

PROJECTION OF THE POPULATION OF EGYPT

BY H. MAKHLOUF

1. INTRODUCTION

People are the basis of any socio-economic decision making at any level. The objectives of any socio-economic plan as an example of such decisions are always concerned with people, such as raising the per capita income, achieving full employment and achieving one hundred percent enrolment ratio: for the first or second level of education and so on. People also determine the labour supply which is the essential factor in the production of all goods and services. Thus it becomes very essential for any country to have the most accurate information about the size and composition of its population at a future point-in-time, since any decision is concerned with the future.

Projection techniques and models are the demographic tools for these purposes because they can provide data about the expected population of the future.

Population projections are not merely taken as a given basis for the development plan, but they can present a factor which may be changed within the limits by planned action.

The accuracy of the results obtained in any projection affected by many factors, among them are the following:

1. The technique and the model used.
2. The type and quality of data used.
3. The assumption underlying the projection.
4. The duration of projection period and, length of each projection interval.

The aim of this paper is to project the population of Egypt in order to know how far this population is going to change in the future, and whether its growth rate needs to be restricted.

2. METHODS OF PROJECTION

The projection for the population of Egypt was made on a computer by component projection programme providing figures for each sex, for quinquennial age groups and for every five years during the period 1965-2000.

The basic principle is that the number of people of a given age and sex who will be in the population at time $t + 1$ is equal to the number in the population at time t plus births, less deaths which will occur during the period t to $t + 1$, given the starting population and some assumptions relating to fertility and mortality & migration.

The model used is a female dominant, i.e. the number of births at each stage of projection is primarily determined by the number of women of childbearing ages and their fertility level.

The basic assumptions used in constructing the projection model are:

1. The age specific fertility and mortality rates are fixed during every projection period.
2. The ratio of female births to total births is the same for all ages of mothers.
3. The population is closed to migration.

The four elements needed for such a model are:

1. The starting population.
2. The expected age specific mortality rates.
3. The expected age specific fertility rates.
4. The expected sex ratio at birth.

These four elements are considered in the following sections. The assumption that the population is closed to migration is a reasonable one for a country like Egypt because migration has never been an important factor in the growth of Egypt's population.

This phenomena may be due to the cultural background of basically an agricultural society that has valued over its long history the relationship between its people and their land.

3. Age and Sex Structure For the Base Population

Among many developing countries, Egypt has the longest series of demographic data. A special agency called the Central Agency for Public Mobilisation and Statistics is responsible for all of the processing of these data.

The first estimate of the population of Egypt was made in the year 1800 during the French expedition. In 1821 another estimation was made on the basis of tax lists and in 1846 a third estimate was made using the returns of a Housing Census.

The first national population census was taken in 1882 following the British occupation of the country. After a lapse of fifteen years the second census was taken in 1897 on a more basis with regard to technique, scope and content. Censuses then followed every ten years up to 1947.

The eighth census was scheduled for 1957 but had to be postponed due to the Suez War. Two more censuses have been taken since then, one in 1960 and the other in 1966, which was the first census to be taken on the sample basis.

Plans were made to carry out a national census in 1970 as the latest decimal census next to 1960 but unfortunately it was postponed due to the prevailing war conditions in the Middle East, and was finally taken in November 1976.

As in common with more of the developing countries these data had some of the usual weaknesses, i.e. the misreporting of age and an under-enumeration of persons especially at the young ages of infancy and early childhood. However, several attempts for rectification of these data have been made, one of these has been made by Valouras (1972), who used the last three completed population censuses taken in 1937, 1947 and in 1960 as a framework for his analysis, Table (1), has estimated age-sex structure for year 1965, Table (2), has been used in this study as the basic population for the population projections for Egypt and it was also used in constructing the age specific fertility and mortality rates for the year 1965.

The reasons for selecting the year 1965 as a starting data for the population projections are:-

1. The national family planning programme in Egypt started 1966, so it seems reasonable to start by the year 1965, i.e. just before the start of the programme.
2. The exceptional situation in the country created by the

1967 war in the Middle East; such a war affected the normal pattern of the demographic statistics. The war situation at least obliged the citizens of the Suez Canal zone and Sināi to move to other governorates and such movements have naturally affected the norms of life in most of the governorates of the country, and the standard of the available services, and in addition such a situation of the people towards natality.⁽¹⁾

4. Age Pattern of Mortality

Mortality levels in any society reflect the factors affecting the socio-economic development level.

Accordingly, the magnitude of mortality risk varies from one country to the other, and in the same country it varies from time-to-time. In countries with a sound statistical system of reporting deaths, mortality levels would be the result of all forces affecting the standard of living.

The object of this section is to investigate recent trends in the age pattern and level of mortality in Egypt. This would help in formulating the assumptions regarding the future course

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1. The Suez Canal was re-opened in June 1975 and since then the citizens of the canal zone began to move back to their governorates.

of mortality to the end of the century. The projected age-specific mortality rates will be used in constructing abridged life tables for the population projection purposes.

4.1 Trends in Mortality Levels

According to the published data, the level of mortality was among the highest in the world. However, this level has shown a gradual decrease since World War II, Table (3), the average death rate for the period 1940-1944 was 26.66 per thousand and dropped to 14.88 per thousand during the period 1965-1969, i.e. a decrease of about 44 percent. It can also be noticed that such a declining level of mortality is existing among both sexes.

The infant mortality rate has achieved some improvement, i.e. from an average of 160 per thousand for the period 1940-1944 to 117.4 per thousand as an average for years 1960-1965, a decline of about 32 percent.

The age specific mortality rates for males and females, (CAPMAS , 1973) shows:

1. There was a notable decline in mortality levels among all age groups and for both sexes.⁽¹⁾
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1. If the under-registration which death statistics in Egypt suffers from, and which is improving with time is taken into consideration, such notable decline will be more assured.

2. Among the first age group 0-4 years there is a very remarkable decline in the mortality rate, the average rate for males was 109.1 for the years 1940-1944 and it declined to 49.52 for the years 1965-1969, i.e. a fall of 54.61 percent and 36 percent for males and females respectively.
3. The age groups 5-9 and 10-14 have shown the greatest percentage reduction among the other groups with a decline of about 77.55 percent for males and 65.95 percent for females during the period from 1940-1944 to 1965-1969.
4. The age groups 15-19, 20-29, 30-39, 40-49 and 50-59 have achieved a reasonable percentage decline during the last twenty five years.
5. In the two higher age groups there was some improvement for both sexes.

With regard to recent trends in the sex differential in mortality levels in Egypt, the data shows that the male mortality was higher in all age groups but (since the early 1960s) became in excess in the age groups of infancy, early childhood and the last age group, 70 and over.

Life expectancy is increasing for all age groups and for both males and females, (CAPMAS, 1973).

The analysis of mortality by causes of death can help in understanding the pattern of mortality.

During (1940-1969) the first leading cause of death was gastro intestinal diseases, especially gastro enteritis, which affects mostly infants and children under five years of age. The second leading cause was respiratory diseases, especially bronchitis and pneumonia, which again affected mostly infants and children. The third leading cause was diseases of early infancy, especially prematurity which lead mostly to neonatal deaths. It is evident that these three leading causes have their greatest risks during infancy and childhood, and collectively they constitute about 60% of the total deaths, this fact explains the high infant and early childhood mortality which Egypt still suffers from.

It is of interest to note that heart and circulatory diseases which were the sixth leading cause during the period 1940-1944 took the third position during 1965-1969 while parasitic and infectious diseases which earlier occupied the third position took the sixth rank, this change being due to socio-economical development.

The conclusion from the previous brief discussion is that there was a declining trend in the level of mortality in Egypt due to the continuation of socio-economic development in the country which made use of modern technology, created better environmental control, improved nutrition for mothers and children, and an increase in the availability of health services throughout rural areas where about 76% of the Egyptian population lived. Such a situation gives the hope for more improvement in levels of mortality in the future especially among infancy and childhood ages.

4.2 Current Level of Mortality

The notification of birth and death events occurring in Egypt became compulsory for both Egyptians and foreigners residing in the country according to the Decree No. 23 promulgated in August 1912.

However, registration of vital events was far from complete at the beginning. Therefore births and deaths were published for all the country and for areas where Public Health Bureaus operated.

Those bureaus were usually located in the more developed regions and therefore their vital statistics represented more

complete registration and were more reliable in 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. In 1960 about 48% of the total population were covered by such bureaus and it is estimated that the registration of the vital events cover between 80% to 90% of the total number of births and deaths. It is certainly improving with time. The other problem which the public data suffered from was the misreporting of age at death, but in spite of that the available data can give a reasonable estimate of the level and the trend of the vital rates.

According to the above facts and due to the exceptional situation created by the war conditions, starting in the year 1967, it would be better to base the projection on a rectified set of (Valouras, 1972) age specific mortality rates for the year 1965 based on the rectified age sex structure in Table (2), and the average number of deaths of five years after accounting for missing neonatal deaths and for erroneous age reporting, Table (4).

4.3 Projection of Age Specific Mortality Rates

The projection of mortality must be based on the past and current pattern of mortality as well as some probable assumptions about the future.

The assumptions used in making such projections in Egypt up to the year 2000 are:-

1. The declining trend in mortality level will continue for all ages and for both sexes, since the effort to extend socio-economic development will continue in Egypt.
2. Male mortality rates are higher than female for all age groups.
3. There is a minimum level for every age group and such level varies from one country to another according to their past mortality experiences and their capability to develop socio-economically.

The model used (Shryock, 1973) for projecting the age specific mortality rates is:

$$M_{x,t} = (M_{x,0} - M_{x,\infty}) e^{-b_x t} + M_{x,\infty}$$

where

$M_{x,t}$ is the age specific mortality rate for age group x t years after the base year.

$M_{x,0}$ is the age specific mortality rate for age group x on the base year.

$M_{x,\infty}$ is the ultimate age specific mortality rate for age group x .

b is the constant specific for age group x

t is the number of years for which the projection is desired.

This model is reasonable for projecting the age specific mortality rates in a country like Egypt because:-

1. It achieves a declining level of mortality.
2. It follows the principle that the rate for any particular age should not fall below a specific level.

The age specific mortality rates for quinquennial periods to cover 1965-2000 have been projected using the above outlined model. The values of the mortality rates for 1965, Table (4) were used as the mortality rates for the base year $M_{x,0}$.

For the ultimate age specific mortality rates $M_{x,a}$, it has been assumed that the mortality rates of the Regional Model Life Tables, South, Level 24 (Coale, 1966) would apply with expectation of life at birth equal to 73.6 for males and 77.5 for females.

The improving percentage for the A.S.M.R's during the projection period has been estimated according to :-

1. The past and current pattern of mortality as well as the improving percentage during the period 1940-1965.
2. The pattern of mortality for some selected countries in the past and the improving percentage which has been achieved in these countries.

Applying the above model with the above assumptions, the mortality rates have been projected by age and sex for the period 1965-2000 at quinquennial intervals and are shown in Tables (5 & 6) and Figures (1) & (2).

5. Age Patterns of Fertility

Fertility is the most important factor affecting the growth

FIGURE (1)

Age Pattern of Mortality

Males

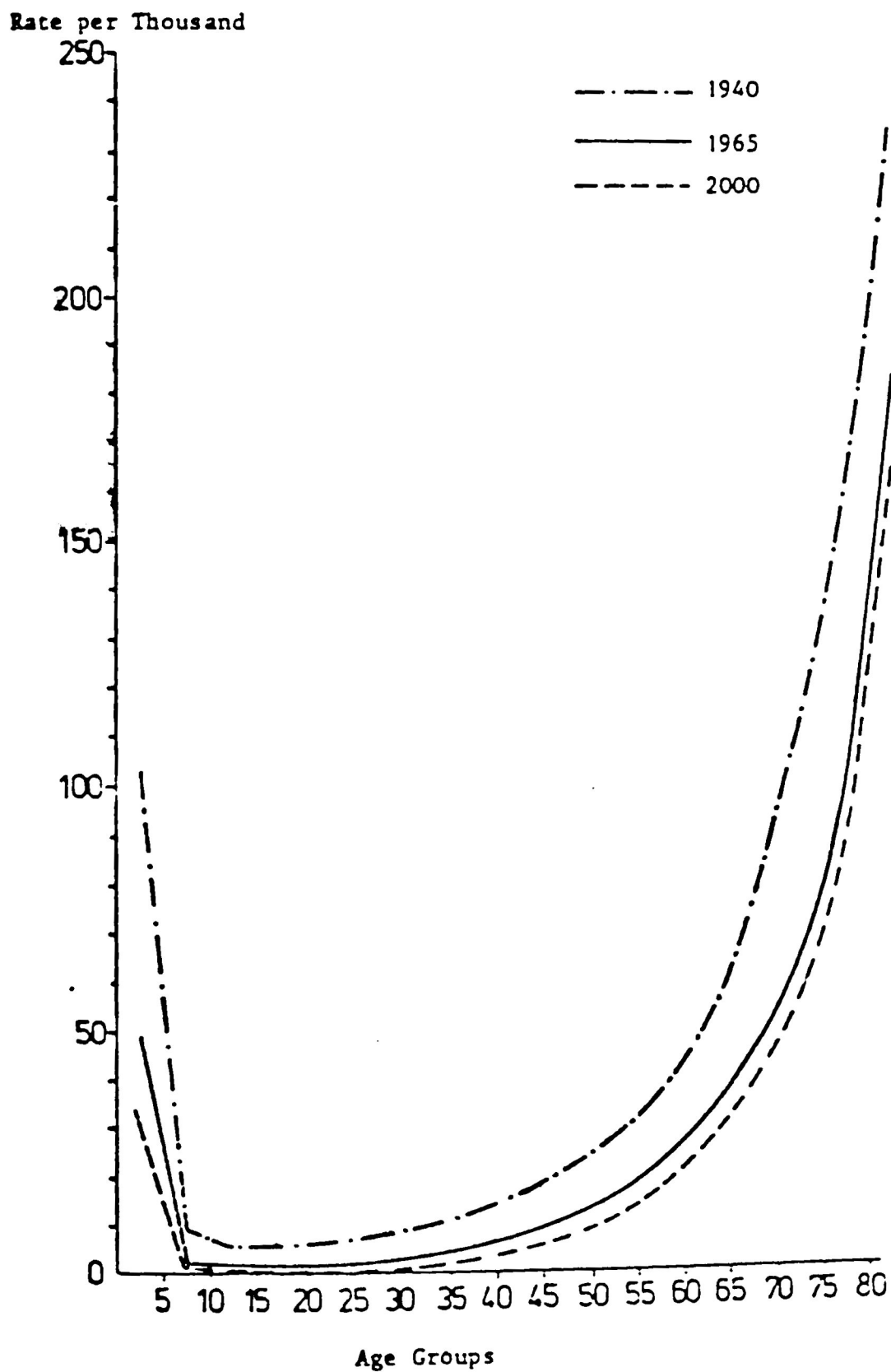
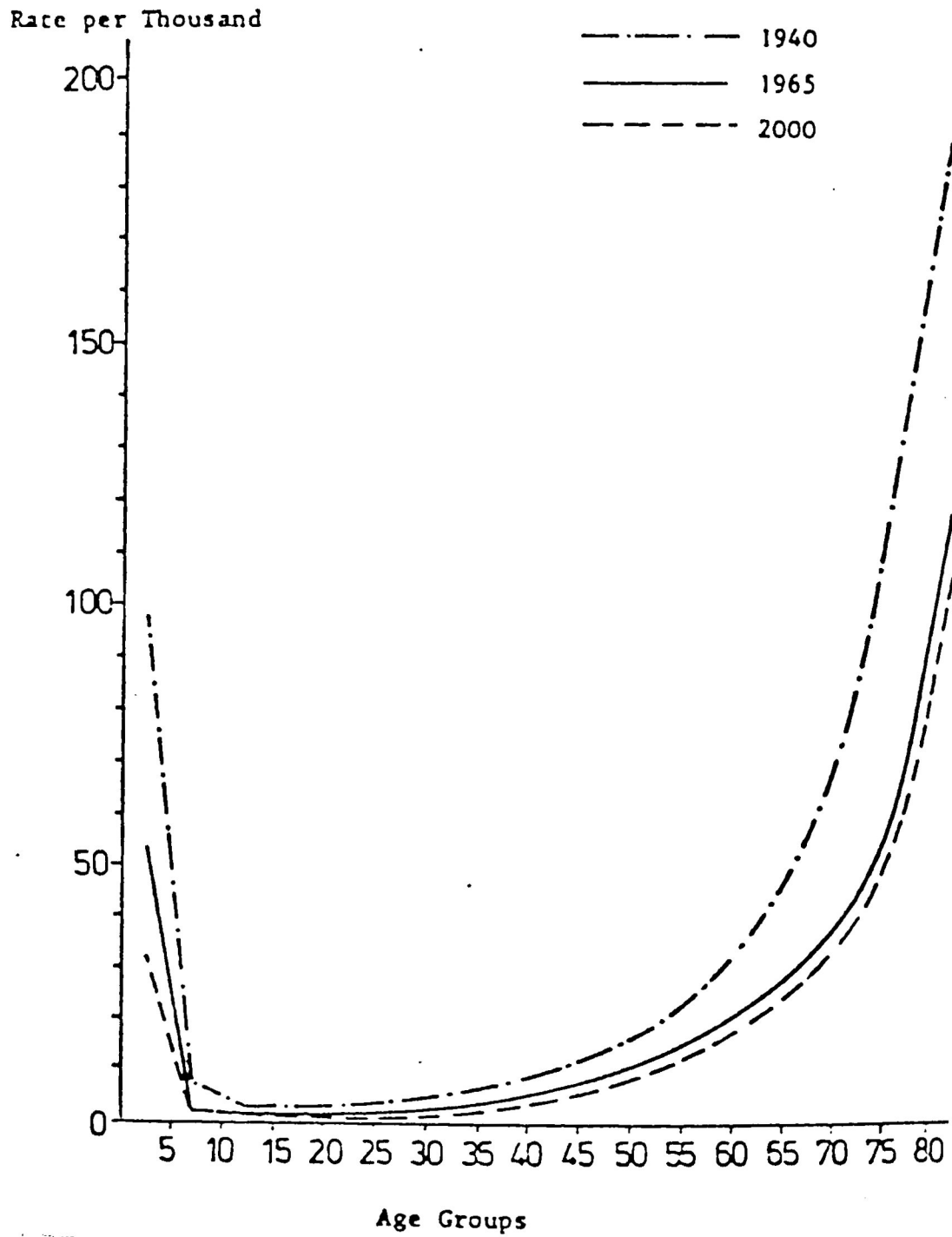


FIGURE (2)

Age Pattern of Mortality

Females



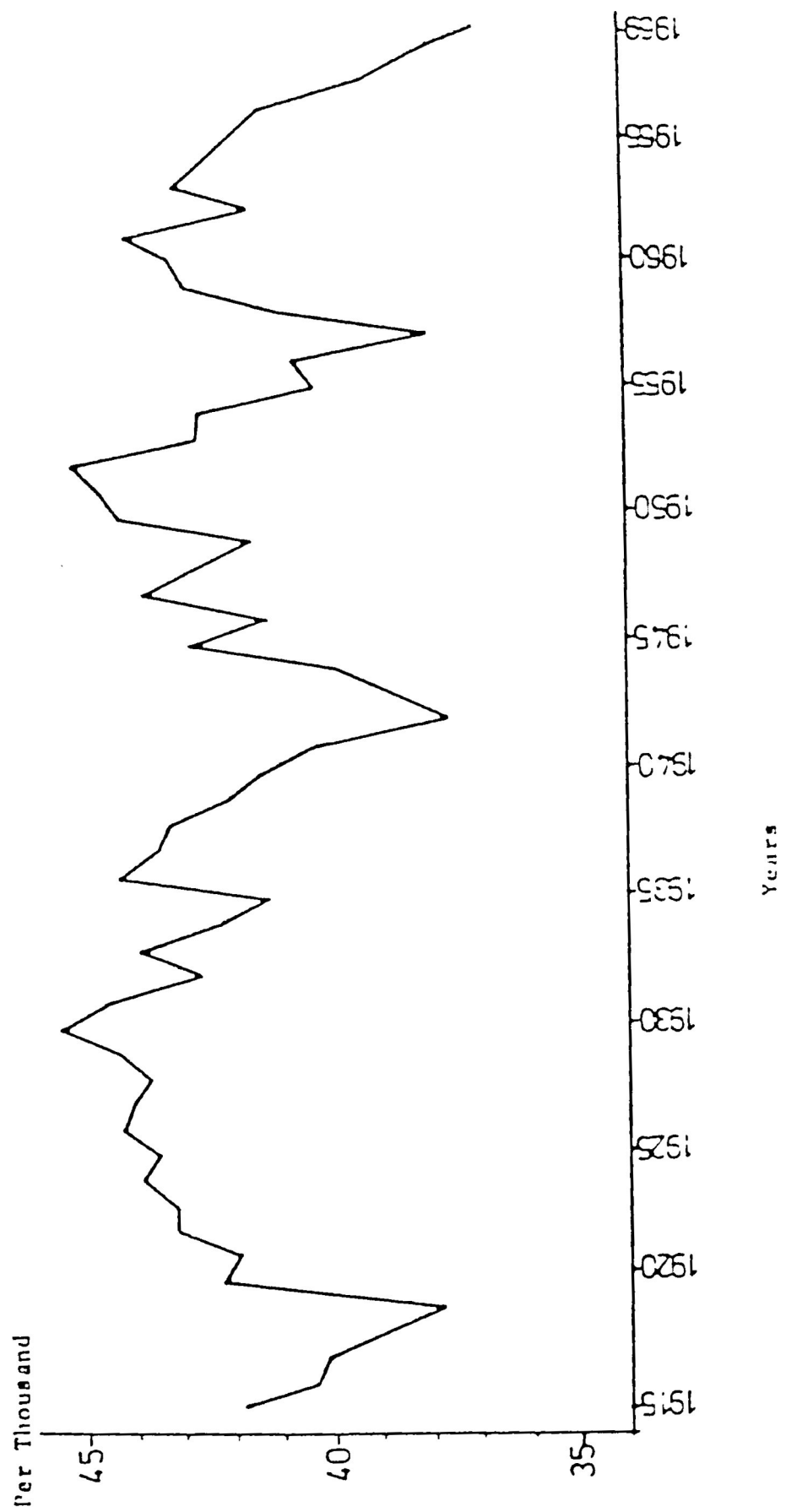
of the population in the developing countries which have suffered from the so-called population explosion. The analysis of fertility is more complicated than that of the other factors affecting the growth of population because changes in fertility are strongly affected by personal attitudes and other socio-economic factors.

The object of this section is to study recent trends in the age patterns of fertility in order to make a reasonable projection for the age specific fertility rates during the period 1965-2000 for the purposes of preparing the population projections of Egypt.

5.1 Trends in Fertility Levels

The birth rate which is the output of the interaction between the level and age pattern of fertility, and the age structure of the population has remained high in Egypt at a level of more than 40 births per thousand population since the early years of this century, Table (7) but there have been three small distinct dips during that period, Figure (3). The first occurred in 1918 and 1919 when the rate dropped to 38.9 and 37.7 per thousand, the second fall occurred between years 1940 to 1944 and the third happened in 1957, all three were war periods and the falls were associated with epidemic diseases (Omran , 1973). The rate shows also a declining pattern since 1967 and such a pattern was also associated with the war situation in the Middle East.

FIGURE ()
Reported C.H.R. (1915-1969)



A closer look at the series of the crude birth rate in Table (7) and Figure (3) would also show that there is a slight declining trend which has started early in the 1960s or possibly a few years earlier when the rate dropped from 45.2 in 1952 to 42.6 in 1953. Such a trend can be accepted if the fact that the registration of births is improving by time is taken into consideration.

The general fertility rate for the census years in Egypt shows an increase between 1917 and 1960 from 170 births per thousand women in the childbearing age to 185 births. But an estimate for the period between 1967 and 1969 which has been made by Issa (1970) showed that the general fertility rate started its declining trend by the year 1964 when the rate fell from 184 to 177 by the year 1966.

The gross reproduction rate increased from 2.71 daughters per women in 1947 to 3.0 daughters in 1966. The net reproduction rate increased much faster than the gross reproduction rate in Egypt since it grew from 1.77 (daughters will survive to the age of their mothers) in 1947 to 2.25 in 1966, i.e. an increase of about 27 while the gross reproduction rate increased by about 10% during the same period. This reflected the important share that mortality contributes to fertility

levels in Egypt because the gradual reduction of premature deaths leads to more female births surviving to the child-bearing ages and therefore to more live births even if the age specific fertility rates remain unchanged. The age specific fertility rates have shown some variation in Egypt during the part (CAPMAS , 1973). The highest fertility rate during the period 1938-1942 as an average was 301.8 per thousand in the age group 25-29.

During the next periods all the rates rose and the peak rate reached 38.1 during the late 40s and early 50s and still occurred in the age group 25-29 but the pattern began to change slightly in the late 50s when most of the rates declined. Beginning in the 60s a change in the age pattern of fertility characterized by an extension of the peak fertility to the older age groups (367.1 births per thousand women aged between 25-29 and 361.24 births per thousand aged between 30-34), and an increase in the older age group. By the year 1966 the rates were already similar for the young and middle-aged and slightly higher for the older age group 40-49.

5.2 Current Level of Fertility

Reporting on the incidence of birth was made compulsory in

Egypt in 1921 as mentioned previously. It was the responsibility of the Ministry of Health to keep the appropriate records of the events and to issue certificates to the public. In 1960 the Department of Civil Registration was established and took on the task of registering all the vital events, meanwhile compilation, tabulation and the publication of data on vital events remained from the beginning the responsibility of the Central Statistical Authority, now called the Central Agency for Public Mobilization and Statistics.

On the occurrence of birth, the parents, the guardian or any adult family member should report within eight days of the birth of the child to the area Health Authority. The birth notification form contains data on:

1. The live born child, i.e. name, sex,...
2. The parent's age, occupation of father, duration of marriage, number of children born alive.

By the birth notification form, the birth certificate can then be obtained, and it is the only document by which the parents can add their child to ration card of the family in

order to obtain subsidised food, and also with it they can apply to a school for their child and in addition for many other benefits such as a tax allowance.

The available data on fertility are:-

1. Data on the crude birth rate since about 1915.
2. Data on births classified by age of mothers since about 1930 with some missing values for the years (1931-1935), 1936 and 1938, 1939.

These data for Egypt, as is the case for other developing countries, suffered from the usual weaknesses such as:

1. Misreporting of age of the mothers.
2. Under-registration of births, especially if the baby died in the first few days of his life, then both the notification of birth and death may not be made.

But with the contribution of socio-economic development of the country and with the expansion of the Health Bureaus as a

phase of such a development, the quality of these data is improving .

In extracting the current age specific fertility rates from these data, a problem emerges because the routine classification of births according to the age of the mother had undergone a three-stage development as follows:-

1. From the early 1930s to 1961 the routine was to classify the births for the whole country according to the percentage of births in the areas having Health Bureaus.
2. From 1962 the classification was done by using the moving average for the percentage during the most recent last three years.
3. Since 1966 the classification was done according to the actual occurrence of the event in the whole country.

Accordingly the rates for the years prior to 1966 do not reflect the real pattern of fertility in the country because

of the great differences between the attitude and behaviour of the people in areas including Health Bureaus, and the people in other areas, with in addition the fact that since 1967 the demographic data has been affected by exceptional war conditions. Under such circumstances the current age specific fertility rates could be estimated using:-

1. The registered births classified by the age of the mothers for year 1966.
2. The age structure for year 1965, Table(2).

The use of registered births for year 1966 in estimating the rates for year 1965 could help in compensating the under-registration of births in year 1965. Table (8) contains the estimated rates.

5.3 Projections of Age Specific Fertility Rates

There are many methods for projecting fertility, one of these methods is the use of the period fertility level which involves examining the trend of the age specific fertility rates, and projecting them on the basis of various assumptions and techniques to some future years. These methods will be used in projecting the age specific fertility rates for Egypt during

the projection period (1965-2000). The general assumption for such projection is that the level of fertility is correlated with the socio-economic development, i.e. at certain levels of income, education, industry etc. people purely decide to limit the size of their family. They then decide to adopt the principles of family planning and to choose personal methods of limiting and spacing their children.

In addition the following assumptions are also made:-

1. The socio-economic development in Egypt is a continuous process.
2. There is an increasing effort towards family planning activities.
3. The age pattern of fertility will not change inspite of a decreasing fertility level.
4. The level of fertility will decrease and because of the uncertain factors which affect the future, it is better to assume an upper and lower limit for the expected fertility level as follows:-

(a) The level of fertility will decrease by about

30% during the projection period (1965-2000) as an upper level.

(b) The level of fertility will decrease by about 40% during the projection period (1965-2000) as a lower level.

4. The level of fertility will exponentially decline among all the age groups.

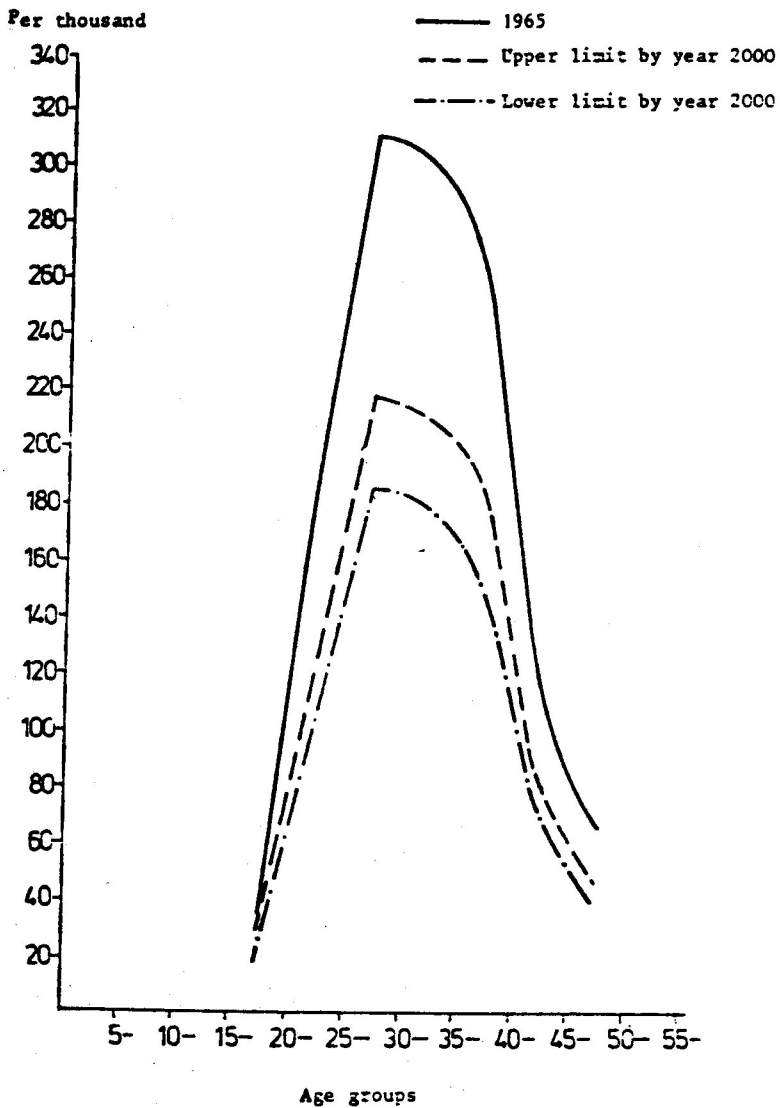
Tables (9) & (10) contain the projected age specific fertility rates. Figure (4) represents the age specific fertility rates for the year 1965 and 2000 under the two assumptions about fertility.

The sex ratio tends to be high at the very young ages and decreases with increasing age. A young population and a population with a higher birth rate tends to have a higher overall sex ratio than an older population with a low birth rate. The sex ratio at birth is above one hundred for nearly all countries for which relatively complete data are available and between 104 to 107 in most countries.

The sex ratio at birth in Egypt varied between 107 male

FIGURE (4)

Age Pattern of Fertility



births per one hundred female births to 115, Table (11) but of course such data suffered from under-registration especially for those who died in their first year.

The projection model (as mentioned previously) needs an estimate for:-

1. The sex ratio at birth during the projection period.
2. The ratio of female births to total births.

It will be assumed that the sex ratio at birth will change every projection period and that it will decrease from 106 to 104 during the projection period 1965-2000, since the level of fertility will decrease.

Table (12) contains the estimated sex ratios at birth and the estimated ratios of female births during the projection period.

6. Results of the Projections

The projection for the population of Egypt has been made twice under the two assumptions about the future pattern of fertility for quinquennial intervalles covering the period

1965-2000. There are two qualifications that must be mentioned:-

1. The variant projections presented here are designed to provide a fairly general idea of the kind of population growth in Egypt that would happen in the future under the present effort in the family planning field. Therefore they cover five year periods and not single years, and thus most demographic measures are five year averages.
2. A single assumption of future mortality trends is assumed because, as previously mentioned, fertility is the more effective factor in population growth in Egypt. Further, the main purpose of the study is to illustrate the consequences of particular changes in the pattern and level of fertility in relation to the growth of the population. However since mortality trends other than those assumed might occur, rates of population growth could be decreased by high mortality.

6.1 The Projected Age Structure

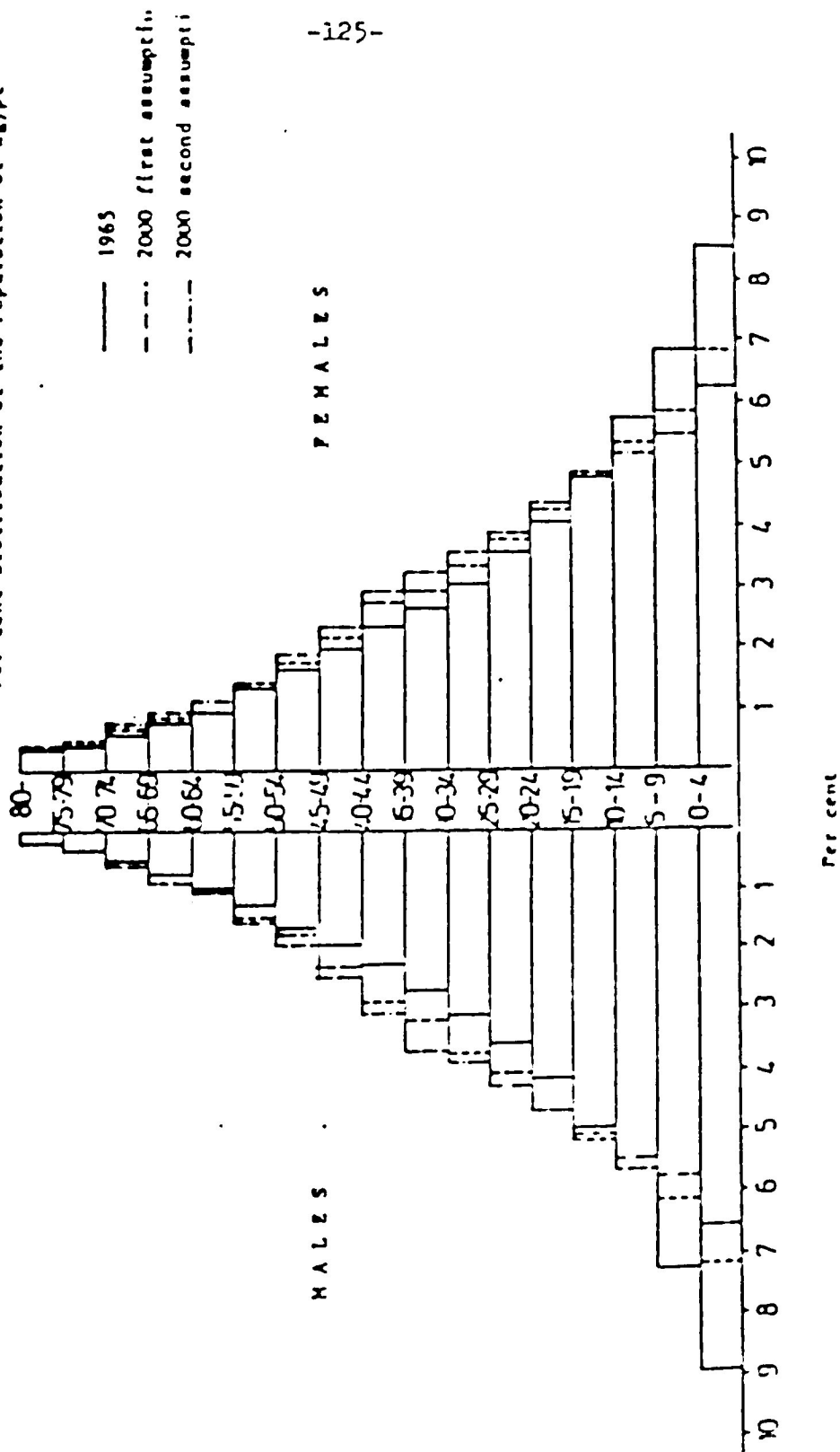
The projected age sex composition during the projection

period reflected the effect of the decline in the level of fertility and mortality as follows:-

1. The size of the population will increase from about 29.5 million in the year 1965 to about 68.8 million in the year 2000 under the first assumption of the future fertility level and to about 64.4 under the second, i.e. more than doubly in every case, Table (13).
2. The percentage of persons under 15 years of age to total population will decrease from 43.32 percent in year 1965 to 37.16 percent in year 2000 under the first assumption and to 34.6 percent under the second assumption as a result of the decrease in the level of fertility, at the same time the percentage of the population over 65 years of age to total population will increase from 3.77 percent in year 1965 to about 4.33 percent and 4.63 percent by year 2000, Table (14). In general the percentage of the population in the age groups under 15 will increase in year 2000 but the percentage for the other age groups will increase, Figure (5). The dependancy ratio

FIGURE (5)

Per cent Distribution of the Population of Egypt



which represents the ratio of the combined child population and aged population of intermediate age will show a decrease from 89.03 percent in year 1965 to about 70.9 percent and 64.6 percent under the first and second assumptions, respectively.

3. The percentage of the women in the childbearing span (14-49) will increase from 22.77 in 1965 to 24.48 and 24.2 in the year 2000 according to the two fertility assumptions.
4. The general sex ratio will increase from about 98.8 and 101.5 in year 2000, Table (15).

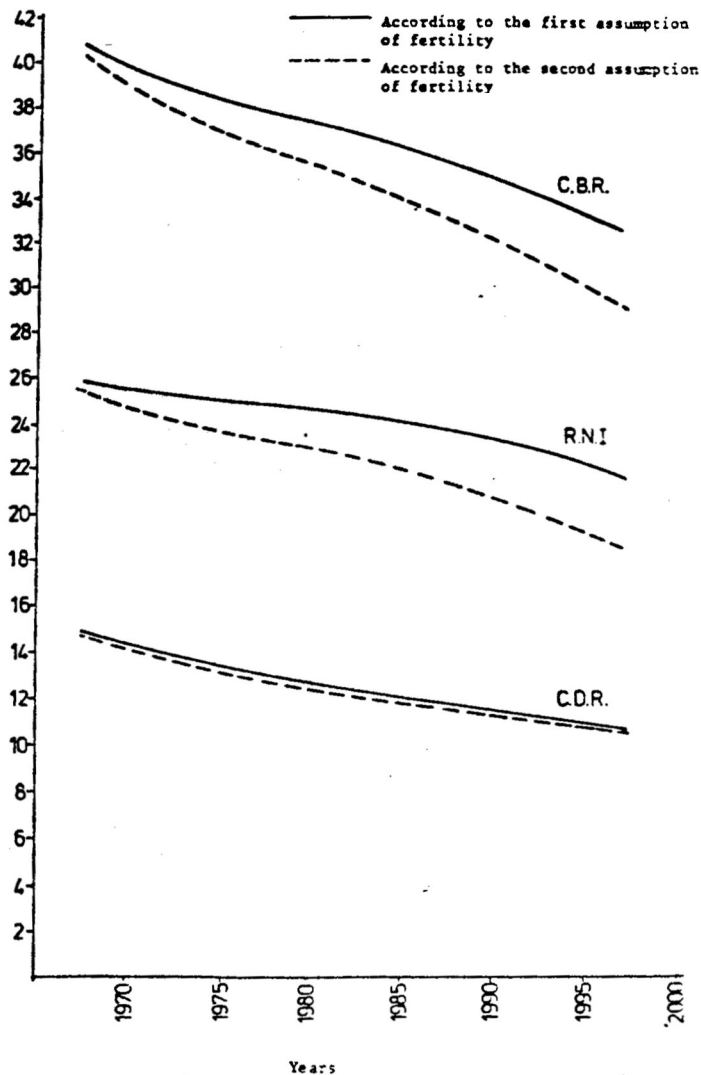
6.2 Vital Ratios per Thousand Population

1. Crude birth rate will show a decrease from 41.74 to about 32.3 and 29.01 under the first and second assumptions of fertility respectively, as shown in (16) and Figure (5).
2. Crude death rate will show a decrease from 15.3 to about 10.66 and 10.52 by year 2000 as shown in Table (16) and Figure (6).

FIGURE (6)

C.B.R., C.D.R., & R.N.I. during the
Projection Period

Per thousand



3. Crude rate of natural increase will decrease from 2.64% in year 1965 to about 2.164% and 1.849% by year 2000 under the two variants, i.e. the number of years needed to double the population will increase from 26.5 in year 1965 to about 32.34 and 37.85 by year 2000 as shown in Table (16) and Figure (6).
4. The time needed to double the population will increase to 27 years during the first projection period under the first assumption and 27.6 years under the second ; and to 32.3 years and 37.9 years during the last projection period respectively, Table (17).

6.3 Fertility Measures

1. The general fertility rate will decrease from 178.6 and 175.6 births per thousand women in the child-bearing age during the first projection period, 1965-1969 under the two assumptions, to about 132.6 and 115.4 during the last projection period, 1995-1999, Table (18).

2. The total fertility rate will decrease from about six during the first projection period to 4.619 during the last projection period, Table (19).
3. The gross reproduction rate will decrease from about three during the first projection period to 2.26 and 1.95 during the last period under the two assumptions of fertility, Table (19).
4. The net reproduction rate will decrease from 3.06 and 2.216 during the first projection period to 1.853 and 1.6009 during the last projection period, Table (19).
5. The mean age of childbearing could achieve a very small change from 32.03 and 32.02 years during the first projection period 1965-1970 to 32.06 and 32.04 in the last projection period.

7. Conclusion

The purpose of this chapter was to study the previous and expected development of the growth of the population of

Egypt with its components, i.e. fertility, mortality and migration.

The results of the projections mentioned previously and shown in Tables (20.1) to (21.4) shows that Egypt faces a dangerous demographic situation due to her long history of high fertility. The question now is whether such a situation has been taken into account in Egyptian planning, especially when formulating the objects of the socio-economic development plan for Egypt in the year 2000. If not or if the Egyptian economy does not afford such growth, how could this growth be restricted and what is the amount of reduction needed in order to achieve the objective of the development plan.

Table (1)
Census Population of Egypt by Sex and Age Groups 1973, 1974 and 1960
(Number in Thousands and Proportion Per 100 Persons of Both Sex)

Age Groups	1977				1974				1960			
	MALE		FEMALE		MALE		FEMALE		MALE		FEMALE	
	Number	Proportion	Number	Proportion	Number	Proportion	Number	Proportion	Number	Proportion	Number	Proportion
0-4	1021.9	6.41	1005.7	6.84	1270.6	6.77	1105.2	6.90	2111.5	8.14	2020.7	7.70
5-9	1107.9	6.70	1101.0	6.93	1208.9	6.39	1191.2	6.30	1971.9	7.59	1927.1	7.01
10-14	1010.9	6.49	878.2	5.53	1142.3	6.04	1071.2	5.67	1651.4	6.16	1527.2	5.00
15-19	713.2	4.49	631.1	3.99	904.0	5.20	917.4	4.85	1114.1	4.29	1040.1	4.09
20-24	519.6	3.40	565.2	3.56	677.8	3.58	706.2	3.73	921.1	3.55	874.2	3.17
25-29	616.7	3.80	629.9	4.16	685.7	3.63	706.5	4.16	1159.8	4.31	1054.3	4.04
30-34	552.9	3.51	614.5	4.00	620.4	3.28	689.6	3.65	886.9	3.19	814.1	3.25
35-39	600.4	3.70	540.6	3.40	659.2	3.49	653.7	3.46	844.4	3.26	879.2	3.10
40-44	474.8	2.99	472.2	2.97	569.1	3.01	566.3	2.99	660.7	2.54	614.2	2.16
45-49	345.1	2.17	313.2	1.97	420.5	2.27	415.2	2.20	567.2	2.10	527.1	2.22
50-54	310.3	2.00	315.5	2.11	421.2	2.23	410.5	2.07	491.0	1.93	501.6	1.91
55-59	144.7	0.91	134.3	0.85	171.1	0.91	171.1	0.92	322.9	1.24	315.4	1.21
60-64	274.0	1.73	304.1	1.91	252.0	1.33	299.8	1.50	320.0	1.23	351.0	1.16
65-69					81.8	0.44	82.1	0.43	163.9	0.63	169.5	0.65
70-74	191.1	1.20	244.3	1.54	102.8	0.57	136.7	0.72	131.5	0.51	167.8	0.65
75+	18.2		19.2		75.5	0.40	100.2	0.53	120.9	0.46	147.1	0.57
Total	7946.7	50.04	79.54	69.96	9191.7	49.54	9575.1	50.44	17064	50.29	17716.1	49.71

Source: C.A.P.M.S., Census Publications, Cairo.

Population of Egypt by Sex-Age Groups in 1965
Based on Rectified Data of the Censuses 1937,
1947, 1960. Number of Thousands and Proportion
per 100 Persons of Both Sexes

Age Group	MALE		FEMALE	
	Number in Thousands	Proportion %	Number in Thousands	Proportion %
0-4	2636.0	8.910	2550.2	8.619
5-9	2127.1	7.189	2042.9	6.905
10-14	1754.5	5.930	1705.5	5.764
15-19	1441.5	4.870	1419.3	4.797
20-24	1218.2	4.110	1213.9	4.103
25-29	1037.9	3.508	1065.8	3.600
30-34	889.6	3.006	925.5	3.128
35-39	778.4	2.620	813.3	2.749
40-44	663.8	2.240	701.2	2.370
45-49	558.3	1.880	597.5	2.019
50-54	469.7	1.570	499.7	1.689
55-59	367.7	1.240	403.8	1.380
60-64	280.2	0.949	309.6	1.046
65-69	204.7	0.691	246.3	0.834
70-74	134.9	0.455	170.9	0.577
75-	79.6	0.269	109.5	0.370
80-	66.0	0.223	106.0	0.350
Total	14703.7	49.700	14880.9	50.299

Source: (Valouras, 1972)

Crude Death Rate

YEAR	BOTH SEXES	MALE	FEMALE
1940	26.3	28.5	24.1
1941	25.7	27.9	23.4
1942	28.3	30.8	25.7
1943	27.7	30.4	24.6
1944	26.0	28.6	23.2
1945	27.7	30.2	25.0
1946	25.0	27.5	22.3
1947	21.4	23.4	19.3
1948	20.4	22.0	18.9
1949	20.6	22.1	19.0
1950	19.0	20.5	17.5
1951	19.2	20.6	17.7
1952	17.8	18.9	16.5
1953	19.6	20.6	18.7
1954	17.9	18.5	17.1
1955	17.6	18.1	17.0
1956	16.4	17.0	15.6
1957	17.8	18.5	17.0
1958	16.6	17.3	15.7
1959	16.3	17.0	15.5
1960	19.9	17.7	16.2
1961	15.8	16.3	15.2
1962	17.9	18.0	17.8
1963	15.5	15.8	15.1
1964	15.7	15.7	15.6
1965	14.0	13.9	14.0
1966	15.9	15.7	16.0
1967	14.2	14.3	14.2
1968	16.1	16.0	16.5
1969	14.5	14.6	14.5
1970	15.1	15.2	15.1

Source: (C.A.P.M.S., 1973)

Table (4)

Age Specific Mortality Rate For Egypt
1965

AGE GROUPS	MALES	FEMALES
0-4	49.0	54.0
5-9	2.1	1.7
10-14	1.8	1.4
15-19	1.9	1.4
20-24	2.4	1.7
25-29	3.3	2.3
30-34	4.6	3.1
35-39	6.1	4.3
40-44	8.4	6.9
45-49	11.6	9.5
50-54	16.0	13.0
55-59	23.2	18.0
60-64	32.4	25.1
65-69	44.3	30.9
70-74	64.5	43.8
75-79	103.6	67.0
80-	185.7	117.7
All Ages	15.53	15.03

Source: (Valouras, 1972)

Table (5)

The Projected Age Specific Mortality Rates
Used in Population Projections*

1-Males

AGE GROUP	1 1965-69	2 1970-74	3 1975-79	4 1980-84	5 1985-89	6 1990-94	7 1995-99
0-4	47.97	45.51	43.2	41.04	39.01	37.10	34.97
5-9	2.06	1.95	1.85	1.76	1.67	1.59	1.51
10-14	1.76	1.67	1.59	1.51	1.43	1.36	1.30
15-19	1.86	1.76	1.66	1.57	1.49	1.41	1.34
20-24	2.34	2.20	2.08	1.96	1.85	1.75	1.65
25-29	3.23	3.06	2.91	2.76	2.62	2.49	2.37
30-34	4.50	4.27	4.05	3.84	3.65	3.47	3.30
35-39	5.98	5.68	5.39	5.13	4.88	4.65	4.43
40-44	8.22	7.81	7.41	7.04	6.7	6.38	6.07
45-49	11.40	10.93	10.48	10.05	9.65	9.27	8.91
50-54	15.72	15.06	14.43	13.84	13.29	12.77	12.28
55-59	22.79	21.82	20.90	20.05	19.25	18.50	17.80
60-64	32.08	31.31	30.57	29.85	29.17	28.51	27.87
65-69	43.86	42.79	41.76	40.78	39.85	38.95	38.10
70-74	63.88	63.07	62.09	61.14	60.23	59.53	58.50
75-79	102.31	100.65	99.07	97.56	96.13	94.76	93.45
80-	184.14	180.58	177.43	174.65	172.20	170.04	168.14

*The central value for every five years starting from 1965

Table (6)
(Continued)
The Projected Age Specific Mortality Rates
Used in Population Projections*

2-Females

AGE GROUP	1 1965-69	2 1970-74	3 1975-79	4 1980-84	5 1985-89	6 1990-94	7 1995-99
0-4	52.37	48.54	45.04	41.83	38.90	36.22	33.77
5-9	1.66	1.56	1.47	1.38	1.30	1.22	1.15
10-14	1.37	1.28	1.19	1.13	1.07	1.00	0.94
15-19	1.36	1.28	1.20	1.13	1.06	1.00	0.94
20-24	1.66	1.56	1.46	1.37	1.29	1.22	1.15
25-29	2.24	2.10	1.98	1.86	1.75	1.65	1.15
30-34	3.02	2.84	2.66	2.51	2.36	2.22	2.09
35-39	4.19	3.93	3.70	3.47	3.27	3.08	2.09
40-44	6.73	6.31	5.93	5.57	5.24	4.94	4.65
45-49	9.38	9.08	8.79	8.51	8.25	7.99	7.74
50-54	12.83	12.42	12.02	11.65	11.28	10.93	10.60
55-59	17.97	17.16	16.65	16.12	15.62	15.13	14.67
60-64	24.77	23.97	23.35	22.47	21.77	21.10	20.45
65-69	30.71	30.24	29.78	29.33	28.90	28.47	28.05
70-74	43.52	42.84	42.17	41.79	40.92	40.33	39.75
75-79	66.52	65.39	64.33	63.34	62.42	61.56	60.76
80-	117.63	117.07	116.63	116.28	116.01	115.79	115.62

*The central value for every five years starting from 1965

Table (7)
Reported Crude Birth Rate
in Egypt

YEAR	RATE	YEAR	RATE
1915	41.8	1943	38.7
1916	40.3	1944	39.8
1917	40.1	1945	42.7
1918	38.9	1946	41.2
1919	37.7	1947	43.7
1920	42.2	1948	42.6
1921	41.8	1949	41.6
1922	43.1	1950	44.2
1923	43.1	1951	44.6
1924	43.8	1952	45.2
1925	43.5	1953	42.6
1926	44.2	1954	42.6
1927	44.0	1955	40.3
1928	43.6	1956	40.7
1929	44.2	1957	38.0
1930	45.4	1958	41.1
1931	44.5	1959	42.8
1932	42.5	1960	43.1
1933	43.8	1961	44.1
1934	42.2	1962	41.5
1935	41.3	1963	43.0
1936	44.2	1964	42.3
1937	43.4	1965	41.7
1938	43.2	1966	41.2
1939	42.0	1967	39.2
1940	41.3	1968	38.2
1941	40.4	1969	36.9
1942	37.6	1970	35.6

Source: (C.A.P.M.S., 1973)

Table (8)

Estimate Age Specific Birth Rate
1965

Age of Mother	Women (1)	Births (2)	Fertility Rate
15-19	1419.3	51	35.933
20-24	1213.9	236	194.440
25-29	1065.8	333	312.440
30-34	925.5	280	302.539
35-39	813.3	216	265.580
40-44	701.2	79*	112.660
45-49	597.5	40*	66.940
Total	6736.5	1235	

1 Rectified age structure for year 1965

2 Reported births for year 1966

* Births for the age groups (40-44, 45-49) has been estimated as 66.66% for the births between age (40-49) for age group 40-44 and the rest for age group 45-49

Source: based on data about the births from (C.A.P M.S., 1973) and data about women from (Valouras, 1972)

Table (9)
Projected Age Specific Fertility Rates
(Upper Level)

YEARS	Age Groups						
	15-	20-	25-	30-	35-	40-	45-
1965-69	34.85	191.02	306.79	298.08	259.49	109.00	66.00
1970-75	33.11	181.33	291.00	282.42	246.32	104.00	62.30
1975-79	31.46	172.13	276.02	267.58	233.81	98.40	59.50
1980-84	29.88	163.40	261.81	253.52	221.93	94.00	56.50
1985-89	28.39	155.11	242.34	240.20	210.66	89.30	53.50
1990-94	26.98	147.24	235.55	227.58	199.96	85.50	51.00
1995-99	25.63	139.77	223.43	215.63	189.81	81.00	48.70

Table (10)
Projected Age Specific Fertility Rates
(Lower Level)

YEARS	Age Groups						
	15-	20-	25-	30-	35-	40-	45-
1965-69	34.46	187.71	301.02	293.23	255.91	105.00	65.00
1970-74	32.09	174.33	280.12	272.07	237.75	100.00	60.50
1975-79	29.88	161.89	259.81	252.43	220.87	93.00	56.00
1980-84	27.91	150.35	240.80	234.22	205.19	86.00	54.00
1985-89	25.90	139.63	223.50	217.31	190.53	80.00	48.50
1990-94	24.45	129.67	207.30	201.63	177.10	74.50	45.00
1995-99	22.45	120.43	192.27	187.08	168.53	69.00	42.00

Table (11)

Registered Sex Ratio of Birth
and General Sex Rates for
Census Years

YEAR	S.R.B.	G.S.R.	YEAR	S.R.B.	G.S.R.
1907	N.A.	101	1949	109	101
1917	N.A.	100	1950	109	
1927	N.A.	99	1951	109	
1930	107	100	1952	110	
1931	107		1953	110	
1932	106		1954	111	
1933	108		1955	110	
1934	109		1956	110	
1935	109		1957	111	
1936	109		1958	117	
1937	108		1959	115	
1938	108		1960	113	
1939	108		1961	111	
1940	109		1962	110	
1941	110		1963	109	
1942	109		1964	107	
1943	110		1965	107	
1944	110		1966	106	
1945	109		1967	106	
1946	108		1968	106	
1947	110	98	1969	107	
1948	109		1970	107	

N.A. - Not Available

Source: (C.A.P.M.S., 1973)

Table (12)
 Estimate Sex Ratio at Birth
 and Rates of Female Births

YEAR	Sex Ratio at Birth	Ratio of Female Births
1965	107	
1965-1969	106.32	0.4843
1970-1974	105.96	0.4852
1975-1979	105.60	0.4861
1980-1984	105.24	0.4869
1985-1989	104.88	0.4878
1990-1994	104.53	0.4887
1995-1999	104.17	0.4896

Table (13)
 Projections of Total Population under the
 Two Alternative Assumptions
 about Future Fertility

YEAR	First Assumption			Second Assumption		
	Males	Females	Total	Males	Females	Total
1965	14703.7 (100.00)	14880.9 (100.00)	29584.6 (100.00)	14703.7 (100.00)	14880.9 (100.00)	29584.6 (100.00)
1970	16831.0 (114.46)	16859.0 (113.29)	33690.0 (113.876)	16781.2 (114.12)	16812.8 (112.98)	33594.0 (113.55)
1975	19163.0 (130.32)	19056.0 (128.05)	38219.0 (129.185)	19000.8 (129.22)	18904.8 (127.04)	37905.6 (128.12)
1980	21760.0 (147.98)	21525.0 (144.64)	43285.0 (146.30)	21406.8 (145.59)	21192.9 (142.42)	42599.7 (143.99)
1985	24647.0 (167.62)	24292.0 (163.24)	48939.0 (165.42)	24010.0 (163.29)	23691.0 (159.20)	47701.0 (161.23)
1990	27794.0 (189.02)	27340.0 (183.72)	55135.0 (186.36)	26757.0 (181.97)	26356.0 (177.11)	53114.0 (179.53)
1995	31161.0 (211.92)	30631.0 (205.84)	61793.0 (208.86)	29587.0 (201.22)	29130.0 (195.75)	58717.0 (198.47)
2000	34719.0 (236.12)	34143.0 (229.44)	68863.0 (232.76)	32445.0 (220.65)	31964.0 (214.79)	64409.0 (217.71)

Table (14)

Population under 15, over 65 and the Dependency
Ratio during the Projection Period

YEAR	First Assumption			Second Assumption		
	-15	65+	D.R.	-15	65+	D.R.
1970	42.720	3.788	86.950	42.550	3.799	86.415
1975	41.390	3.853	82.637	40.908	3.884	81.136
1980	40.500	3.937	79.980	39.542	4.000	77.127
1985	39.759	4.016	77.860	38.372	4.120	73.892
1990	39.085	4.105	76.027	37.302	4.260	71.128
1995	38.240	4.215	73.780	36.085	4.435	68.127
2000	37.160	4.330	70.920	34.615	4.631	64.602

Table (15)

Sex Ratio of Birth and General Sex Ratio
during the Projection Period

YEAR	S.R.B.	G.S.R.	
		1st Assumption	2nd Assumption
1970	106.0	99.8	99.8
1975	105.9	100.5	100.5
1980	105.6	101.0	101.0
1985	105.2	101.4	101.3
1990	104.8	101.6	101.5
1995	104.5	101.7	101.5
2000	104.0	101.6	101.5

Table (16)
Crude Birth Rate, Crude Death Rate and Rate of
Natural Increase during the
Projection Period

YEAR	First Assumption			Second Assumption		
	C.B.R.	C.D.R.	R.N.I.	C.B.R.	C.D.R.	R.N.I.
1965-69	40.850 (100.00)	14.900 (100.00)	2.596 (100.00)	40.220 (100.00)	14.840 (100.00)	2.538 (100.00)
1970-74	39.110 (95.74)	13.910 (93.36)	2.519 (97.03)	37.290 (94.20)	13.770 (92.78)	2.412 (95.03)
1975-79	37.970 (92.93)	13.110 (87.99)	2.486 (95.76)	36.240 (90.10)	12.920 (87.06)	2.332 (91.88)
1980-84	36.960 (90.48)	12.440 (83.49)	2.450 (94.38)	34.830 (86.41)	12.230 (82.41)	2.260 (89.04)
1985-89	35.620 (87.19)	11.810 (79.26)	2.391 (91.71)	33.080 (82.24)	11.610 (78.23)	2.148 (84.63)
1990-94	34.010 (83.25)	11.230 (73.37)	2.278 (87.75)	31.090 (77.3)	11.050 (74.461)	2.000 (78.50)
1995-99	32.300 (79.07)	10.660 (71.54)	2.164 (83.36)	29.010 (72.12)	10.520 (70.88)	1.849 (72.85)

Table (17)
Time Needed to Double the Population

YEARS	Number in Years	
	First Assumption	Second Assumption
1965-1969	27.0	27.6
1970-1974	27.8	29.0
1975-1979	28.2	30.0
1980-1984	28.5	31.0
1985-1989	29.4	32.6
1990-1994	30.7	34.9
1995-1999	32.3	37.9

Table (18)
Crude Birth Rate and General Fertility
Rate Under the Two Alternative Assumptions
About Future Fertility

YEAR	First Assumption		Second Assumption	
	C.B.R.	G.F.R.	C.B.R.	G.F.R.
1965-69	40.85 (100.00)	178.68 (100.00)	40.22 (100.00)	175.66 (100.00)
1970-74	39.11 (95.74)	168.48 (94.29)	37.89 (94.20)	162.32 (92.40)
1975-79	37.97 (92.93)	160.89 (90.04)	36.24 (90.10)	151.67 (86.34)
1980-84	36.96 (90.48)	155.23 (86.87)	34.83 (86.59)	143.49 (81.68)
1985-89	35.62 (87.19)	148.90 (83.27)	33.08 (82.24)	134.83 (76.75)
1990-94	34.01 (83.25)	141.06 (78.94)	31.09 (77.3)	125.32 (71.34)
1995-99	32.30 (79.07)	132.62 (74.22)	29.01 (72.12)	115.40 (65.69)

Table (19)
Total Fertility Rate, Gross Reproduction
and Net Reproduction Rate During
the Projection Period

YEAR	First Assumption			Second Assumption		
	T.F.R.	G.R.R.	N.R.R.	T.F.R.	G.R.R.	N.R.R.
1965-69	6.2360 (100.00)	3.0630 (100.00)	2.2540 (100.00)	6.2166 (100.00)	3.0107 (100.00)	2.21604 (100.00)
1970-74	6.0020 (94.87)	2.9120 (95.07)	2.2900 (97.16)	5.7840 (93.04)	2.8040 (93.20)	2.1110 (95.26)
1975-79	5.6950 (90.02)	2.7680 (90.36)	2.1240 (94.23)	5.3690 (86.36)	2.6100 (86.69)	2.0000 (90.25)
1980-84	5.4050 (85.44)	2.6310 (85.89)	2.0560 (91.21)	4.9920 (80.30)	2.4300 (80.71)	1.8980 (85.64)
1985-89	5.1280 (81.06)	2.5000 (81.61)	1.988 (88.19)	4.6240 (74.38)	2.2550 (74.89)	1.7930 (80.91)
1990-94	4.8690 (76.96)	2.3790 (77.66)	1.9210 (85.22)	4.2960 (69.10)	2.0990 (69.71)	1.6950 (76.48)
1995-99	4.6190 (73.01)	2.2610 (73.61)	1.8530 (82.20)	3.9900 (64.18)	1.9500 (64.76)	1.6009 (72.24)

Table (20.11)

PROJECTED POPULATION BY AGE AND SEX

=====

AGE	MALES	FEMALES	TOTAL	AGE
	NUMBER	NUMBER	NUMBER	%
0 -	25,506.9	27,569.10	53,076.0	14.97
5 -	23,205.1	27,216.37	50,421.47	13.48
10 -	20,681.0	20,274.82	40,955.82	12.27
15 -	17,369.4	16,959.10	34,328.50	10.10
20 -	17,264.6	16,082.4	33,347.0	9.42
25 -	17,011.0	15,212.5	32,223.5	8.42
30 -	16,160.6	15,184.1	31,344.7	7.13
35 -	14,66.0	13,897.5	28,557.5	6.14
40 -	13,127.6	12,142.0	25,269.6	5.27
45 -	12,017.7	11,355.0	23,372.7	4.54
50 -	11,106.6	10,527.3	21,633.9	3.84
55 -	10,216.7	9,629.1	19,845.8	3.23
60 -	9,207.8	8,431.7	17,639.5	2.63
65 -	8,241.1	7,405.0	15,646.1	2.03
70 -	7,567.7	6,678.6	14,246.3	1.60
75 -	6,866.0	6,101.0	12,967.0	1.07
80 +	6,012.0	5,693.1	11,705.1	0.65
All AGES	168,312.8	168,937.7	337,250.5	0.38

MALE RATIO 49.06
FEMALE BIRTHS 50.04
TOTAL BIRTHS 100.00
FEMALE POPULATION 15-49 65743.
FEMALE POPULATION 15-49 62619.
FEMALE POPULATION 15-49 1292482.
FEMALE POPULATION 15-49 7750477.
FEMALE POPULATION 15-49 22,94551
FEMALE POPULATION 15-49 1,04230
FEMALE POPULATION 15-49 0.48430
FEMALE POPULATION 15-49 0.90834
FEMALE POPULATION 15-49 0.95115

RATIO OF POPULATION UNDER 15 YEARS OLD TO TOTAL POPULATION 42.72155
RATIO OF POPULATION OVER 15 YEARS OLD TO TOTAL POPULATION 3.78854

Table (20.2)

PROJECTED POPULATION BY AGE AND SEX

=====

AGE	MALES		FEMALES		TOTAL	AGE	
	NUMBER	%	NUMBER	%			
0 -	3,349.4	0.44	3,030.64	7.03	6,380.04	14.30	0 -
5 -	2,720.2	0.84	2,426.403	6.35	5,096.603	13.21	5 -
10 -	2,006.3	0.02	2,059.18	5.77	4,065.48	11.70	10 -
15 -	2,006.3	5.07	2,045.47	5.77	4,051.84	10.74	15 -
20 -	1,215.0	4.50	1,641.97	4.40	2,856.94	8.91	20 -
25 -	1,078.8	3.08	1,057.40	3.65	2,136.20	7.34	25 -
30 -	1,795.7	3.09	1,147.34	3.11	2,943.04	4.10	30 -
35 -	603.40	2.00	1,042.54	2.71	1,645.94	5.30	35 -
40 -	837.5	2.10	880.23	2.32	1,717.73	4.51	40 -
45 -	1,169.5	1.08	741.52	1.00	1,911.02	3.87	45 -
50 -	502.71	1.15	638.50	1.47	1,141.21	3.22	50 -
55 -	759.4	1.25	525.56	1.57	1,284.96	2.62	55 -
60 -	769.51	0.07	417.54	1.00	1,187.05	2.04	60 -
65 -	667.6	0.20	342.56	0.83	1,010.16	1.53	65 -
70 -	788.7	0.27	224.94	0.59	1,013.64	1.04	70 -
75 -	1,047.5	0.17	156.57	0.41	1,204.12	0.68	75 -
80 +	716.8	0.10	151.00	0.40	867.80	0.54	80 +
All AGES	19,133.4	50.14	19,055.10	49.86	38,188.50	100.00	

MALE BIRTHS
FEMALE BIRTHS
TOTAL BIRTHS
FEMALE POPULATION 15-40
RATIO OF FEMALE POPULATION 15-40
RATIO OF GIRL BIRTHS TO TOTAL BIRTHS
GENERAL SEX RATIO
DEPENDENCY RATIO
RATIO OF POPULATION UNDER 15 YEARS OLD TO TOTAL POPULATION
RATIO OF POPULATION OVER 65 YEARS OLD TO TOTAL POPULATION

723394.
682704.
1406098.
8961479.
23,44720
1.05960
0.48520
1.00560
82.63745
41.39392
3.87280

PROJ. POP. BY AG. AND SEX
1975-

Table (20.3)

PROJECTED POPULATION BY AGE AND SEX

AGE	MILES	%	NUMBER	%	NUMBER	TOTAL	AGE
7 -	337380.	8.24	336930.	7.78	494374	14.04	0 -
5 -	210473.	7.66	2602480.	6.22	537723.	12.88	5 -
10 -	210400.	6.01	2490370.	5.57	5010769	11.58	10 -
15 -	210400.	5.7	2102777.	5.07	4473791	10.34	15 -
20 -	210400.	4.78	2101104.	4.42	4070451	9.40	20 -
25 -	170023.	3.93	1047517.	3.85	3367751	7.78	25 -
30 -	181545.	3.0	1320716.	3.19	2763251	4.38	30 -
35 -	152000.	2.66	1168652.	2.70	2320713	5.34	35 -
40 -	171800.	2.7	1009656.	2.33	1971450	4.55	40 -
45 -	101212.	1.05	854048.	1.97	1655340	3.82	45 -
50 -	173780.	1.56	723078.	1.67	1396743	3.23	50 -
55 -	50423.	1.55	504230.	1.17	1136703.	2.63	55 -
60 -	418476.	0.97	475223.	1.10	893009	2.07	60 -
65 -	40911.	0.4	566011.	0.85	674942	1.56	65 -
70 -	16117.	0.8	265774.	0.61	471470.	1.09	70 -
75 -	20233.	0.8	17671.	0.40	292074	0.68	75 -
80 +	8119.	0.10	182709.	0.42	264917	0.61	80 +
ALL AGES	2170080.	50.77	21525027.	49.73	63285877.	100.00	

794749.

752603.

1547352.

10273553.

23.73410

1.05600

0.42610

1.01094

79.90055

RATIO OF POPULATION UNDER 15 YEARS OLD TO TOTAL POPULATION 40.50124

RATIO OF POPULATION OVER 65 YEARS OLD TO TOTAL POPULATION 3.93720

PROJECTED POPULATION BY AGE AND SEX

=====

AGE	Males		FEMALE		TOTAL		AGE
	NUMBER	%	NUMBER	%	NUMBER	%	
0 -	3650379.	8.07	3746684.	7.66	7696068.	15.73	0 -
5 -	3,056,171.	6.75	3,012,806.	6.17	6,224,492.	12.72	5 -
10 -	2,613,013.	5.85	2,675,616.	5.47	5,536,039.	11.31	10 -
15 -	2,005,131.	5.77	2,057,722.	4.20	4,076,225.	10.17	15 -
20 -	2,260,977.	4.02	2,178,180.	4.45	4,439,165.	9.07	20 -
25 -	2,651,171.	4.18	2,435,105.	4.06	4,030,292.	8.24	25 -
30 -	1,072,612.	3.42	1,626,674.	3.37	3,321,826.	6.70	30 -
35 -	1,352,811.	2.74	1,350,260.	2.78	2,717,121.	5.54	35 -
40 -	1,175,664.	2.18	1,142,560.	2.33	2,260,124.	4.62	40 -
45 -	921,672.	1.38	974,777.	1.00	1,896,399.	3.87	45 -
50 -	784,017.	1.54	817,124.	1.66	1,567,031.	3.20	50 -
55 -	683,124.	1.27	674,610.	1.38	1,293,743.	2.64	55 -
60 -	620,050.	0.68	539,783.	1.10	1,018,813.	2.08	60 -
65 -	351,108.	0.72	417,654.	0.85	768,852.	1.57	65 -
70 -	239,901.	0.40	306,678.	0.63	546,635.	1.12	70 -
75 -	345,310.	0.50	204,444.	0.42	343,047.	0.70	75 -
80 +	952,100.	0.50	211,035.	0.43	306,295.	0.63	80 +
All AGES	266,473,433.	50.36	249,923,664.	49.64	689,397,097.	100.00	

MALE BIRTHS	733,806.
FEMALE BIRTHS	830,384.
TOTAL BIRTHS	1,702,290.
FEMALE POPULATION 15-49	11,686,997.
RATIO OF FEMALE POPULATION 15-49	23.87631
SEX RATIO AT BIRTH	1.05260
RATIO OF GIRL BIRTHS TO TOTAL BIRTHS	0.48600
GENERAL SEX RATIO	1.01461
DEPENDENCY RATIO	77.56078
RATIO OF POPULATION UNDER 15 YEARS OLD TO TOTAL POPULATION	39.75641
RATIO OF POPULATION OVER 65 YEARS OLD TO TOTAL POPULATION	4.01664

PROJECTION PRIMOVS)
1985-

Table (20.5)

PROJECTED POPULATION BY AGE AND SEX

AGE	Males	Females	TOTAL	AGE
	NUMBER	NUMBER	NUMBER	
0 -	4,109.14	4,113.95	8,222.80	0 -
5 -	3,424.1	3,529.15	6,953.25	5 -
10 -	3,187.7	3,101.05	6,288.75	10 -
15 -	2,646.2	2,614.24	5,260.44	15 -
20 -	2,590.0	2,616.00	5,206.00	20 -
25 -	2,358.0	2,417.01	4,775.01	25 -
30 -	2,133.2	2,044.18	4,177.38	30 -
35 -	1,371.3	1,026.30	2,397.60	35 -
40 -	1,313.15	1,306.51	2,619.66	40 -
45 -	1,228.8	1,104.14	2,332.94	45 -
50 -	1,033.0	1,038.4	2,071.4	50 -
55 -	900.7	750.37	1,651.07	55 -
60 -	588.12	614.53	1,202.65	60 -
65 -	434.8	475.71	910.51	65 -
70 -	326.40	351.07	677.47	70 -
75 -	452.4	237.30	689.70	75 -
80 +	1,114.7	247.26	1,362.00	80 +
ALL AGES	27,949.4	27,340.501	55,289.901	

MALE BIRTHS
FEMALE BIRTHS
TOTAL BIRTHS
FEMALE POPULATION 15-40
RATIO OF FEMALE POPULATION 15-40
RATIO OF GIRL BIRTHS TO TOTAL BIRTHS
GENERAL SEX RATIO
DEPENDENCY RATIO
RATIO OF POPULATION UNDER 15 YEARS OLD TO TOTAL POPULATION
RATIO OF POPULATION OVER 65 YEARS OLD TO TOTAL POPULATION

948992.
904836.
1853829.
13231362.
23.00791
1.04880
0.48780
1.01062
76.02782

39 08.20
4 10.560

PROJECTED POPULATION BY AGE AND SEX

=====

AGE	M. LIVES	MALES	FEMALES	TOTAL	AGE
	NUMBER	%	NUMBER	NUMBER	%
0 -	46323	7.50	4645833	9083162	14.70
5 -	36028	6.52	3738926	7664776	12.37
10 -	3365	5.72	334210	6900770	11.17
15 -	3589	5.4	2186082	6142068	9.94
20 -	21191	4.56	2666658	566841	8.84
25 -	23204	4.10	2346666	4896740	7.92
30 -	20285	3.56	2140892	434697	7.03
35 -	16292	3.10	1938965	391917	6.33
40 -	15026	2.58	1504101	3182758	5.16
45 -	16394	2.05	1288320	2552316	4.13
50 -	11544	1.66	1053761	2069165	3.35
55 -	9503	1.30	845927	1674060	2.71
60 -	61910	1.10	693796	1312086	2.12
65 -	63070	0.75	543140	1007119	1.63
70 -	71600	0.54	600838	716048	1.16
75 -	82311	0.30	727236	460126	0.74
80 +	43161	0.24	78822	420433	0.68
ALL AGES	3161850	50.43	30631796	61703646	100.00

MALE BIRTHS
FEMALE BIRTHS
TOTAL BIRTHS
FEMALE POPULATION 15-40
RATIO OF FEMALE POPULATION 15-40
SEX RATIO AT BIRTH
RATIO OF GIRL BIRTHS TO TOTAL BIRTHS
GENERAL SEX RATIO
DEPENDENCY RATIO
RATIO OF POPULATION UNDER 15 YEARS OLD TO TOTAL POPULATION
RATIO OF POPULATION OVER 65 YEARS OLD TO TOTAL POPULATION

1016146
972110
1988256
16959781
26,20926
1.04530
0.48870
1.01730
73.78090
38.24124
4.21404

Table (20.7)

PROJECTED POPULATION BY AGE AND SEX

AGE	MALES	FEMALES	TOTAL	AGE
	NUMBER	NUMBER	NUMBER	
0 -	418600	475487	894087	0 -
5 -	427790	404934	832724	5 -
10 -	316049	371047	687096	10 -
15 -	332460	334835	667295	15 -
20 -	335394	267052	602446	20 -
25 -	280972	272865	553837	25 -
30 -	240649	236325	476974	30 -
35 -	240644	211854	452498	35 -
40 -	171800	150681	322481	40 -
45 -	133130	145342	278472	45 -
50 -	109800	123078	232878	50 -
55 -	12078	98334	110412	55 -
60 -	71854	706973	714157	60 -
65 -	13545	61687	75232	65 -
70 -	76510	458316	534826	70 -
75 -	17540	342500	360040	75 -
80 +	15395	335153	350548	80 +
All Ages	3671977	34143790	68863767	
			100.00	
			1074604	
			1033507	
			2110111	
			16861841	
			24.4855	
			1.04170	
			0.42040	
			1.01688	
			70.02014	
			37.161	
			6.3321	

MALE BIRTHS
FEMALE BIRTHS
TOTAL BIRTHS
RATIO OF FEMALE POPULATION 15-49
SEX RATIO AT BIRTH
RATIO OF GIRL BIRTHS TO TOTAL BIRTHS
GHERAL SEX RATIO
DEPENDENCY RATIO
RATIO OF POPULATION UNDER 15 YEARS OLD TO TOTAL POPULATION
RATIO OF POPULATION OVER 65 YEARS OLD TO TOTAL POPULATION

Table (21.1)

PROJECTED POPULATION BY AGE AND SEX

=====

AGE	MALES	FEMALES	TOTAL	AGE
	NUMBER	NUMBER	NUMBER	
0 -	2609634	2710322	5620006	0 -
5 -	2,20514	2,21637	452169	5 -
10 -	2,04800	2,02782	413482	10 -
15 -	1,38644	1,03900	343254	15 -
20 -	1,26644	1,00824	325468	20 -
25 -	1,01300	1,02125	2403485	25 -
30 -	1,18066	1,05181	2060027	30 -
35 -	86600	90075	1775584	35 -
40 -	51244	791420	1542697	40 -
45 -	32007	67350	1305618	45 -
50 -	21444	565273	1087039	50 -
55 -	22107	462971	885138	55 -
60 -	32078	363173	683011	60 -
65 -	32411	269506	502057	65 -
70 -	15677	204786	361503	70 -
75 -	84600	130140	219770	75 -
80 +	46100	126931	193051	80 +
ALL AGES	16781103	16812780	33593982	
			100.00	
	MALE BIRTHS		454513	
	FEMALE BIRTHS		416128	
	TOTAL BIRTHS		1270641	
	FEMALE POPULATION 15-49		7730477	
	RATIO OF FEMALE POPULATION 15-49		73.01140	
	SEX RATIO AT BIRTH		1.06230	
	RATIO OF GIRL BIRTHS TO TOTAL BIRTHS		0.48430	
	GENERAL SEX RATIO		0.99812	
	D-DEPENDENCY RATIO		86.41508	
	RATIO OF POPULATION UNDER 15 YEARS OLD TO TOTAL POPULATION		42.55684	
	RATIO OF POPULATION OVER 45 YEARS OLD TO TOTAL POPULATION		3.79943	

PROJ. CTION PERIO (2)
1970-

Table (21.2)

PROJECTED POPULATION BY AGE AND SEX
=====

AGE	MALES	FEMALES	TOTAL	AGE
0 -	3 16715.	2420142.	4034026.	15.93
5 -	2 70518.	2385410.	406308.	13.10
10 -	2 00613.	2705018.	4505540.	11.82
15 -	2 88817.	2014547.	4103639.	10.83
20 -	1 21510.	1 81917.	3603486.	8.94
25 -	1 07818.	1 605790.	2803617.	7.60
30 -	1 70547.	1 187374.	2366031.	6.24
35 -	1 03010.	1 084246.	2027286.	5.15
40 -	37805.	760073.	1723919.	4.55
45 -	1 16915.	741522.	1678517.	3.90
50 -	1 02311.	1 38350.	1230721.	3.25
55 -	75916.	525056.	1000990.	2.64
60 -	26811.	437854.	787705.	2.08
65 -	1 66716.	317256.	583092.	1.54
70 -	1 78817.	224704.	403601.	1.04
75 -	1 04715.	156637.	261382.	0.80
80 +	71618.	151890.	223557.	0.50
All AGES	19,008 1.	18,04784.	37,05595.	100.00

MALE BIRTHS

FEMALE BIRTHS

TOTAL BIRTHS

FEMALE POPULATION 15-60

RATIO OF FEMALE POPULATION 15-60

SIX RATIO AT BIRTH

RATIO OF GTH BIRTHS TO TOTAL BIRTHS

GENERAL SIX RATIO

DEPENDENCY RATIO

RATIO OF POPULATION UNDER 15 YEARS OLD TO TOTAL POPULATION

RATIO OF POPULATION OVER 15 YEARS OLD TO TOTAL POPULATION

494947.

657764.

1354731.

8061479.

23.64157

1.05960

0.48320

1.00508

81.13587

40.90009

3.88423

POPULATION PERIOD, 1975-

Table (21.3)

PROJECTED POPULATION BY AGE AND SEX

=====

AGE	MALES	FEEMALES	TOTAL	AGE
	NUMBER	NUMBER	NUMBER	
0 -	37691.00	317641.0	654604.0	0 -
5 -	27204.06	250411.0	537615.06	5 -
10 -	25655.55	234088.0	492693.0	10 -
15 -	24310.55	219277.0	447379.0	15 -
20 -	26045.55	200110.0	407651.0	20 -
25 -	19021.33	166751.7	336751.0	25 -
30 -	1835.55	139706.0	276251.0	30 -
35 -	15600.00	114865.2	232071.3	35 -
40 -	1638.00	100965.0	107456.0	40 -
45 -	20121.33	15404.0	165340.0	45 -
50 -	62371.0	72302.5	139673.3	50 -
55 -	5624.33	59428.0	113670.3	55 -
60 -	17666.0	47523.0	89309.0	60 -
65 -	3089.10	36801.0	47492.0	65 -
70 -	20610.7	24527.0	47147.0	70 -
75 -	12023.3	17267.0	29292.0	75 -
80 +	8210.0	18270.0	26017.0	80 +
ALL AGES	214068.8	211929.55	425997.3	100.00

MALE BIRTHS

FEMALE BIRTHS

TOTAL BIRTHS

FEMALE POPULATION 15-49

RATIO OF FEMALE POPULATION 15-49

% RATIO AT BIRTH

RATIO OF BIRTH BIRTHS TO TOTAL BIRTHS

GROSS SEX RATIO

DEPENDENCY RATIO

RATIO OF POPULATION UNDER 15 YEARS OLD TO TOTAL POPULATION

RATIO OF POPULATION OVER 15 YEARS OLD TO TOTAL POPULATION

749230.

709698.

1458729.

10273553.

24.11644

1.05600

0.48610

1.01000

77.12781

39.54294

6.00062

Table (21.4)

PROJECTED POPULATION BY AGE AND SEX

AGE	MALES	FEMALES	TOTAL	AGE
0 -	NUMBER 3,647,015	NUMBER 3,456,710	NUMBER 7,103,725	0 -
5 -	3,260,815	2,845,981	6,106,796	5 -
10 -	2,867,715	2,577,801	5,445,516	10 -
15 -	2,468,615	2,152,217	4,620,832	15 -
20 -	2,069,515	1,748,180	3,817,695	20 -
25 -	1,651,171	1,451,105	3,102,276	25 -
30 -	1,224,715	1,049,401	2,274,116	30 -
35 -	828,115	702,240	1,530,355	35 -
40 -	475,615	392,560	868,175	40 -
45 -	216,715	177,777	394,492	45 -
50 -	99,715	81,217	180,932	50 -
55 -	49,141	40,619	89,760	55 -
60 -	20,101	16,763	36,864	60 -
65 -	5,111	4,165	9,276	65 -
70 -	1,991	1,667	3,658	70 -
75 -	1,051	844	1,895	75 -
80 +	952	710	1,662	80 +
ALL AGES	24,010,069	23,014,581	47,024,650	

MALE BIRTHS
FEMALE BIRTHS
TOTAL BIRTHS

RATIO OF FEMALE POPULATION 15-40

RATIO OF FEMALE BIRTHS TO TOTAL BIRTHS

GENERAL SEX RATIO

RATIO OF POPULATION UNDER 15 YEARS OLD TO TOTAL POPULATION

RATIO OF POPULATION OVER 15 YEARS OLD TO TOTAL POPULATION

100.00

100.00

100.00

100.00

100.00

100.00

100.00

100.00

100.00

100.00

PROJECTED POPULATION BY AGE AND SEX

=====

AGE	MALES	FEMALES	TOTAL	AGE
	NUMBER	NUMBER	NUMBER	
0 -	3178112.	3608650.	7576762.	0 -
5 -	3 87133.	3121280.	640A613.	5 -
10 -	2008676.	2829167.	5827843.	10 -
15 -	216726.	2564200.	5300924.	15 -
20 -	215816.	2361442.	4857266.	20 -
25 -	2 35810.	2161701.	4397559.	25 -
30 -	2 15302.	1964818.	3978210.	30 -
35 -	1 37113.	1626360.	3263313.	35 -
40 -	1 34315.	1330651.	2644957.	40 -
45 -	1 72818.	1102716.	2177574.	45 -
50 -	870330.	1283316.	1798713.	50 -
55 -	90007.	749397.	1455406.	55 -
60 -	48812.	614563.	1163376.	60 -
65 -	403408.	475721.	879159.	65 -
70 -	274000.	351067.	625107.	70 -
75 -	163271.	237400.	400671.	75 -
80 +	11477.	247226.	358706.	80 +
ALL AGES	26757451.	26356744.	53114195.	

MALE BIRTHS

FEMALE BIRTHS

TOTAL BIRTHS

FEMALE POPULATION 15-49

RATIO OF FEMALE POPULATION 15-49

SEX RATIO AT BIRTH

RATIO OF GIRL BIRTHS TO TOTAL BIRTHS

GENERAL SEX RATIO

DEPENDENCY RATIO

RATIO OF POPULATION UNDER 15 YEARS OLD TO TOTAL POPULATION

RATIO OF POPULATION OVER 65 YEARS OLD TO TOTAL POPULATION

553772.

813009.

1667722.

1309388.

24.6233

1.0688

0.4278

1.0320

71.1289

37.30268

4.28186

Population Pyramid (a)
1990

Table (21.6)

PROJECTED POPULATION BY AGE AND SEX

AGE	Males	Females	TOTAL	AGE
	NUMBER	NUMBER	NUMBER	
0 -	4 5487	387424	702992	0 -
5 -	3 155 A	314357	1172	5 -
10 -	3 4297	310434	10 A	10 -
15 -	2 7297	281507	5791039	15 -
20 -	2 1517	2551010	4 34	20 -
25 -	2 8025	2327114	3 06	25 -
30 -	2 2085	2140807	3 65	30 -
35 -	1 7297	1618065	3 10	35 -
40 -	1 5026	1504101	2 71	40 -
45 -	1 419 A	1 48379	2 19	45 -
50 -	1 154 A	1 05741	1 79	50 -
55 -	1 150 A	84917	1 48	55 -
60 -	1 0110	69374	1 11	60 -
65 -	819 0	54316	0 93	65 -
70 -	1 1010	40088	0 68	70 -
75 -	814 1	27214	0 46	75 -
80 -	1 116 1	248272	0 49	80 -
All Ages	29 8030	20180154	5871734	100 00
MIE RIKING				
FEMALE RIKING				
TOTAL RIKING				
FEMALE RIKING 15-69				
RATIO OF FEMALE RIKING 15-69				
SEX RATIO AT BIRTH				
RATIO OF SEX RIKING TO TOTAL RIKING				
GENERAL SEX RATIO				
DEPENDENCY RATIO				
RATIO OF POPULATION UNDER 15 YEARS OLD TO TOTAL POPULATION				
RATIO OF POPULATION OVER 15 YEARS OLD TO TOTAL POPULATION				
ABR515				
ASQ510				
1738525				
16652108				
26 93374				
1 24330				
0 48270				
1 01568				
48 12701				
36 04538				
6 43500				

PROJECTION PERIOD (//)
1995-

Table (21.7)

PROJECTED POPULATION BY AGE AND SEX

=====

AGE	MALES	FEMALES	TOTAL	AGE
0 -	NUMBER 4 79603.	NUMBER 402608A.	NUMBER 8203779.	0 -
5 -	% 6.40	% 6.25	% 12.74	5 -
10 -	NUMBER 3690743.	NUMBER 3558221.	NUMBER 7256964.	10 -
15 -	% 5.74	% 5.52	% 11.26	15 -
20 -	NUMBER 369076.	NUMBER 3346041.	NUMBER 6836967.	20 -
25 -	% 5.42	% 5.20	% 10.61	25 -
30 -	NUMBER 364152.	NUMBER 3089440.	NUMBER 6330962.	30 -
35 -	% 5.03	% 4.80	% 9.83	35 -
40 -	NUMBER 205808A.	NUMBER 280038A.	NUMBER 5756195.	40 -
45 -	% 4.50	% 4.35	% 8.94	45 -
50 -	NUMBER 2188049.	NUMBER 2532857.	NUMBER 5220907.	50 -
55 -	% 4.17	% 3.03	% 7.11	55 -
60 -	NUMBER 2654262.	NUMBER 2503651.	NUMBER 4277913.	60 -
65 -	% 3.61	% 3.58	% 7.19	65 -
70 -	NUMBER 260664.	NUMBER 211863A.	NUMBER 4279100.	70 -
75 -	% 3.55	% 3.20	% 6.64	75 -
80 +	NUMBER 1021870.	NUMBER 1006601.	NUMBER 3828472.	80 +
	% 2.08	% 2.96	% 5.94	
	NUMBER 134113.	NUMBER 1545542.	NUMBER 309725.	
	% 2.38	% 2.40	% 4.78	
	NUMBER 110880.	NUMBER 123070A.	NUMBER 349518.	
	% 1.84	% 1.61	% 3.77	
	NUMBER 162078.	NUMBER 989356.	NUMBER 1931364.	
	% 1.44	% 1.54	% 3.00	
	NUMBER 71851A.	NUMBER 706973.	NUMBER 141548A.	
	% 1.12	% 1.24	% 2.35	
	NUMBER 225415.	NUMBER 614807.	NUMBER 1160223.	
	% 0.62	% 0.95	% 1.77	
	NUMBER 345170.	NUMBER 48883A.	NUMBER 826016.	
	% 0.57	% 0.71	% 1.28	
	NUMBER 17374.	NUMBER 342500.	NUMBER 520864.	
	% 0.34	% 0.40	% 0.82	
	NUMBER 183985.	NUMBER 315153.	NUMBER 489139.	
	% 0.24	% 0.52	% 0.76	
ALL AGES	3244900.	3196378.	6440875.	100.00

MALE BIRTHS	911149.
FEMALE BIRTHS	874675.
TOTAL BIRTHS	1785824.
FEMALE POPULATION 15-40	14297125.
RATIO OF FEMALE POPULATION 15-40	25.30265
SIX RATIO AT BIRTH	1.04170
RATIO OF GIRL BIRTHS TO TOTAL BIRTHS	0.48940
GENERAL SEX RATIO	1.01505
DEPENDENCY RATIO	66.60260
RATIO OF POPULATION UNDER 15 YEARS OLD TO TOTAL POPULATION	34.61592
RATIO OF POPULATION OVER 65 YEARS OLD TO TOTAL POPULATION	4.63175

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