typical demographic pattern observed in low income areas. This has two salient features: (1) a young population, with a high ratio of dependents to earners; and (2) an actual or incipient high rate of population growth.^{3/}

Table (VII-4) below is a summary of some selected economic and demographic indicators for Egypt during the period 1959/1960 to 1969/1970.

It is our belief that the level of modernization and stage of demographic transition are mutually interrelated. Rapid population growth contributes to stagnate or even lower the socio-economic standards in a country. At the same time low socio-economic factors are the main reasons responsible for the high fertility rates. Therefore, it can be said that socio-economic development is of prime importance to reduce fertility rates.

3. Coale, A.J. and Hoover, E.M., "Population Growth in the Low Income", Princeton Univ. Press, Princeton, N.J., 1958.

Table (VII-4)

Selected Economic Indicators for Egypt during the Plan Period

(1959/60 - 1969/70)

Indicators	Base Year 1959/60	The First Plan Period					The Second Plan Period				
		1960/61	1961/62	1962/63	1963/64	1964/65	1965/66	1966/67	1967/68	1968/69	1969/70
Mid-Year Population Estimate (000)	25581	26247	26915	27598	28300	29022	29763	30521	31297	32084	32912
Population Growth Rate	-	2.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Rate of Increase in G.N.P. (Constant Prices)	-	5.4	3.4	11.1	8.4	3.8	10.2	-	0.7	7.4	7.1
Rate of Increase in Personal Consumption	-	2.3	10.5	6.7	6.5	17.3	8.2	3.1	8.0	2.5	7.1
Rate of Increase in Governmental Consumption	-	12.2	3.4	28.8	26.3	8.9	10.2	1.3	15.2	14.6	11.2
Rate of Increase in Domestic Saving	-	19.4	21.6	18.6	21.2	29.7	0.8	19.7	26.9	25.9	15.8
Rate of Increase in Capital Formation	-	31.6	11.3	19.3	24.3	2.5	16.9	-	11.4	-	7.0
Rate of Increase in Exports	-	-	0.3	33.4	13.6	12.3	0.5	11.1	13.6	28.0	12.5
Rate of Increase in Imports	-	6.2	9.7	30.1	17.5	2.9	12.1	13.4	-	4.0	22.0
Per Capita G.N.P. (Current Prices)	99.6	102.3	103.2	114.3	123.8	133.6	141.8	143.3	144.4	151.3	156.5
Per Capita National Income (Current Prices)	53.9	55.7	65.2	61.0	66.6	75.6	80.2	81.6	82.9	86.8	90.8
Percentage Ratio of Exports to Imports	101.6	94.9	74.2	76.1	73.5	85.0	75.5	96.9	84.9	104.6	96.8

In Egypt, in spite of the continuous growth of the national product, it has been and still is unable to cope with the rapid increase of population. Regarding cultivated land, in order to keep the per capita share of land in 1970 the same as that at the beginning of the century (0.7 feddan), the crop area should have increased to 23.3 million feddans - that is, more than double the present area.

The agricultural-type economy undoubtedly has contributed to the population problem. For a long time, Egypt's economy was based generally on agriculture. About 68% of the population were engaged in agricultural activities at the beginning of the present century. This decreased to only 58% in 1960. On the other hand, the proportion engaged in manufacturing increased from 11.5% to only 12.6% during the same period.

The growth of population with its young character (which implies a high dependency ratio) has contributed to increase the consumption of consumer goods and services. This resulted in the stagnation of the percentage saved of the gross domestic product. This is in addition to the fact that local saving fell short of financing the investments of the first plan project, a matter which induced the state to depend to some extent on external sources in financing the plan's investment.

Increase in consumption of consumer goods and in particular food items, without a parallel increase in the local production to cope with it, led to increasing imports of consumption commodities.

Table (VII-5) below shows the imports of selected consumption commodities in Egypt for some selected years.

Table (VII-5)

Imports of some Selected Consumption Goods
in some Selected Years in Egypt (L.2. Thousand)

Year	Food Grains & Flour	Meats	Edible Oils & Fats
1939	54	124	73
1945	3357	327	77
1950	22066	1363	248
1960	26291	1619	2874
1965	66415	8013	5023
1970	30524	3226	13012
1971	70749	3673	16910

i) The per capita income. Estimates of the national income at current prices in the years 1952/53 to 1964/65 indicate that the total income increased considerably. In spite of that, due to rapid population growth, the per capita income increased much more slowly, reaching an average of \$108.56 during the First Five Year plan against \$90.39 for the preceeding period from 1952/53 to 1959/60. (See table 24 in the Appendix).

ii) The per capita consumption of food. Although the total per capita consumption of food is relatively high, that of some of the food items, such as animal protein, is by far lower than many other countries.

In retrospect, we find that the per capita consumption of food in the A.R.E. is steadily increasing. In 1951-52 the per capita

daily consumption of food totaled 933 g., in 1962-63 it increased to 1227 g., in 1969-70 it was 1301 g. The per capita daily food supply of proteins (animal & vegetable) increased from 58.5g. in 1951-52 to 85.1 g. in 1969-70. The per capita consumption of fats increased from 34.7 g. per day in 1951-52 to 45.4 g. per day in 1969-70.

The per capita intake of calories per day was 2324 in 1951-52, and increased to 2963 in 1969-70.

E) BASIC CHARACTERISTICS OF THE DEVELOPMENT PLAN (1973-1982)^{4/}

The general policy of the economic and social development plan has been designed for the next decade to bring under control the economic activity of the community in the fields of production, investments, income, employment, social services and family consumption as well as dealing with the outside world in such a way as to achieve the designed objectives.

*For the first time in the history of the national economy, the industrial income will exceed the agricultural income. This will be effected as from the fifth year of the plan. This means the radical conversion of the Egyptian economy into an industrial, agricultural economy by readjusting the structure of production and giving powerful boosts to industry, and consolidating the growth of agricultural production.

4. op. cit., Population, Vol.1, No.2, 1972, pp.57

*Achieving a surplus in the balance of payments instead of a deficit as was the case in the previous development plans, as a consequence of the dependence on the foreign capital for financing development. Bringing about an increase in the ratio of investments to income from 13.6% in the year 1972 to 20.9% in the year 1982. Efforts should be exerted to double the national income at the close of the development plan.

*The priorities of the service projects in the plan have been decided on the light of the interests of the people.

*Particular stress has been laid in the plan to raise the social and economic standard in the rural areas, by starting a programme of rebuilding Egyptian villages, and universalising the supply of electricity and fresh water, the integration of the rural health services, and raising the individual consumption.

*Lessening the housing problem after having reached a great degree of complexity by allocating the funds necessary for the public sector to construct 20 thousand dwelling units every year. This is in addition to the housing units to be built by the private sector and to what is needed for industrial and rural housing in reclaimed areas.

The prospective increase in population up to 1982 has been taken into consideration when formulating the objectives of the plan so far as the rate of economic growth is concerned, and the necessity of raising it higher than the rate of population growth.

F) POPULATION POLICY AS AN ELEMENT IN SOCIAL AND ECONOMIC POLICY

As mentioned earlier, population policy has been integrated in the general development plan. Therefore, two aspects of the development plan were recognized. Firstly, the extension of the economic and social development plans. Secondly, the reduction of the population growth rate through reducing fertility rates.

1) Family Planning:^{5/}

In 1953, the government realized the importance of population studies and the National Commission for Population Problems was established. Since 1953, all studies of the population in Egypt point out the widening gap between birth and death rates thus reflecting a high rate of natural increase. Therefore, it was necessary to study the matter within the general framework of socio-economic planning that aims particularly at promoting a happy and prosperous life for every citizen. The National Committee for Population Studies formed sub-committees in the fields of medical care, public health, and social services to carry out & follow up the various activities related to the adoption of family planning.

In November 1955, a few clinics for family planning were established on an experimental basis. Since then the number of clinics has increased gradually from 8 in 1955 to 3000 in 1972.

5. Thanks are especially due to Dr. A. Bindary, Chairman of the Board for Population and Family Planning in Egypt, for his review and recommendations of the present section.

The aims of the family planning centers are the following.

- (a) Raising the social level of the family through restricting the number of children according to people's desire income.
- (b) Raising the health level of the family and particularly the mother's health which may be weakened due to frequent pregnancies.
- (c) Fighting abortion by preventing pregnancy whenever the latter is undesirable.
- (d) Providing medical treatment of infertility, thus, solve some of the social problems of the family arising there.

In 1965, a presidential decree established a Supreme Council for Family Planning. By 1972, the distribution of family planning centers were as in table (VII-6)

Table (VII-6)

Number of Centers and Eligible Couples in
Rural and Urban Areas (1966-1970)

Date	Urban		Urban		Total	
	Centers	E.C.	Centers	E.C.	Centers	E.C.
February 1966	575	3,051	1,416	1,948	1,991	2,3
December 1970	908	2,159	2,122	1,385	3,030	1,6

Here we consider eligible couples (E.C.) to be the average number of married women in the fertile age group per family planning center.

6. Khalifa, A.M. et al., "Status of Women as Related to Fertility & Family Planning", NCSCS, Cairo, 1973.

The following tables show the number of acceptors of family planning services offered in the national programme up to 1970.

Table (VII-7)

Yearly and Cumulative Number of Acceptors
by Methods (1966-1970)

Year	Yearly (in 000's)				Cumulative (in 000's)			
	All Methods	IUD	Orals	Others	All Methods	IUD	Orals	Others
1966	174	24	150	-	174	24	150	-
1967	141	51	90	-	315	75	240	-
1968	134	47	87	-	449	122	327	-
1969	148	55	33	-	597	177	420	-
1970	206	57	115	34	803	234	535	34

Table (VII-8)

Acceptors by Methods and Source

Method	All Sources		National Program		Private Sector	
	Users	% of E.C.	Users	% of E.C.	Users	% of E.C.
All	619	12.6	458	9.3	161	3.3
IUD	183	3.7	132	2.6	51	1.1
Oral	420	8.5	314	6.5	106	2.1
Conventional	16	0.3	12	0.2	4	0.1

Population targets (1973-1982)

According to the published statement by the Supreme Council for Family Planning, the policy is as follows:^{7/}

7. Supreme Council for Population and Family Planning, "General Policy of the Population and Family Planning in A.R.E.", Mem., Cairo, 1973.

1. Reduction of annual growth rate from 20.6 per thousand in 1973 to 10.6 per thousand in 1982.
2. The above target can be achieved through:
 - (a) Reduction of birth rate from 33.6 per thousand in 1973 to 23.6 per thousand in 1982 (a one per thousand decline per year).
 - (b) Reducing the death rate from 14.2 in 1969-1971 to 13 per thousand in 1982.
3. The total size of population in A.R.E. will reach about 41 million in 1982, with a change in the rural urban distribution as follows:

1970: Rural 58% - Urban 42%

1982: Rural 53% - Urban 47%
4. The amount of birth averted need to be 3,120 thousands. This would save L.E.14,380 of the government expenditure, assuming that each new born child costs about L.E.4000 up to age 15.

These objectives can be measured through:

- (a) General fertility rates to be reduced from 159 per thousand in 1972 to 112 per thousand in 1982 (4.3 annual average).
- (b) Marriage fertility rate to be reduced from 236 in 1972 to 160 in 1982 (annual average is 7.6 per thousand).
- (c) Average birth to be reduced from 3.6 (1969 data) to 2.5 in 1982.

Three types of population are possibly recognized since

they are different from the point of view of motivations, attitudes and behaviour towards fertility and family planning.

- (a) Rural population: high fertility behaviour and attitudes.
- (b) Urban population: which both attitudes and behaviour are towards low fertility.
- (c) Transitional population: those who acquired the attitudes of low fertility, yet behaviour tends to be of high fertility.

As a matter of fact there are no exact geographical limitations between these three types; all exist in different proportions throughout the country.

Family Planning through Development^{8/}

Family planning is not only a medical, but mainly socio-economic problem, and therefore this solutions lie in the fields of socio-economic development, raising the standard of living, education, and employment (specifically that of women). Experience shows that family planning practices can spread in a community as a natural process within the framework of the development process of the community and without any external pressure.

At a certain level of socio-economic development, at a certain level of education and knowledge, at a certain

8. This part is written in reference to the announced policy of the Board for Population and Family Planning. In addition to; Herz; M., "Family Planning through Development", (Memo), Board for Population & Family Planning in Egypt, Cairo, December 1971.

degree of consciousness of personal interests, rights and tasks, people freely decide to limit the size of their family.

Multiplication of family planning clinics and services, widespread distribution of contraceptives and nation wide advertisement are not enough. We have not only to make mothers swallow pills, insert IUDs, distribute condoms and diaphragms, we have also to stimulate, to help and to accelerate a change of attitude and behaviour. It is certainly a more difficult process and a longer one.

There are 3000 centers and hospitals providing family planning services in Egypt. This number will be increased so as to have one center per village and per city quarter. But the main task is to encourage women to become familiar with them

We have then to create the historic circumstances (socio-economic development and education), the climate (information, stimulation of new interests) and the conditions of a social conflict between deeply rooted traditional habits and new needs which place people in the position of free and personal decision.

As the long-term objectives and the policy of a programme of family planning and population control must be established in the light of the general plans for the development of the country, its immediate objectives and activities should be

linked to national development projects.

All projects of development can constitute a favourable frame for launching family planning activities, or they can be accompanied and supported by family planning activities.

Family planning can be linked to development projects, whatever objectives they have:

- Raising the standard of living of people.
- Creating a change of interests.
- Opening new perspectives for production.
- Creating new job opportunities specially for women:
- Economic development through industrialization, (especially in rural areas), intensive agriculture and mechanization, cooperative electrifications, land reclamation and settlement, etc.
- Improvement of health and welfare, through action against epidemics, inoculation campaigns, sanitation, nutrition, occupational health (Reducing Infant Mortality).
- Social structure change based on the conflict created between women's employment and child-bearing.
- The implementation of a social security system.
- Regulation of child labour.
- Developing new disciplines in school curricula.
- Adult education, literacy and vocational training.

The solution seems for us to be the introduction of the family planning and population component into all the national

programmes and projects of development.

The integration of family planning and development will facilitate and accelerate the beneficial effects which any development programme achieve in relation to fertility reduction.

Development and mechanization of agriculture, industrialization of rural areas, women's employment, building of schools, hospitals and cinemas are also, according to the new policy, Family Planning Projects.

Usual family planning activities are only activities additional to development programmes. Family planning programmes must utilize development programmes as privileged channels to transmit the family planning messages.

The above considerations might lead to a drastic review of future programmes, which would avoid loss of time and waste of money.

However, the efforts and actions done hitherto and everywhere have not been entirely useless because they have permitted us to serve the part of society which was already awaiting family planning services.

These efforts and actions have also enabled the authorities concerned to realize the magnitude of the problem and its complexity.

Finally, they have shown that everything remains to be

done in order that attitudes and behaviour may change, and fertility trends may be affected.

ii) Internal Migration^{9/}

As indicated in chapter 5, Egypt is facing a trend of internal migration from rural to urban areas, which in turn resulted in a great rate of growth in the cities. Meantime, problems of housing and communication arose in those cities as a result of crowdedness.

The state faces the results of those migrations by increasing the investments in housing and transportation in order to cover the existing shortage in the main cities. Committees have also studied the methods of limiting migration from the rural areas to the capital either through direct administrative means which regulate the use of the migrating labour force or through indirect means by raising the standard of living in the rural regions. The programme set for the improvement and the rebuilding of the Egyptian villages is considered an important step in this respect. Some of the recent studies have pointed to the necessity of following a policy in order to re-distribute the population and to create new settlement regions, also, setting programmes for regional balanced distribution of industries and universities.

iii) External Migration

The state has set a general policy for external migration

9. op. cit., Population and Development.

with a view of encouraging and facilitating external migration for those who want it. The state does not see in this a way out of the problem of the rapid population growth, but considers it in pursuance of the principle of the right of citizens in movement and in work.

The state puts some restrictions with respect to emigrants who are holders of critical qualifications for needed for national economy. Certain quotas of such holders of specific academic degrees are credited for emigration annually.

APPENDIX A

DEMOGRAPHIC DATA IN ARAB REPUBLIC OF EGYPT

Among the Arab countries of North Africa and South West Asia, the Arab Republic of Egypt is outstanding with respect to demographic data available and the adoption of a sound population policy.

A) POPULATION CENSUSES

Population censuses in Egypt go back as far as 1832 and the latest census was taken in 1966. Between these two dates, seven complete decennial censuses were carried out, namely: 1897, 1907, 1917, 1927, 1937, 1947 and 1960.

The complete censuses taken at regular intervals are regarded as an important instrument and from the basic source of comprehensive data on demographic aspects. These censuses also provide the frame for designing household sample surveys which have been developed in Egypt with the recent trend of increased use of sampling to spare time and cost wherever complete enumeration is unnecessary.

The latest census taken in Egypt was in 1966. It was also the first census to be taken on the sample basis. This includes a complete head-count in which the number of persons by sex, religion, and nationality were recorded household by household. This complete count was taken on a de facto basis. A list of households provided the frame for the sample. Other characteristics of the population

1.

were taken from a sample of households.

The National Census of Population 1970. The census planned to be carried out in 1970 as the latest decennial census (next to 1960) was postponed due to the prevailing war conditions in the Middle East. Measures have been taken to carry out the 1970 census during the World Population Year (1974).

B) VITAL REGISTRATION SYSTEM

Registration of vital events (birth, deaths, marriages and divorces) has been in force in Egypt since 1912. However, it was known that registered vital events were somewhat below the actual total events. Therefore, birth and death rates were published in areas where a public health bureau operated. These bureaus were usually located in the more developed regions and therefore the vital statistics represented more complete registration and were of more reliable approximation of the true rates.

Registration has been remarkably improved by the extension of health bureaus and the increase of their coverage throughout the country. To test the completeness of reporting various vital events for registration, a sample survey of vital rates in rural Lower Egypt was carried out in 1964.

APPENDIX B

DETAILED TABLES

Table (1)

Distribution of Mothers According to Order on New Born
(1955, 1959, 1960, 1961, 1966, 1967)

Order of New Born	Distribution of Mothers					
	1955	1959	1960	1961	1966	1967
	489181	519809	536468	575373	1228646	1180442
1	11.6	10.5	10.8	10.3	19.5	18.0
2	15.4	12.5	12.3	11.8	23.6	24.1
3	17.9	17.4	16.8	16.0	16.9	17.7
4	17.6	17.8	17.3	16.8	14.1	14.7
5	12.2	13.1	13.0	13.1	10.3	10.1
6	9.9	11.1	10.9	11.6	7.2	7.2
7	15.4	17.6	18.9	20.4	8.4	8.2
% (1,2,3)	44.9	40.4	39.9	39.1	60.0	59.8
% (4,5)	29.8	30.9	30.3	29.9	24.4	24.8
% (6-)	25.3	28.7	29.8	32.0	15.6	15.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Mean Order	4.2	4.4	4.5	4.6	3.4	3.4
Median Order	4.3	4.5	4.6	4.7	3.4	3.4

Source: Cairo Demographic Center, "Fertility Trends and Differentials in Arab Countries", Memo, No.2, CDC, Cairo 1971.

Table (2)

Infant Mortality and Age Specification Death Rates in Egypt

Years	Infant Mortality	Age Intervals			
		1-24	25-44	45-64	65+
1930	151	17.5	8.1	18.8	93.9
1935	161	19.0	9.1	19.7	108.6
1940	162	19.4	8.6	18.8	115.5
1941	150	20.2	6.8	18.9	117.7
1942	169	20.5	10.1	21.3	144.1
1943	161	18.4	10.3	23.2	151.2
1944	152	18.4	9.5	19.8	135.5
1945	152	19.9	10.1	23.7	132.5
1946	141	17.0	9.8	19.4	140.7
1947	127	14.2	9.5	16.5	106.7
1948	138	13.4	9.7	14.0	108.7
1949	136	14.3	6.4	15.0	100.9
1950	130	12.1	5.6	12.4	105.3
1951	128	13.0	5.3	11.8	101.2
1952	127	11.1	4.3	11.4	94.7
1953	146	13.3	4.5	11.0	95.4
1954	138	10.9	4.5	11.1	98.0
1955	136	12.2	3.9	10.2	90.0
1956	124	9.6	4.1	11.1	99.7
1957	130	12.1	4.0	11.2	105.8
1958	112	10.2	3.9	11.3	99.0
1959	109	9.6	4.0	11.6	107.4
1960	110	10.9	3.8	11.8	103.4
1961	108	9.2	3.6	11.2	90.5
1962	134	11.6	3.6	12.4	85.1
1963	119	8.4	3.5	12.0	84.1
1964	117	9.5	3.3	11.6	81.1
1965	113	7.3	3.1	10.9	86.1
1966	127	9.1	3.3	12.0	91.9
1967	116	7.4	3.3	12.0	90.1
1968	131	9.8	3.3	12.5	90.9
1969	119	7.5	3.3	13.2	95.0
1970	116	8.4	3.5	14.0	108.0

Source: C.A.P.M.S., "Vital Statistics for A.R.E. from 1930", Cairo, July 1968.

Table (3)

Crude Death Rates in A.R.E. from 1930 till 1970

Year	Male	Female	Total
1930	27.0	22.3	24.9
1935	28.4	24.4	26.4
1940	28.5	24.1	26.3
1941	27.9	23.4	25.7
1942	30.8	25.7	28.3
1943	30.5	24.6	27.7
1944	28.6	23.2	26.6
1945	30.2	25.0	27.7
1946	27.5	22.3	25.0
1947	23.4	19.3	21.4
1948	22.0	19.7	20.4
1949	22.1	29.0	20.6
1950	20.4	17.7	19.0
1951	20.5	17.9	19.2
1952	18.9	16.7	17.8
1953	20.3	18.8	19.6
1954	18.5	17.8	17.9
1955	18.2	17.1	17.6
1956	17.0	15.7	16.4
1957	19.5	17.7	17.8
1958	17.4	15.8	16.6
1959	17.0	15.6	16.3
1960	17.7	16.2	16.9
1961	16.5	15.2	15.8
1962	19.0	17.8	17.9
1963	15.8	15.2	15.5
1964	15.8	15.8	15.7
1965	14.1	14.1	14.0
1966	15.7	16.1	15.9
1967	14.3	14.2	14.2
1968	15.9	16.1	16.1
1969	14.5	14.4	14.5
1970	15.1	15.1	15.1

Source: C.A.P.M.S., "Vital Statistics for A.R.E. from 1930", Cairo, July 1968.

Table (4)

Neo-Natal and Still-Birth Death Rates in Egypt (1930-1970)*

Years	Neo-Natal Death Rates	Still-Birth Death Rates
1930	23.1	7.6
1935	18.4	7.1
1940	18.4	7.7
1941	17.5	7.3
1942	17.6	7.2
1943	19.4	7.3
1944	19.7	7.5
1945	21.4	7.7
1946	21.0	7.0
1947	18.6	7.1
1948	19.5	6.3
1949	19.8	7.0
1950	20.2	6.2
1951	20.2	7.9
1952	20.2	7.3
1953	21.9	8.4
1954	22.0	8.2
1955	20.9	8.5
1956	20.9	8.4
1957	20.5	7.7
1958	19.5	7.7
1959	20.3	7.5
1960	19.3	7.3
1961	20.4	7.7
1962	22.7	6.2
1963	21.1	9.1
1964	21.8	7.3
1965	22.2	8.3
1966	23.7	8.8
1967	22.0	8.9
1968	21.4	7.5
1969	20.5	7.4
1970	19.9	7.7

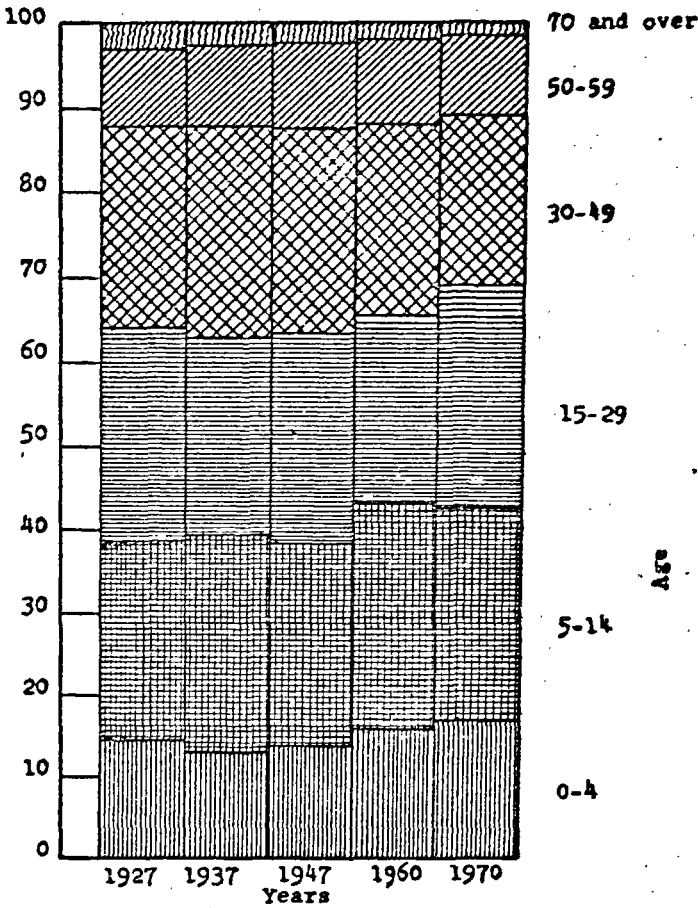
*Source: C.A.P.M.S., "Vital Statistics for A.R.E. from 1930", Cairo July 1968.

Table (5)

Adjusted Expectation of Life in Egypt in
Successive Censuses Years 1947-1966

Age	1947		1960		1966	
	Males	Females	Males	Females	Males	Females
0	39.56	42.50	46.24	48.75	48.49	51.25
1	47.38	49.56	53.35	55.33	55.32	57.58
5	51.83	53.98	55.63	57.52	56.91	59.34
10	48.60	50.81	51.92	54.18	53.05	55.53
15	44.43	46.77	47.57	49.92	48.64	51.18
20	40.59	43.03	45.89	45.89	44.46	47.04
	73.20	39.48	39.73	42.03	40.60	43.66
	33.66	35.94	35.87	38.18	36.63	39.09
	30.03	32.31	31.98	34.27	32.66	35.08
	26.37	28.63	28.08	30.34	28.58	31.05
45	22.81	24.86	20.30	26.37	24.81	27.00
50	19.31	21.03	20.6	22.38	21.04	22.95
55	15.87	17.34	12.08	18.54	17.47	19.05
60	12.84	13.82	13.78	14.86	14.11	15.30
65	10.05	10.73	10.81	11.58	11.08	11.94
70	7.60	8.06	8.18	8.71	8.38	8.99
75	5.63	4.93	6.02	6.39	6.17	6.59
80	4.15	4.32	4.38	4.61	4.48	4.75

*Source: Central Agency for Public Mobilization and Statistics,
Population and Development, Cairo 1973



Percentage Distribution of Population by
Age in Egypt

Table (7)
Percentage Distribution of the
Population by Age in Egypt

Age	1927	1937	1947	1960	1970
0 - 4	14.4	13.2	13.6	15.9	16.8
5 - 9	13.1	13.9	12.7	14.6	13.8
10 - 14	11.1	12.0	11.7	12.3	11.8
5 - 14	24.2	25.9	24.4	26.9	25.6
15 - 19	9.1	8.5	10.0	8.3	10.2
20 - 24	7.8	8.0	7.3	6.9	8.7
25 - 29	8.6	8.2	7.8	7.4	7.5
15 - 29	25.5	23.7	25.1	22.6	26.4
30 - 34	7.5	7.5	6.9	6.4	6.4
35 - 39	6.6	7.2	6.9	6.7	5.4
40 - 44	5.6	5.9	6.0	4.9	4.6
45 - 49	3.8	4.1	4.4	4.4	3.8
30 - 49	23.5	24.7	24.2	22.4	20.2
50 - 54	4.0	4.2	4.6	3.8	3.2
55 - 59	1.6	1.7	1.8	2.4	2.6
60 - 64	2.8	2.7	2.9	2.6	2.0
65 - 69	0.9	0.9	0.9	1.3	1.5
50 - 69	9.3	9.5	10.2	9.3	9.3
70 & over	3.1	3.0	2.5	2.1	1.7
Total	100.0	100.0	100.0	100.0	100.0

Source: Population Census Data, CAPMAS, Cairo, Egypt. (different years)

Table (8)

Sex Ratio by Age for Egypt during the Period (1917-1970)

Age groups	1917	1927	1937	1947	1960	1970
0 - 4	96	96	94	89	104	105
5 - 9	101	102	101	101	108	108
10 - 14	119	120	117	107	108	108
15 - 19	119	111	113	107	107	107
20 - 24	90	90	95	96	105	105
25 - 29	90	88	89	87	82	82
30 - 34	97	87	88	90	96	97
35 - 39	97	111	111	101	96	98
40 - 44	101	190	101	100	108	110
45 - 49	100	117	110	103	98	99
50 - 54	100	89	98	94	98	99
55 - 59	99	113	108	99	102	104
60 - 64	89	90	92	84	91	92
65 - 69	86	88	87	102	91	98
70 - 74	79	88	86	97	80	81
75 & over	86	79	73	75	82	81
All Ages	100	99	100	98	101	102

Source: Several Census Tables and 1970 Estimates for Egypt.

Table (9)

Marriage and Divorce Rates

Per 1000 Population in Egypt (1947-1970)

Years	Marriage Rate	Divorce Rate
1947	13.7	4.0
1948	14.0	3.6
1949	14.1	3.7
1950	13.4	3.7
1951	12.1	3.6
1952	10.8	3.2
1953	9.8	2.8
1954	9.7	2.6
1955	9.8	2.6
1956	9.4	2.4
1957	10.0	2.5
1958	9.2	2.4
1959	9.1	2.4
1960	10.9	2.5
1961	8.6	2.3
1962	8.5	2.0
1963	9.8	2.1
1964	10.5	2.2
1965	9.8	2.2
1966	9.8	2.1
1967	7.3	1.8
1968	8.6	1.9
1969	9.5	1.9
1970	9.7	2.0

Source: Marriage and Divorce Statistics for Egypt, by C.A.P.M.A.S.,
(Several Years)

Table (10)

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

Educational Attainment	Duration of Married Life					Total
	Less than 5	5-9	10-19	20-29	30 or more	
Illiterate	.7	2.5	4.8	6.3	6.7	4.2
Able to read	.8	2.9	5.0	6.2	6.2	3.7
Intermediate certificates	.8	2.4	3.6	4.4	4.7	2.1
University degrees	.7	2.1	2.9	3.1	3.7	1.6
Total	.8	2.6	4.8	6.3	6.7	4.1

Source: Cairo Demographic Center, Monographie 2, "Fertility Differentials and Trends in Arab Countries", Cairo, CDC, 1971, Mono. No.2

Table (11)

Average Annual Percentage Growth of the Metropolitan Areas

and Province Capitals of 20,000 and More Population, 1937-1960*

Major Regions and Capitals	Population in 1924 Census (000's)	1937 Census		1947 Census		1960 Census	
		Pop.	Annual growth 27-37	Pop.	Annual growth 37-47	Pop.	Annual growth 47-60
<u>Metropolitan</u>							
Cairo	1092	1352	3.5	2,157	6.0	3,567	5.1
Alexandria	573	686	2.0	919	3.4	1,513	5.0
Cena	130	161	2.4	246	3.3	520	8.6
Suez	41	50	2.2	197	11.4	203	6.9
Dominata	53	40	1.6	54	3.3	12	2.5
Subtotal	1811	2287	2.2	3,483	5.2	5,909	5.3
<u>Lower</u>							
Damanhour	52	62	1.9	84	3.4	126	3.9
Tanta	90	95	0.6	140	4.7	184	2.6
Mansoura	64	69	0.8	102	4.8	152	3.8
Zagazig	33	60	1.1	82	3.7	124	3.9
Shebeen	27	38	2.2	42	2.7	50	3.9
Banha	26	29	1.2	36	2.4	33	3.6
Subtotal	312	348	1.2	486	3.7	694	3.3
<u>Middle</u>							
Beni-Suef	40	45	1.3	57	5.5	97	3.0
Fayoum	53	64	2.1	74	1.6	102	4.0
Minia	48	55	1.5	70	2.7	94	2.7
Subtotal	141	164	1.6	201	2.7	275	3.0
<u>South Upper</u>							
Assiut	66	71	0.8	90	2.7	120	3.2
Soheh	25	32	2.8	43	3.4	62	3.4
Qena	28	34	2.1	43	2.7	58	2.7
Assuan	16	22	3.5	26	1.9	48	6.2
Subtotal	135	159	1.6	202	2.9	296	3.6

*Source: U.A.R. Census 1960 and more Computed Annual Growth.
The city of Zagazig is considered a suburb of Cairo and is included in its population.

Table (12)

Percent of the Total Population in each Governorate*

Egypt, 1927-1966

Governorate Year	1927	1937	1947	1960	1966
Cairo	7.6	8.2	10.9	12.9	14.0
Alexandria	4.2	4.5	5.0	5.8	6.0
Port Said	0.7	0.7	0.9	0.9	0.9
Ismailia	0.5	0.6	0.9	1.1	1.1
Suez	0.3	0.3	0.6	0.8	0.9
Damietta	1.2	1.3	1.4	1.5	1.4
Dakahlia	7.7	7.7	7.7	7.8	7.6
Sharkia	7.5	7.3	7.1	7.0	7.0
Kalyubia	4.1	4.0	3.8	3.8	4.0
Kafr El Sheikh	3.4	3.5	3.6	3.7	3.7
Gharbia	7.7	7.3	6.8	6.6	6.3
Menoufia	7.5	7.	5.9	5.2	4.8
Bahera	6.7	6.5	6.4	6.5	6.6
Giza	4.2	4.4	4.5	5.1	5.5
Beni Suef	4.2	4.2	3.8	3.3	3.1
Fayoum	3.9	3.8	3.5	3.2	3.1
Minya	7.2	7.1	6.7	6.0	5.7
Assiut	5.6	5.6	5.5	5.1	4.7
Subag	6.8	7.0	6.8	6.1	5.6
Kena	6.4	6.4	5.8	5.2	4.9
Aswan	1.9	1.9	1.5	1.5	1.7
Red Sea	...	0.1	0.1	0.1	0.1
New Valley	0.2	0.2	0.2	0.1	0.2
Matruh	0.3	0.3	0.4	0.4	0.4
Sinai	0.1	0.1	0.2	0.2	0.4
Total	100.0	100.0	100.0	100.0	100.0

* Lower Egypt includes the first 13 governorates in the table, whereas Upper Egypt comprises the next 8 governorates. The last four are the Frontier Governorates.

Table (13)

Net Internal Migration of the Population

in Governorates of Egypt during the Period 1965-1970

Governorates	Males	Females	Total	Average Annual Rate OF Net Migration
Cairo	-222.6	-205.7	-428.3	- 2.1
Alexandria	- 24.9	- 23.1	- 48.0	- 0.5
Damiette	- 13.2	- 12.9	- 26.1	- 1.2
Dkahlia	- 33.9	- 45.3	- 79.2	- 0.7
Sharkia	- 54.7	- 64.3	-119.0	- 1.1
Kalyubia	- 62.2	- 59.1	-121.3	- 2.1
Kafr El Sheikh	- 2.8	- 6.7	- 3.9	- 0.1
Gharbia	- 14.3	- 26.6	- 40.9	- 0.4
Menoufia	- 25.1	- 20.1	- 45.2	- 0.6
Behera	- 28.9	- 45.4	- 75.3	- 0.8
Giza	- 91.6	- 78.1	-169.7	- 2.1
Beni-Suef	- 31.3	- 24.5	- 55.8	- 1.2
Fayum	- 7.9	- 1.7	- 9.6	- 0.5
Menia	- 35.1	- 28.0	- 63.1	- 0.7
Asyut	- 29.6	- 31.0	- 60.6	- 0.9
Suhag	- 42.3	- 32.8	- 95.1	- 1.1
Qena	- 29.2	- 27.4	- 56.6	- 0.8
Aswan	- 52.3	- 44.8	- 97.1	- 3.9

Table (14)

Net Numbers of Migrants in Urban Governorates of Egypt

According to Age and Sex between 1960-1965

Age Group	Cairo		Alexandria		Port Said		Ismailia		Suez	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
- 9	-36.1	-36.1	- 8.4	- 8.9	- 1.2	- 1.4	- 2.5	- 2.3	- 4.9	- 4.5
10 -	-27.2	-37.2	- 7.0	-12.9	- 1.4	- 2.1	- 1.6	- 1.6	- 3.7	- 2.5
20 -	-35.5	-41.3	- 8.0	-10.5	- 1.1	- 1.1	- 1.1	- 1.1	- 3.5	- 2.3
30 -	-26.7	-14.4	- 7.7	- 3.8	- 1.1	- 1.1	- 1.1	- 1.1	- 2.1	- 1.1
40 -	- 9.6	- 2.0	- 3.7	- 1.1	- 1.1	- 1.1	- 1.1	- 1.1	- 1.1	- 1.1
50 -	- 1.0	- 1.3	- 1.3	- 1.9	- 1.3	- 1.4	- 1.1	- 1.1	- 1.1	- 1.1
60 -	- 1.4	- 1.2	- 1.4	- 1.1	- 1.1	- 1.1	- 1.1	- 1.1	- 1.1	- 1.1
70 -	- 2.5	- 2.6	- 1.0	- 1.1	- 1.1	- 1.1	- 1.1	- 1.1	- 1.1	- 1.1
Total	140.0	133.5	-36.7	-35.3	- 4.4	- 4.4	- 6.0	- 5.9	-10.1	-10.0

Table (15)

Net Internal Migration of the Population
in Governorates of Egypt during
the Period 1965-1970

(000)

Governorates	Males	Females	Total	Average Annual Rate of Net Migration
Cairo	+222.6	+ 205.7	+428.3	+ 2.1
Alexandria	+ 24.9	+ 23.1	+ 48.0	+ 0.5
Damiette	+ 13.2	+ 12.9	+ 26.1	+ 1.2
Dakahlia	+ 33.9	+ 45.3	+ 79.2	+ 0.7
Sharkia	+ 54.7	+ 64.3	+119.0	+ 1.1
Kalyubia	+ 62.2	+ 59.1	+121.3	+ 2.1
Kafr El Sheikh	- 2.8	+ 6.7	+ 3.9	+ 0.1
Gharbia	+ 14.3	+ 26.6	+ 40.9	+ 0.4
Menoufia	- 25.1	- 20.1	- 45.2	- 0.6
Behera	+ 28.9	+ 46.4	+ 75.3	+ 0.8
Giza	+ 91.6	+ 78.1	+169.7	+ 2.1
Beni-Suef	- 31.3	- 24.5	- 55.8	- 1.2
Fayum	- 7.9	- 1.7	- 9.6	- 0.5
Menia	- 35.1	- 28.0	- 63.1	- 0.7
Asyut	- 29.6	- 31.0	- 60.6	- 0.9
Suhag	- 42.3	- 52.8	- 95.1	- 1.1
Qena	- 29.2	- 27.4	- 56.6	- 0.8
Aswan	+ 52.3	+ 44.8	+ 97.1	+ 3.9

Table (16)

Numbers of Migrants in Non-Urban Governorates of Egypt
According to Age and Sex between 1960-1965

(000)

Age Gov.	20		20-49		50 +		Total	
	M	F	M	F	M	F	M	F
Damiette	- 4.4	- 4.3	- 1.5	- .5	- .1	- .6	- 6.0	- 5.4
Dakhlia	...	- 1.0	- .2	- .8	...	...	- .2	- 1.8
Sharkia	- 4.7	- 9.3	- 1.2	- 3.5	- 3.1	- 5.4	- 9.0	- 11.2
Kalyoubia	- 2.7	- 4.7	- 2.0	- 3.6	- .8	- 2.9	- 1.5	- 4.0
Kafr El Sheikh	- 8.8	- 5.8	- 6.1	- 3.6	- 1.1	- 2.0	- 16.0	- 11.4
Charbia	- 16.3	- 15.1	- 2.9	- 2.2	- 2.5	- 5.4	- 21.7	- 22.7
Menoufia	- 25.0	- 24.3	- 9.9	- 7.7	- 1.5	- 5.9	- 36.4	- 37.9
Behira	- 6.0	- 3.2	- 1.0	- 3.0	- 2.7	- 4.7	- 7.7	- 4.9
Giza	- 8.3	- 8.5	- 13.1	- 14.8	- 1.2	- .1	- 22.6	- 23.2
Beni Suef	- 14.2	- 16.1	- 11.6	- 4.6	- 3.6	- 4.1	- 29.4	- 24.8
Fayum	- 3.9	- 7.7	- 13.5	- 3.2	- 2.0	- 1.9	- 19.4	- 12.8
Minai	- 20.6	- 18.0	- 12.2	- 8.7	- 7.0	- 5.3	- 39.8	- 32.0
Assiut	- 3.9	- 6.8	- .2	- 2.8	- .2	- 3.3	- 3.9	- 7.3
Sohag	- 3.2	- 2.2	- 19.2	- 5.5	- 1.1	- 4.9	- 14.9	- 12.6
Kena	- 13.2	- 19.4	- 20.7	- 6.2	- 3.2	- 3.1	- 30.7	- 28.7

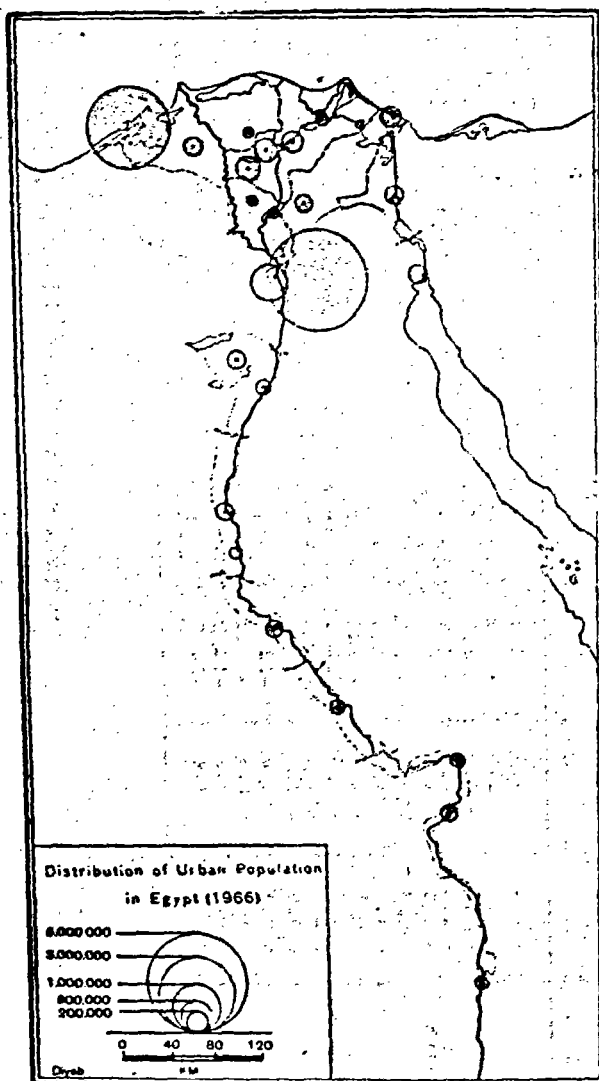


Fig.(A-2) Distribution of Urban Population in Egypt*

Source: Dr. Mohamed Sobhi Abdel Hakim, "The Population of Egypt a Demographic Study", The Bulletin of the Faculty of Arts, Cairo University, Vol.XXIX, Parts 1 & 2, 1967, pp.17-44

1. From South Upper Egypt to Cairo.
2. From South Upper Egypt to Alexandria.
3. From South Upper Egypt to Suez Canal Area.
4. From South Upper Egypt to Red Coast and Sinai.
5. From North Upper Egypt to Cairo.
6. From Kena to Aswan.
7. From the Delta to Cairo.
8. From East Delta to Suez Canal Area.
9. From West & North Delta to Alexandria.
10. From South Delta to North Delta.

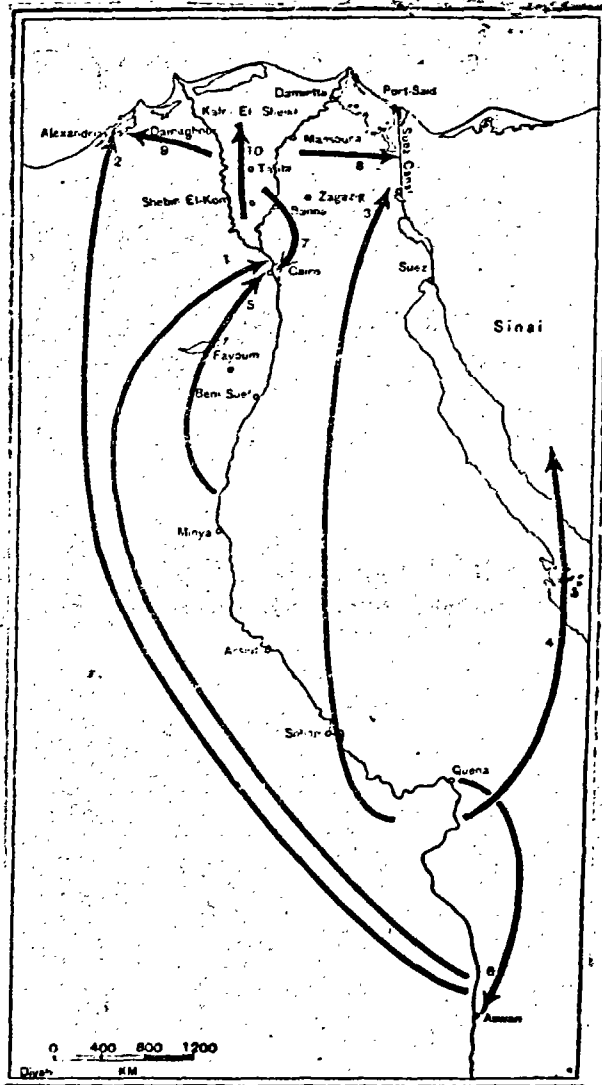


Fig.(A-3) Streams of Internal Migration in Egypt*

*Source: Dr. Mohamed Sobhi Abdel Hakim, "The Population of Egypt a Demographic Study", The Bulletin of the Faculty of Arts, Cairo University, Vol.XXIX, Parts 1 & 2, 1967, pp.17-44.

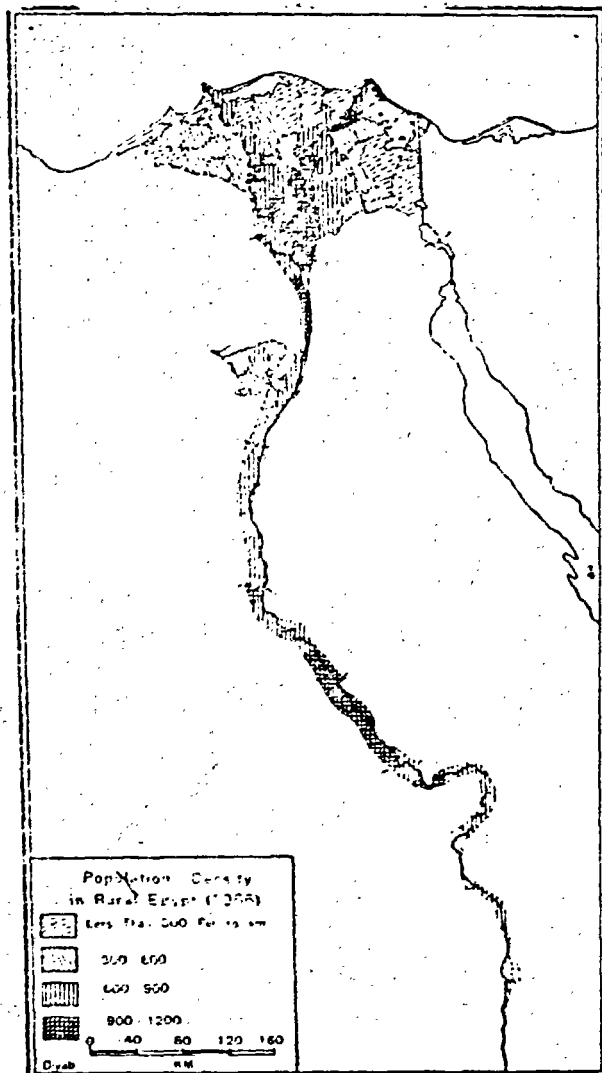


Fig.(A-4) Population Density in Rural Egypt*

*Source: Dr. Mohamed Sobhi Abdel Hakim, "The Population of Egypt a Demographic Study", The Bulletin of the Faculty of Arts, Cairo University, Vol. XXIX, Parts 1 & 2, 1967, pp.17-44.

Table (17)
Percent of Labour Force in Each Industry,
by Sex, Egypt, 1937-1960

Industry/Year	1937	1947	1960
		Males	
Agriculture	69.5	16.8	57.4
Mining	.2	.2	.3
Manufacturing	6.3	8.8	9.6
Construction	2.3	1.9	2.2
Electricity	.4	.4	.5
Commerce	7.5	9.0	8.4
Transport	2.7	3.4	3.6
Services	11.1	14.5	15.6
Not adequately described	....	....	2.5
Total	100.0	100.0	100.0
		Females	
Agriculture	66.6	59.7	43.3
Mining	0.0	....	....
Manufacturing	4.0	5.2	4.0
Construction	0.2	.1	0.1
Electricity	0.2	.4	0.1
Commerce	8.0	8.2	6.2
Transport	0.2	.3	0.4
Services	20.5	26.1	38.2
Not adequately described	0.5	....	6.8
Total	100.0	100.0	100.0

Table (18)

Percent Distribution of the Labour Force by Status
for Age and Sex Groups, Egypt 1960

Age Status	Employers	Self-Employed	Employees	Family Workers	Others	Total
<u>Males</u>						
6-9	...	.2	16.8	80.1	2.9	100.0
10-14	.2	.3	28.5	55.7	4.8	100.0
15-19	1.3	7.4	47.6	28.8	4.9	100.0
20-24	2.6	13.3	55.1	25.3	3.8	100.0
25-29	4.7	20.7	56.2	16.7	1.7	100.0
30-34	6.6	25.8	57.3	9.3	1.1	100.0
35-39	8.6	30.8	54.7	5.4	.8	100.0
40-44	10.3	32.6	53.7	2.6	.9	100.0
45-49	12.6	34.3	50.9	1.5	.8	100.0
50-54	14.0	35.9	48.8	.7	.9	100.0
55-59	16.6	36.0	46.0	.5	1.0	100.0
60-64	19.1	42.1	37.6	.4	.9	100.0
65-	23.3	48.8	27.9	.4	.6	100.0
Not Stated	5.4	3.7	46.2	3.2	35.5	100.0
Total 6-	7.8	23.7	48.8	17.7	2.1	100.0
<u>Females</u>						
6-9	...	.1	28.8	67.3	3.8	100.0
10-14	...	.2	52.3	43.7	3.8	100.0
15-19	.2	2.8	61.8	25.1	10.1	100.0
20-24	.5	3.9	73.4	13.1	9.2	100.0
25-29	1.1	7.5	69.8	14.8	6.8	100.0
30-34	2.3	12.7	61.7	15.4	7.9	100.0
35-39	4.0	17.6	56.0	14.1	8.3	100.0
40-44	5.6	21.2	22.7	10.3	7.3	100.0
45-49	6.4	24.0	52.2	10.7	6.8	100.0
50-54	7.5	28.1	52.4	6.7	5.4	100.0
55-59	8.4	30.8	47.8	7.9	5.1	100.0
60-64	9.6	37.0	46.2	4.4	2.9	100.0
65-	12.8	40.4	40.3	4.0	2.4	100.0
Not Stated	4.8	9.5	9.5	2.3	73.8	100.0
Total	1.9	8.3	54.9	28.5	6.4	100.0
<u>Both Sexes</u>						
6-9	...	.1	19.9	76.8	3.2	100.0
10-14	.1	.7	34.3	60.4	4.5	100.0
15-19	1.2	6.9	49.1	37.4	5.5	100.0
20-24	2.5	12.6	56.4	24.4	4.2	100.0
25-29	4.5	19.9	57.0	16.6	2.0	100.0
30-34	6.4	25.2	27.5	9.6	1.4	100.0
35-39	8.4	30.0	54.7	5.3	1.2	100.0
40-44	10.1	32.0	53.8	3.0	1.2	100.0
45-49	12.3	33.8	50.9	1.9	1.1	100.0
50-54	13.7	35.2	49.0	1.0	1.2	100.0
55-59	16.3	35.9	46.0	.7	1.1	100.0
60-64	18.7	41.9	37.9	.5	.9	100.0
65-	24.9	45.7	28.3	.5	.7	100.0
Not Stated	5.2	9.0	34.8	3.0	47.4	100.0
Total 6-	7.4	22.4	43.3	18.5	2.4	100.0

Table (19)

**Summary of Results Assuming Constant Fertility
and Declining Mortality (sim(1))**

Time	Age Composition				Vital Characteristic				
	Percentage Disc			Median age	CBR	CDR	R	CRR	NRR
	0-14	15-64	65-						
1950	42.50	54.39	3.12	19.29	42.84	17.48	2.54	3.01	2.03
1970	39.72	56.69	3.59	19.68	41.65	16.47	2.52	3.01	2.08
1980	40.07	55.87	4.06	20.13	42.77	16.23	2.65	3.01	2.13
1990	41.15	54.49	4.36	19.64	40.84	15.22	2.56	3.01	2.19
2000	40.79	54.89	4.32	19.58	40.79	14.36	2.65	3.01	2.25
2010	41.22	54.98	3.80	19.50	41.22	13.80	2.74	3.01	2.28
2035	41.57	54.54	3.89	19.22	41.33	13.70	2.76	3.01	2.28
2060	41.73	54.43	3.84	19.14	41.16	13.62	2.75	3.01	2.28

Source: A. Khalifa and M. El Rouby, "Aging of Population of Egypt: Past and Future Trend" in Egyptian Population and Family Planning Review, Vol.4, December 1972

Table (20)

**Summary of Results Assuming Constant Mortality
and Declining Fertility (sim (2))**

Time	Aging Measures				Vital Characteristics				
	Percentage Dis.			Median Age	XBR	CDR	R	GRR	NRR
	0-14	15-64	65 -						
1960	42.50	54.39	3.12	19.29	42.84	17.48	2.54	3.01	2.03
1970	39.14	57.24	3.62	19.89	38.51	16.63	2.16	2.71	1.83
1980	36.21	59.32	4.47	21.54	36.67	16.31	1.99	2.41	1.62
1990	35.31	59.84	4.58	22.99	32.85	16.31	1.57	2.11	1.42
2000	32.54	62.58	5.23	42.66	27.78	15.32	1.20	1.81	1.22
2010	28.49	66.14	5.36	72.13	26.10	15.90	1.02	1.66	1.12
2035	25.94	65.58	8.87	31.05	23.53	18.00	.54	1.66	1.12
2060	25.33	64.17	10.49	31.85	32.28	19.51	.38	1.66	1.12

Source: Same as Table 19

Table (21)

Summary of Results Assuming a Simultaneous
Decline in Fertility and Mortality (sim (3))

Time	Aging Measures				Vital Characteristics				
	Percentage Dis.			Median Age	CRR	CDR	R	GRR	NRR
	0-14	15-64	65-						
1960	42.50	54.39	3.12	19.29	42.64	17.48	2.54	3.01	2.03
1970	93.24	57.14	3.62	19.36	39.07	15.81	2.23	2.71	1.87
1980	37.38	58.64	4.25	21.41	36.24	15.81	2.11	2.41	1.71
1990	36.15	59.00	4.85	22.51	31.15	14.07	1.74	2.11	1.53
2000	33.22	61.53	5.26	23.94	27.35	13.12	1.42	1.81	1.35
2010	30.09	64.62	5.29	26.07	25.89	12.96	1.28	1.66	1.25
2035	27.29	64.17	7.92	29.17	23.72	14.77	0.88	1.66	1.25
2065	27.42	63.02	29.81	29.81	23.70	15.93	0.76	1.66	1.25

Source: Same as Table 19.

Table (22)

Summary of Results Assuming Constant Fertility and
Mortality Conditions at the Levels of 1960 (sim (4))

Time	Aging Measures				Vital Characteristics				
	Percentage Dis.			Median Age	CBR	CDR	R	GRR	NRR
	0-14	15-64	65+						
1960	42.50	54.39	3.12	19.29	42.84	17.48	2.54	3.01	2.03
1970	39.62	56.67	3.59	19.71	41.80	17.34	2.45	3.01	2.03
1980	39.56	56.58	3.06	20.39	43.32	18.09	2.52	3.01	2.03
1990	40.27	55.35	4.38	20.13	41.65	17.96	2.37	3.01	2.03
2000	39.52	56.12	4.37	20.28	41.66	17.95	2.37	3.01	2.03
2010	39.41	56.70	3.90	20.54	42.22	18.00	2.42	3.01	2.02
2035	39.38	56.36	3.26	20.50	41.58	18.05	2.38	3.01	2.03
2065	39.46	56.18	4.35	20.47	41.68	18.06	2.36	3.01	2.03

Source: Same as Table 19.

Table (23)

Summary of Results Assuming the Attainment
of Replacement Level in Egypt after 40 Years of 1960
(sim (5))

Time	Aging Measures				Vital Characteristics				
	Percentage Dis.			Median Age	CBR	CDR	R	GRR	NRR
	0-14	15-64	65-						
1960	42.50	54.39	3.12	19.29	42.83	17.48	2.54	3.0	2.03
1970	39.00	57.37	3.63	19.95	36.31	15.49	2.08	2.56	1.77
1980	36.00	59.66	4.36	22.03	32.82	14.63	1.82	2.12	1.50
1990	33.35	61.53	5.12	24.02	26.34	13.44	1.29	1.67	1.22
2000	28.58	65.58	5.84	26.69	21.79	13.18	.86	1.36	1.00
2010	24.99	68.88	6.12	29.59	21.77	13.02	.78	1.36	1.00
2035	22.67	66.83	10.51	34.13	18.86	17.13	.17	1.36	1.00
2065	22.55	64.63	12.81	34.78	18.67	18.96	.03	1.36	1.00

Source: Same as Table 19.

Table (24)

Total National Income and Per-capita Income
in Egypt from 1952/53 to 1969/70 Constant Prices
(1952-1953)

Years	National Income Millions	Annual Increase %	Per-capita Income L.E.	Annual Increase %
1952/53	806.0	....	37.1	...
1953/54	871.0	8.1	39.1	5.4
1954/55	930.0	6.8	40.8	4.3
1955/56	881.0	- 5.6	37.7	- 7.6
1956/57	897.0	1.8	37.5	- 0.5
1957/58	959.0	6.9	39.9	6.4
1958/59	985.0	2.7	39.4	- 1.3
1959/60	1091.0	10.8	42.6	8.1
1960/61	1139.0	4.4	43.3	1.6
1961/62	1190.0	4.5	44.2	2.1
1962/63	1324.0	11.3	48.0	8.6
1963/64	1416.0	6.9	29.9	4.0
1964/65	1480.0	4.5	50.7	1.6
1965/66	1554.0	5.0	52.2	2.9
1966/67	1559.0	0.3	51.8	- 0.8
1967/68	1544.0	- 0.9	49.4	- 4.6
1968/69	1632.0	5.7	51.0	3.2
1969/70	1746.0	7.0	53.2	4.3

Source: CAPMAS, Population and Development, op. cit.

