POPULATION GROWTH AND FAMILY PLANNING IN IRAN

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ABSTRACT

The main objects of this thesis are to trace the growth in Iran and appraise probable future growth. These objectives lead us to examine population projections, assess the possibilities for planning, and to evaluate the family planning program.

The last official data concerning the number of population reached 33,375,000 in November 1975. In fact, the population of Iran has increased from just under 10 million before 1900 to over 33 million in 1975. The density of the country was 20 persons per square kilometer in 1974. The median age in 1971 was 16.5, indicating a slight decrease in a period of five years. The mean number of live births per married women under 45 years of age ranged from 6.5 to 8.5 in urban and rural areas. The birth and death rates yield a rate of natural increase of 3.2 percent per year, among the world's highest. The life expectancy for 1967-1970, reported by the United Nations was 50 year for both sexes.

Iran's population has exhibited extremely rapid growth in the recent past. Fertility rates are among the highest in the world and have changed little in recent years. Mortality rates are about 16 per thousand population, diminished from earlier levels.

The computed population projections yield a population size of 32.5 million in 1976, 36.5 million in 1981, 41.4 million in 1986 and 47.2 million in 1991 (assuming rates are unchanged). Knowing that mortality will decline in all probability, with the improving helath conditions, the projection provides a population size of 42.4 million in 1986, and 53.7 million in 1996.

The second assumption expects the birth rate to continue to increase to the end of the first decade and then after a period of stability, begin to decline. The assumption (we still consider mortality to decline) provides 32.8 million in 1976, 46 million in 1986, and 66.9 million in 1996. This means, regardless of the success of family planning, there will be a difference of 13.1 million persons by 1996 under the above assumptions.

The last chapter deals with the function of the family planning program in Iran. In order to avoid a continued high growth rate, such planning must attempt to reduce live births from 8.5 to 6.5 for each married woman under 45 in the rural and urban areas. Iran's family planning program offers contraceptive information and services through the growing national network of family planning clinics, relying almost exclusively on pills as the contraceptive technique. The overall goal of the family planning program by the end of the fifth five-year plan in 1978, is to reduce the annual 3.2 percent rate of increase to 2.4 percent.

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CHAPTER I

INTRODUCTION

Problem Setting and Relevance of the Study

In this era of planning for social and economic development, it is increasingly apparent that demographic analyses are among the key contributions to the planning process. The future size, structure and distribution of populations are essential for any plan that involves food, housing, employment, education, health and other public services. Increasing awareness of man's unprecedented growth, of the interaction between growth and the environment, and of the possible implication for the future, have stimulated many investigations into these complex relationships as well as the demand for population estimates and programs. This situation, of course, explains the vast increase in the number of population studies conducted particularly since the middle of the present century. Understandably, many less developed countries still lack the basic demographic data required in planning for socio-economic development.

In countries like Iran, where a considerable part of the population is illiterate, and scattered over a large geographic area, the collection of needed population information is not only a difficult task to perform, but creates doubts as to the accuracy of the data collected. Like other countries in the region, Iran began to take an interest in population issues only quite recently. However, the emergence of a "population

problem" in Iran does not imply over-population, but rather the fact that population growth would interfere with national efforts to achieve economic and social development. Hence, authorities began thinking about the creation of a population policy which in turn, prepared the way for a family planning program. Thus, the government, social institutes, individuals, and some international bodies directed their efforts to the study of population issues, future trends, population structure, and the consequences of over-population in Iran. Most of the studies and researches have been conducted during the last decade.

A comprehensive study of the country's population has not yet been conducted. This situation led the writer to collate articles, research studies and reports in this field in order to appraise Iran's population position, including the development of family planning programs. This study, it is hoped, may be useful for those interested in gaining knowledge about Iran's population structure, population policies and programs as they have emerged, and probable future trends.

The Objectives of the Study

The main purposes of this thesis are to trace the growth in Iran and appraise probable future growth. These objectives lead us to examine population projections, to assess the possibilities for planning, and to evaluate the family planning program, its rationale and prospects. This study, of necessity, deals with the organization, administration and extension of the more or less official programs that bring family planning information, services, and supplies to the population at large.

The exploration goes through the major steps that have been taken in that regard up to the present and probable impact of the family planning program on future growth.

Important Sources Used

The most important sources that have been used in this thesis were derived from publications of the United Nations, The Population Council, the Iranian Statistical Center, Division of Demographic Research, Tehran University, World Population Conferences, and articles and papers (published or unpublished) by students in U. S. universities. Great care has been taken in selecting reliable articles and approved papers by academic authorities. Most statistical information was derived from the Demographic Yearbooks of the United Nations, which are more valid than local statistical publications.

To illustrate the future population growth, I computed population projection for Iran by two different methods, using a series of assumptions. The calculations were made on the basis of the 1966 and the 1971 Iranian Censuses. In addition, some projections done by other agencies are presented. These projections suggest a number of alternative possibilities with respect to the population future of the country.

Thesis Outline

This study consists of three sections. The first section will deal briefly with the population situation of Iran in the past, present and future. A historical survey beginning in the 19th century up to the second census gives some idea of past trends in population growth. Analysis of the population in the 1970s provides a more contemporary picture of the population. Recent information about the population

allows us to describe other demographic patterns such as age-sex structure, marital status, economic activity, literacy and education. Finally, the population projections using a series of assumptions and different methods are presented at the end of Chapter II. In the second section, Chapter III, a number of questions relative to the family planning program are addressed and discussed. Why did the family planning program come into the picture as one of the country's policy issues? What procedures for population control were taken before introducing the family planning program in the country? How does the family planning program operate and to what extent is it a success or failure? The organizations, program policy, training, communication, administration, and program cost will be considered. The second section also contains some tentative conclusions in regard to population planning. The final section is devoted to a summary and conclusions.

CHAPTER II

POPULATION SITUATION IN IRAN - Part 1

This chapter is composed of two sections. The first is devoted to a brief description of Iran's population. Emphasis is placed on the country's history of growth and current demographic structure. This section is then followed by an explanation of probable future growth in which a series of projections are presented and evaluated.

Geographic Characteristics

Iran with its 1,648,000 square kilometers (636,000 square miles) is situated in Southwestern Asia between the Caspian Sea, the Persian Gulf, and the Golf of Oman. It borders the U.S.S.R. to the North, Iraq and Turkey to the West, and Afghanistan and Pakistan to the East.

Differences in altitude cause great climatic variations, i.e., the temperature varies from severe cold in the highlands to extreme heat in the lowlands. Mountains border all sides of Iran with the exception of the Southeast corner. A region in the center which extends to the East, named Dasht-E-Kavir, is a sandy desert. Generally, 13 percent of the country's area is arable land, and about one third of this arable land is currently under cultivation. The major water source is rainfall, a limiting factor in agricultural production and development.

Historical Background and Population Trends

Prior to 1956, when the first national census was taken, the only existing official population records were urban head counts (taken between June 1939 and August 1941), and the statistics of the Civil Registration Office (C.R.O.) which started operation in 1928.[1]

Between 1890 and 1957, historians, travellers and local municipalities hazarded various guesses as to the country's population. An attempt had been made earlier to count the population in 1860, but this effort ended in complete failure.[2] In 1884, Sir A. Houtum Schindler who was a general in the Persian army, estimated the population of Iran to be 7,654,000.[3] In 1891, Lord Curzon who had studied the country for three years, estimated 9 million for Iran's population and established 0.75 percent as the annual growth rate.[4] Population distributions were computed, based on Lord Curzon's studies, by Colonel A. I. Medvedev in 1909. According to these computations, there were 7.5 million settled population, or 75 percent (25 percent lived in towns and 50 percent lived in villages) and 2.5 million, or 25 percent were nomads.[5] The density of population computed by him was 6.8 per square verst (a verst is 3,500 feet or 1,067 meters); a square verst, therefore, was very slightly larger than a square kilometer.[6] In density of population, Persia (Iran) was close to that of Russia (7 persons per square verst)

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[1]Bharier, Julian, "A Note on the Population of Iran, 1900-66", Population Studies, Vol. XXII, 1968, p. 273.

[2]Ibid., p. 33.

[3]Issawi, Charles, The Economic History of Iran 1800-1914, The University of Chicago Press, 1971, p. 3.

[4]Ibid., p. 33.

[5]Ibid., p. 33.

[6]Chaqueland, J. C., La Population de l'Ira[illegible] d'evolutio[illegible]

and to the United States (8 persons a square verst).[7] A 30-year life expectancy for the period 1900-35 was used by Chasteland.[8]

In 1941 the total population was computed using the Official Urban figures and C.R.O. estimates of percentage of the total population living in urban areas. Then the figures were corrected by the ratio given in 1956 at the time of the first national census. According to this census, the population numbered 18.9 million. The 1956 census actually did not contain needed demographic parameters and thus was not easy to use for analysis. In 1963 a sample survey was conducted which indicated 21 percent population growth during the seven years. In 1966 the second census suggested 36 percent growth during the last decade, with 3.2 percent annual growth - among the world's largest growth rates.[9]

The last official data concerning the number of the population of Iran indicate that the population reached 33,375,000 in November 1975.[10] The pattern and level of population growth based on estimated data since 1890 is illustrated in Figure 1. It suggests that the population has increased from just under 10 million before 1900 to over 33 million in 1975.

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[7]Issawi, Charles, op. cit., p. 33.

[8]Chasteland, J. C., op. cit., p. 33.

[9]United Nations, Population and Family Planning Program in Iran, New York: United Nations, 7 Aprin 1971.

[10]Kayhan Air Mail Edition (Weekly Newspaper), January 14, 1976, No. 158. Quoted from Iranian Statistical Center.

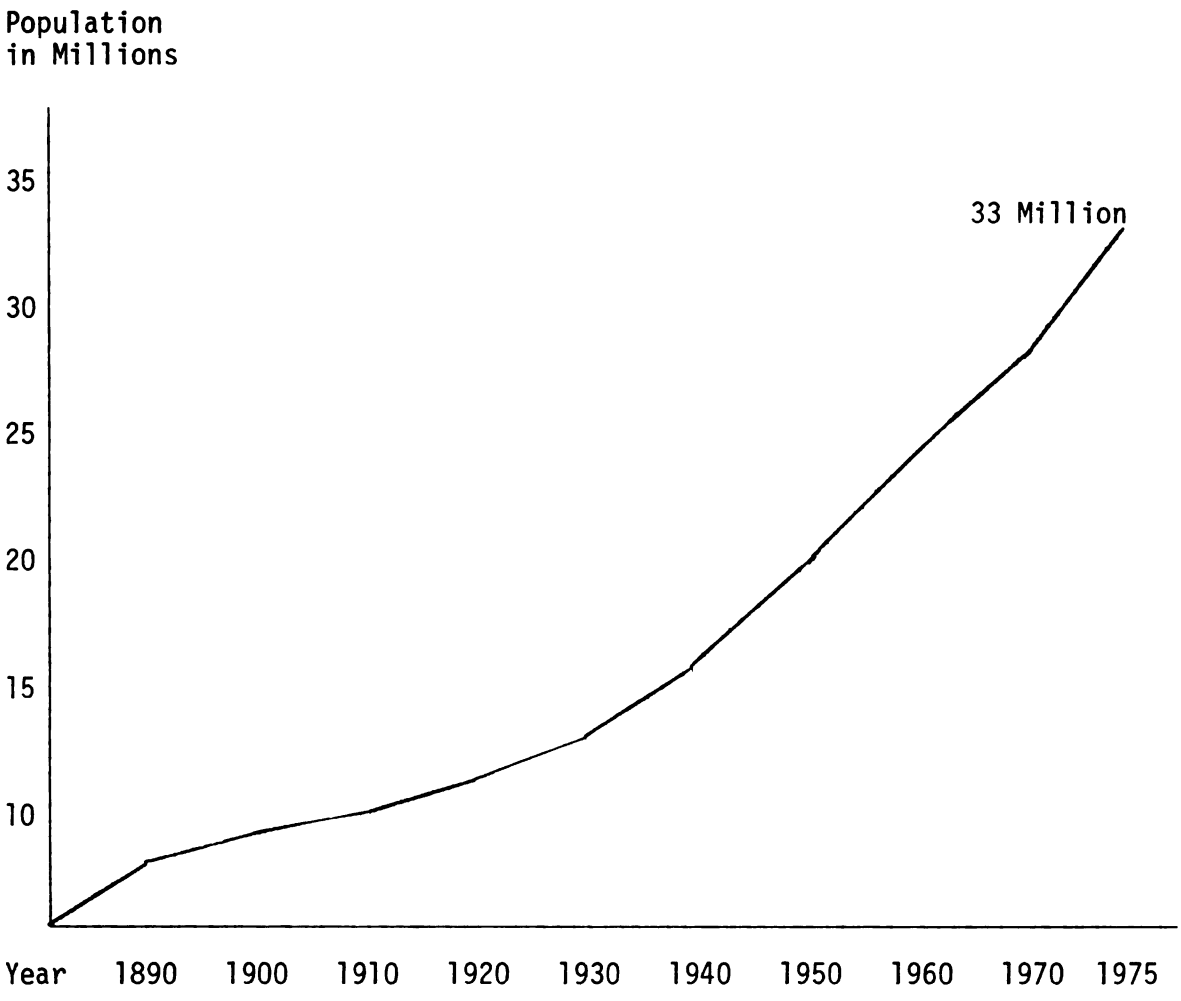

Figure 1. Population growth in Iran, 1890 to 1974.

In 1956 the density of the country was 12 persons per square kilometer (1 mile = 1.61 kilometers), while in 1966 and 1974 the density was 16 and 20, respectively. A large percentage of the people live in the North and the Northwest, with the heaviest concentration along the Caspian Sea, near Tehran (the capital), and in the provinces of East-Azarbayejan and West-Azarbayejan. About 70 percent of the country consists of the rugged area of Zagros, the Mountains of Elbourz, and the great desert of the interior. All these areas are virtually uninhabitable. Considering the ratio of the population to arable land, the densiby becomes 92 persons per square kilometer in 1956, 130 in 1966, and 153 in 1974. If we just

take the area under cultivation into account, the density increases to 276,390 and 459 persons per square kilometer in 1956, 1966, and 1974 respectively. Therefore, the country's absolute area is not a good criterion for determining the relationship between the land and population.

Age statistics show a substantial decline in median age from 20.2 years in 1956 to 16.9 years in 1966. The median age in 1971 was 16.5, indicating a slight decrease in a period of 5 years. This reduction is to be partially explained by a decrease in infant mortality and by more accurate reporting of the younger age groups in the later census.[11]

Variations in the percentages of three different age categories of Iran's population for 1956, 1966, and 1971, are shown in Table 1. These categories of "active" and "inactive" population based on "working ages" represent ratios of the number of persons under 15, 15-64, and over 65 to the total population, respectively. The column labeled under 15 years shows an increasing proportion in the young ages, whereas the percentage of people over 65 years is on the decline.

Table 1. Percent Distribution of "Active and "Inactive" Population, Iran, 1956, 1966, and 1971.

Year	Percent Distribution			
	Total	Under 15	15-64	65 and over
1956	100.0	42.2	58.8	4.0
1966	100.0	46.3	48.8	3.9
1971	100.0	47.1	49.4	3.5

Source: Plan Organization, Statistical Center, "Statistical Report of 1971", No. 349, Tehran, Iran.

[11] Plan Organization, Statistical Center, Statistical Report of Iran's Population, 1971, No. 349.

Dependency ratios for Iran in 1956, 1966, and 1971, using the formula $\frac{P0\text{-}14 + P65+}{P15\text{-}64} \times 100$, are 78.6, 101.6, and 102.4, respectively. Age dependency ratios for other selected countries are: India (1961) = 78.9, Japan (1960) - 55.7, Taiwan (1956) - 87.4, and U. S. (1960) - 67.6.[12] Iran in comparison with these countries, has very high ratios. The dependency ratio is to be regarded as a summary measure of age composition, and not as a good index of economic dependency since a considerable number of Iran's population less than 15 years old and over 65 years participate in economic activities. The high dependency ratio of Iran principally reflects the large numbers of children, i.e., the high fertility rate.

Population Situation of the 1970s

General Structure. The last official estimates of Iran's total population indicated that the population reached 33.3 million as of November 1975. As of this date, birth and death rates were estimated to be 46 and 16 thousand, respectively; and the average density was 20 persons per square kilometer. In 1972, the birth and death rates were 48 and 16 per thousand, respectively, with overall death rates and infant mortality being relatively high.[13] The mean number of live births per married women under 45 years of age ranged from 6.5 to 8.5 in the urban and rural

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[12]Shryock, H. S. and Siegel, J. S., The Methods and Materials of Demography, Vol. 1, U. S. Department of Commerce, 1973, p. 235.

[13]Northman, Dorothy, "Population and Family Planning Programs: A Factbook", Report on Population/Family Planning, The Population Council, New York, September 1973.

areas, respectively.[14] The birth and death rates yield a rate of natural increase of 3.2 percent per year, among the world's highest. The life expectancy for 1965-70, reported by the United Nations was 50 years for both sexes.[15] As indicated before, Iran has very young population. A large proportion of the population was under 15 years of age in 1971 (47%), another indicator of Iran's birth rate.

Marital Status. The data on marital status were obtained from census and sample surveys, and there is a question as to whether these data can be considered reliable.[16] Registration data most certainly are inadequate. Table 2 shows crude marriage rates for selected countries to indicate international comparisons with Iran. Iran as compared with the selected countries in Latin America, Europe, Middle East, and Far East, has a low marriage rate. It would seem probable that this low rate in relation to other areas is not a genuine reflection of the real condition.

The Urban-Rural Pattern. The urban population enumerated in the 1966 census included all SHAHRESTAN (counties) regardless of their size and all other settlements having 5,000 or more inhabitants. In 1966, 38 percent of the total population lived in rural areas, generally defined as settlements with less than 5,000 inhabitants. 62 percent of the total population lived in urban areas. The 1971 data indicated 41.8 percent and 58.2 percent of the population residing in urban and rural settlements, respectively. In fact, the proportion of urban settlements increased by nearly 4 percent between 1966 and 1971 (Table 3).

Ethnic Groups, Languages, and Religions. For the most part, the

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[14]Amani, Mehdi, "Overview of the Demographic Situation of Iran", Bulletin of the Family Planning Bureau, Tehran, September 1971, p. 23.

[15]United Nations, op. cit., p. 29.

[16]United Nations, Demographic Yearbook, 1973, p. 388.

population of Iran in 1970 can be considered homogeneous. Yet there were still noticeable differences in spite of the fact that the physical, cultural, and linguistic characteristics that distinguished the various people in earlier centuries have been lessened by intermarriage, cultural exchange, and other factors.[17]

Table 2. Crude marriage rates for selected countries

Country	Rate per 1,000
Taiwan	7.4
Philippines	6.7
Syrian Arab Republic	7.6
Egypt	10.2
France	7.9
United States	9.2
Canada	7.4
Chile	7.6
Iran	5.7

Source: United Nations Demographic Yearbook, 1966, Table 24.

About two-thirds of the total population in 1970 consisted of people of "Aryan" origin whose ancestors migrated from central Asia in ancient times. They speak one of several Iranian languages. The major groups in this category include the Persians, Gilani, Mazandarani, Kurds, Lurs, Bakhtiari, and Baluch. Smaller Iranian groups are found throughout the country. The remaining third of the population is composed primarily of

[17]American University, Area Handbook for Iran, 1970.

Table 3. Rural-Urban Distribution in Iran, 1966 and 1971.

	1966	1971
TOTAL	100.0	100.0
Urban	38.0	41.8
Rural	62.0	58.2

Source: Plan Organization, Statistical Center, "Statistical Report of 1971", No. 349, Tehran, Iran.

Turkish and Arabic speakers.[18]

In 1970 Muslims made up about 98 percent of the population, a figure that had remained relatively constant for about a century. Somewhat over 90 percent of the population were members of the Shiah branch of Islam, which is the official religion. Most of the remainder were members of the Sunni branch. Officially recognized minorities are the Jews, Zoroastrians, and Christians, altogether numbering about 500,000.[19]

Economic Participation. Between 1960 and 1970 Iran's economy industrialized rapidly in urban areas and in regions with rich natural resources. The industrial base developed especially rapidly after 1968 and according to national planning, it is expected to be dominant by 1978. In this respect, agriculture, which had been virtually the only economic activity for thousands of years, will be relegated to a secondary position in the economy.[20]

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[18]Ibid.

[19]Plan Organization, Statistical Yearbook, 1972.

[20]American University, op. cit., 1971.

Table 4. Percentage of Population 10 Years Old and Over Economically Active in Iran, 1966 and 1971.

Year	Total	Male	Female
1966	46	77	13
1971	43	73	12

Source: Plan Organization, Statistical Yearbook, 1971, Tehran, Iran.

In 1971 the "economically inactive" population accounted for 57 percent of the total population. The inactive population was composed of students (29%), housewives (63%) and infants and other disabled persons (7%).[21]

The percentage of the active population declined between 1966 and 1971 for both sexes. It is said that increases in the number of students and the length of educational training account for the decline in percentage of active population. The proportion of employed persons decreased about one percent from 1966 to 1971. Hence, the proportions of unemployed, consisting of those "seeking a job" and "seasonal unemployed", increased during the same period (Table 5).

Literacy and Education. The rate of illiteracy in Iran is high, especially among women. Rapid advances have taken place in formal education which will be practically universal in the towns within a few years. However, reforms in content and curriculum are still needed and are being progressively introduced.

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[21] Plan Organization, op. cit., No. 349.

Table 5. Percent Distribution of Employed and Unemployed by Sex, in Iran, 1966 and 1971.

Year	Employed			Unemployed					
				Seeking a Job			Seasonal Unemployed		
	Both	Males	Females	Both	Males	Females	Both	Males	Females
1966	90	90	91	11	11	9	6	6	7
1971	89	89	90	11	11	10	9	9	9

Source: Plan Organization, Statistical Center, "Statistical Report of 1971", No. 349, Tehran, Iran.

A United Nation mission reported that:

> "Despite some exceptional progress it will be many years at the present pace before the one-third of the population living in the poorer rural areas have the necessary schools, teachers and literacy rate . . .[22]

In 1971, 38 percent of the total population over 7 years of age were literate (Table 6). Although statistics show a substantial increase in the literacy rate over time, a considerable proportion of population still suffers from illiteracy. In 1970, some 3.5 million students were enrolled in a centrally-located network of primary and secondary schools and institutions of higher learning. Basic primary education and vocational instruction were also available to some of the adult population in the cities and in some rural areas.

According to official estimates, school age level instruction in day-time or evening classes was being given to about 15 percent of the total population. Primary education is compulsory and free for children ages six to eleven. In 1970, about 68 percent of the 6-11 age group, mostly urban youths, attended primary schools.[23]

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[22]United Nations, op. cit., p. 23.

[23]American University, op. cit., 1970.

Table 6. Percent Distribution of Literate Population by Sex 1956, 1966, and 1971

Year	Percent Literate		
	Male and Female	Male	Female
1956	15	22	8
1966	29	40	18
1971	38	49	26

Source: Plan Organization, Statistical Center,"Statistical Report of 1971", No. 349, Tehran, Iran.

Among the literate population there were a number of people who did not have official certification. Nine percent of the literate population lacked certification in 1971 (Table 7). The proportion of people who attended elementary level and higher level education classes has decreased between 1966 and 1971, but has increased at the secondary level. It may be inferred that the number of children who entered elementary-level education was smaller than the number who moved to secondary-level or who did not continue their studies. Higher educational institutes place a limit on the number of students they accept, so a majority of the students cannot attain higher education.

In summary, Iran's population has exhibited extremely rapid growth in the recent past. Fertility rates are among the highest in the world and have changed little in recent years. Mortality rates are about 16 per thousand population, diminished from earlier levels. The country's population contains a large proportion of young persons who will be moving into

Table 7. Percent Distribution of Literate Population by Educational Level in Iran, 1966 and 1971.

Year and Sex		Total	Literate (Without certification)	Elementary	Secondary	Advanced	Unknown
1966	Both Sexes	100.0	10.7	68.1	18.3	2.0	0.9
	Males	100.0	13.3	65.9	17.7	2.3	0.8
	Females	100.0	4.4	73.5	20.0	1.1	0.1
1971	Both Sexes	100.0	9.2	67.0	21.4	1.9	0.5
	Males	100.0	11.6	64.5	21.0	2.4	0.5
	Females	100.0	4.6	71.6	22.2	1.1	0.5

Source: Plan Organization, Statistical Center, "Statistical Report of 1971", No. 349, Tehran, Iran.

the reproductive period. Depending upon what is accepted as the most realistic assumption regarding vital rates, Iran's population might well double in the next twenty years.

POPULATION PROJECTION FOR IRAN - Part 2

The purpose of this section is to examine the population size of Iran during the next decades using projection methods. The first census conducted in 1956 allows the researchers to estimate population trends in the future for the first time, since before that data were obtained by mere guesswork. The first population projections for Iran for the years 1961, 1966, 1971, and 1976 on the basis of the 1956 census were presented at the World Population Conference in 1965, in Belgrade. The figures suggested were 30.3 million for 1971 and 36.0 million for 1976 using the component method, the method usually used for countries for which demographic information is not available in detail.

Iran suffers from a lack of sufficient reliable statistics relating to fertility and mortality. Iran does not have a complete registration program, and the 1956 and 1966 censuses did not collect any data relating to births and deaths for different age groups. However, population projection in the absence of accurate birth and death registration can be calculated through mathematical formulas.

The writer computed projects for Iran's population, using available information and two mathematical procedures. The first and simplest method of projecting the population of a country such as Iran is to assume constant rates. Using this assumption, I projected the population through the cohort method, using 1966 and 1971 data for five-year interval groups.

The formula used is that of Hamilton and Perry for Cohort-Change rates.[24]

$$nP_{a+k}^{t+k} = \frac{aP_{a+k}^{t}}{nP_{a}^{t+k}} \; nP_{a}^{+} \qquad \text{where:}$$

P = population

a = initial age of interval at the second census

n = size of interval

t = year of second census

k = intercensal interval in years

The fraction $\frac{nP_{a\,+\,k}^{+}}{nP_{a}^{t+k}}$ illustrates the survival ratio of people moving from "a" to "a+k" which is multiplied by the number of people at the beginning of a+k years interval. The number of children 0-4 for the projected year can be calculated by the multiplication of the child-woman ratio (the ratio of children 0-4 to women 15-49) of the base year by the number of women 15-49 in the projected year. For example, to compute the number of children for the 1976 projected population on the basis of 1971 we need to multiply the child-woman ratio of 1971 by the number of women 15-49 in 1976. This, of course, represents a rough computation of the number of children 0-4 in 1976. Populations were estimated for the years 1976, 1981, 1986, and 1991 as shown in Table 8.

The population projection as Table 8 shows, yields a population size of 32.5 million in 1976, 36.5 million in 1981, 41.4 million in 1986 and 47.2 million in 1991 (assuming the rates are unchanged). The projected population for 1976 as compared with enumerated population in November 1975 which indicated 33.3 million persons, is smaller by less than one million persons. This reduced figure may have been due to the nomadic population, inhabitants of camps such as garrisons, work camps, etc.,

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[24]Shryock and Siegel, op. cit., Vol. 2, p. 796.

Table 8. Total Population Projections for Iran 1976 - 91 Assuming Constant Rates

Age	1966	1971	1976	1981	1985	1991
Total	25,978,923	28,317,200	32,467,721	36,509,424	41,342,188	47,140,976
0 - 4	4,436,921	4,944,000	6,123,808	6,152,180	7,122,344	8,360,311
5 - 9	4,106,158	4,554,400	5,072,544	6,283,027	6,312,137	7,307,525
10 - 14	3,017,250	3,836,500	4,253,810	4,737,756	5,868,347	5,369,537
15 - 24	2,129,036	2,762,100	3,510,398	3,892,236	3,281,155	3,654,445
25 - 29	1,649,672	1,653,000	1,765,173	2,288,866	2,908,958	3,225,375
30 - 34	1,668,046	1,636,600	1,639,776	1,751,052	2,270,555	2,885,686
35 - 39	1,418,239	1,633,000	1,602,231	1,605,341	1,714,280	2,222,873
40 - 44	1,321,050	1,414,500	1,628,101	1,597,424	1,600,525	1,709,137
45 - 49	843,608	1,129,500	1,209,397	1,392,026	1,365,798	1,398,449
50 - 54	740,839	881,900	1,180,327	1,263,820	1,454,667	1,427,259
55 - 59	427,901	479,900	571,471	764,852	818,955	942,624
60 - 64	669,937	610,400	684,337	814,918	1,090,679	1,167,830
65 plus	968,105	985,700	897,898	1,006,660	1,198,744	1,604,389

Sources: Demographic Yearbook, United Nations, 1973 and Plan Organization "Statistical Report of 1971", No. 349, Tehran, Iran.

which were taken into account through estimates instead of being enumerated. As the "Statistical Report of 1971, Iran" reveals, 3.4 percent of the 1966 total population was nomads and inhabitants of camps. The same proportion was used as an estimate for 1971.

The Population Council provided a projected population of 48.6 million by the year 2000. The projection was designated "low growth rate". That is, under the assumption that the growth rate will decline dramatically so as to reach one percent per year by 1991.[25] If the constant rate of population, computed by the writer, continues in the same manner, the population size will be 59 million by the year 2000. This figure is more reasonable than that of Population Council's projection since such dramatic decline in growth rates, assumed by the Population Council, are highly unlikely for a country like Iran with such a potential of human reproductivity. This seems particularly true when it is considered that the infant mortality rate will decline through improving health conditions. However, the Population Council set an ultimate goal of one percent growth rate for Iran's population by the year 1991 and adopted a growth such that one percent growth rate could be reached in the determined year. As we will discuss later, the United Nations mission agreed that Iran's population growth will not achieve such a target by 1991.

The constant growth rate that the writer assumed is based on the assumption that mortality and fertility levels would offset each other. This assumption can be closer to reality for Iran's population than the Population Council's "low" growth rate.

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[25]John K. Friesen and Richard V. More, "Iran", Country Profile, The Population Council, October, 1972, p. 2.

To be more concrete on population projection for Iran, the constant rate also may not be a good assumption. According to the two previous censuses, 1956 and 1966, the percentage of the population under 15 years were 42 and 48, respectively. These figures indicate a high birth rate in the country. The Iranian government at the forty-first session of the High Plan Council in May 1970, decided upon the ambitious goal of reducing the population growth to one percent per year in the next twenty years (by 1990).[26] While this may be a very desirable target, the problem is that Iran's population structure has been produced by a long period of high fertility.

> "Already the mothers of twenty years hence have been born and they are very numerous. The girls who were zero to 14 years of age in 1970 will be in the heart of their most reproductive years, 20-34 in 1990."[27]

With the improving of health conditions in Iran, the death rate will be declining and will cause the population to increase at least over the short term. Taking these factors into consideration, it should be clear why "constant rates" may not be an accurate assumption for projecting a population such as Iran's.

There is a second method for estimating the future population which seems better suited to our purposes. Knowing that mortality will decline in all probability with the improving health conditions, the following two assumptions were used to project the population:

Assumption 1: A decline in fertility and in mortality.

Assumption 2: A decline in mortality and an initial increase in fertility followed by a slow decline.

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[26]United Nations, op, cit., p. 32.

[27]Ibid., p. 32.

Table 9. Assumptions For Different Order Rates Used For Population Projection.

	1971	1976	1981	1986	1991	1996
Crude Birth Rate:						
Decline Order	44	41	39	35	31	27
Increase Order	46	47	48	47	47	46
Crude Death Rate:	16	14	12	10	8	8
Growth:						
Decline Order	28	27	27	25	23	19
Increase Order	30	33	36	37	39	39

Source: United Nations, Population and Family Planning in Iran, 1971.

To compute these projections another mathematical formula is used to estimate future populations. The formula is:

$$Pn = Po(i+r)^n$$

At this time "r" will change over periods (every 5 years). The subscripts used in this formula are:

$$Pt+n = P(t+ri)^n$$

t = year estimation started

n = period we wish to estimate

p = population

r = rate of natural increase

i = 1976, 1981, 1986, 1991, and 1996

The results are shown in Table 10.

Table 10 illustrates the population projection of Iran under two assumptions (the rates were obtained from the United Nations).

Table 10. Population Projections for Iran, 1976 - 96.

Assumptions	1971	1976	1981	1986	1991	1996
1	28,317,200	32,510,977	37,140,540	42,429,353	48,004,570	53,784,320
2	28,317,200	32,828,130	38,615,729	46,084,011	55,268,550	66,913,639

The first assumed that fertility will decline in such a way that the birth rate diminishes from 44 per thousand in 1971 to 27 per thousand in 1996. This, indeed, postulates a reduction in the total fertility ratio (equal to completed family size in a stable population situation) of about one child every eight years from the late 1960s to the remainder of the century. The decline will not be very fast until 1981, but then by the reduction in the potential number of mothers, the birth rate will decline faster. Such an assumption, including a mortality decline, provides a population size of 32.5 million in 1976, 42.4 million in 1986, and 53.7 million in 1996. The second assumption expects the birth rate to continue to increase to the end of the first decade and then after a period of stability to begin to decline. That is due to not producing a successful family planning program in the country. The assumption (we still consider mortality to decline) provides 32.8 million in 1976, 46.0 million in 1986, and 66.9 million in 1996.

This means, regardless of the success of family planning, there will be a difference of 131.1 million persons by 1996 under the above assumptions. The next Chapter deals with the function of the family planning program in Iran to find out whether or not such a policy can be useful to reduce population growth.

CHAPTER III

THE FAMILY PLANNING IN IRAN

An attempt is made in this Chapter to examine the Family Planning Program in Iran. The changing position of the government with respect to family planning and how planning is organized and delivered are detailed. An attempt is made to evaluate the likely effectiveness of family planning in helping to achieve population goals.

The Rationale for Family Planning

Several reasons can be cited, among them the following, for carrying out the Family Planning Program:

1) Iran has only 13 percent arable land and only two-thirds of this land is under cultivation.

2) Iran has one of the highest growth rates in the world.

3) According to several projections cited in the previous chapter, Iran's population will vary from around 48 to 67 million under different assumptions. As the United Nations reports, even if the fertility rate declines so that the population growth reaches one percent, the population size would be 48.6 million within 25 years. But this projection is not realistic due to the large number of potential mothers already born.[28]

These facts require a serious effort in population planning. In order to avoid a continued high growth rate, such planning must attempt to reduce live births from 8.5 to 6.5 for each married woman under 45 in the rural and urban areas.

Review of the Background of the Establishment of the Program

In the 1950s some voluntary organizations, such as the Family Health Guidance Associations, were established to supply child health information to mothers, including limited family planning information. At the same time, the Ministry of Health opened a few maternal and child health clinics. To quote from Friesen and Moore:

> "The first public instruction in contraception was given by maternal-and-child-health clinics set up in 1953 but these did not supply contraceptive materials. In 1957, the International Planned Parenthood Federation started to encourage family planning activities in Iran and supplied a number of Iranian volunteers with contraceptives, such as foam,tablets, jellies, and diaphragms."[29]

The activities of such organizations were quite circumscribed and limited to the city of Tehran, the capital. These activities had little or no effect on the fertility levels of the country. The first mention of any population policy in Iran was made in the Third Development Plan of Iran (1963-1968) where the need for a birth control policy was stressed. But no concrete action was undertaken, and no policy was adopted.[30] Not only was there no official family planning program in Iran before 1966, but the general policy favored large families. For example, each year a "distinguished mother" was chosen on the basis of the largest number of children, and government employees received monthly financial assistance for each child born.

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[29]John K. Friesen and Richard Moore, op, cit., p. 6.

[30]Behnam, Dyamshid, "Population and Family Planning in Iran," Paper presented at International Union for the Scientific Study of Population, Sydney, 1967, p. 457.

In 1966 a Population Council mission was invited to write a report on the Iranian population problem. This mission recommended that:

> "The government declare a policy of providing, as soon as possible, a family planning service for every couple who wants it. The public emphasis of this policy should be on maternal health and family welfare, including raising the standard of living. Iran can fortunately use this approach while population pressures are less than critical instead of having to press for an emergency program to slow down the rate of increase at once."[31]

Following this report, meetings and seminars were held, population experts and advisors from abroad visited Iran, and members of the Ministry of Health and Iranian Universities traveled abroad to study population control methods and to discuss other matters related to family planning. Representatives from the Ministry of Health, Tehran University, and the Plan Organization met in August and November of 1966 to create guidelines and to formulate a national policy on population control. Subsequently, in December 1966 an official program was introduced and the government appointed an under-secretary for family planning in the Ministry of Health. A few months later a specific plan with budgetary estimates was submitted to the government. In addition to these efforts, an executive and coordination committee was formed in 1967 to coordinate the family planning programs of a number of government and non-government agencies, including: the Plan Organization, Tehran University, Family Planning Association, Health Corps, Red Lion, Society of Iran, Institution of Mother and Infant Protection, Farah Pahlavi Hospital, and Maternal and Child Health Departments.[32] This program got underway in April of 1967.

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[31]United Nations, op. cit., p. 23

[32]The American University, op. cit., p. 86.

In 1967 the Shah of Iran joined 29 other leaders to sigh the World Leaders Declaration on Population which was presented to the former United Nation Secretary General, U Thant. Since that time the Shah has given strong and constant support to the family planning program.

In 1971, at the request of the government of Iran, an interagency mission was organized by the United Nations in cooperation with UNESCO and WHO, to visit Iran during January and February to review the family planning efforts and activities undertaken so far and to advise on the future conduct of the program. A report was prepared for the government of Iran by this mission. To quote briefly:

> " . . . if the early success in general response continue and if the whole enterprise can now be intensified and accelerated on the lines which are now proposed, it may well be that Iran will provide a good example of the ways that these problems could be tackled elsewhere."[33]

The Purpose of the Program

Before 1970 there was no specific indication relating to the extent of the decline in fertility aimed for by the family planning program. In other words, the program was confined to assisting individuals in having the number of children they wanted when they wanted them. In May 1970, as already mentioned, the Iranian government announced in the forty-first session of the High Plan Council a target of a one percent annual growth rate to be achieved over the next twenty years.

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[33]United Nations, op. cit., p. 36.

In November 1972 in the second Asian Conference in Tokyo, the Iranian Under-Secretary of Health who was in charge of Family Planning Program said:

> "The goal over the next six years was to reduce the present 3.2 percent growth rate to 2.4 percent."[34]

He added that this target would involve providing contraceptives to 3.6 million women, thereby averting about one million births. A large increase in training, information, education, and clinics serving the rural population of 18 million was planned. Finally, he told delegates:

> "Our goal is to achieve a one percent growth rate toward the end of this century. We will have to implement a most vigorous family planning program to achieve this."[35]

To achieve a one percent growth rate by the end of this century, according to the under-secretary's announcement, is more reasonable than the previous goal which was put forward in the High Plan Council. This is true due to the youthfulness of the population and the potential for human reproductivity which now exists.

In the Population Council mission report in 1966, the following recommendations were given:

> "(a) aim at the early motivated couples: (b) start when the job is easiest (in the cities and towns with the better education); and (c) move into large scale programs quickly without waiting for pilot projects except for political reasons."[36]

The United Nations Mission in 1971 recommended that:

> "The Population Council's advice with its strictly pragmatic approach was no doubt appropriate at the time it was written, namely before the twenty-year target had been formulated and hardly any start had yet been made. Attention should now be given to longer-term strategy. The problem of attaining the target has now to be regarded as a major economic and social development operation and not as an isolated campaign."[37]

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[34]The Second Asian Population Conference, Tokyo, November 1972, p. 14.

[35]Ibid., p. 14.

[36]United Nations, op. cit., p. 108.

[37]Ibid., p. 109.

As to contraceptive availability, the objective was to provide contraceptives wherever clinical facilities exist. The contraceptives would be provided by the Ministry of Health, other Ministries, and non-governmental and private organizations.[38]

It is clearly important to note the meaning of the family planning concept and how it has changed in Iran. As we know, the phrase apparently means very different things to different people, different societies, depending on their social or political perspective. For Iran the family planning "concept" seems to have changed markedly since the program was established.

In the Fourth Five-year plan (1968-73), family planning was considered a broad-scale plan as the following quotation shows:

> "The objective of family planning program in Iran is to promote the physical, mental, social and economic welfare of families and consequently that of society."[39]

In contrast, in the Fifth Five-year plan (1973-78), the family planning program was considered as a program for population control:

> "The realization that a program of socio-economic development is closely linked with the program of population control has led the government to adopt an ambitious policy of population policy and family planning. Side by side, all possible efforts are being made to develop and improve the demographic data, research and training facilities."[40]

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[38]Friesen and Moore, op. cit., p. 6.

[39]Ibid.

[40]United Nations, World Population Conference, Bucharest, Rumania 19 August 1974.

Therefore, family planning action in Iran focuses on some specific techniques of contraception, family size, and fertility, rather than a very broad program for improving the physical and social well-being of families. This is true despite the fact that the responsibility for those programs was given to the other organizations. But it is important to mention that health as a major consideration comes with the program in as much as it is called, "The Health and Family Planning Program."

Program Policy

The Government adopted more aggressive population policies in May 1970 in view of the ultimate goal of achieving an annual population increase of only one percent to be achieved within twenty years.

> "Ministry of Health was called upon by the Government to design the new national program. The program would call for the concrete involvement of all pertinent Government, non-governmental and private services and organizations. The directions given to the Ministry were to formulate the program in a flexible manner with room for experimentation in order to find effective ways and with no set budgeting limits if it could be shown that money could be spent well. The allocation for Iranian fiscal year 1970-71 was in fact sharply implemented."[41]

Thus, the program was being implemented through existing health and clinical facilities and staff. Family planning functions were assumed by existing technical staff on a part-time basis, and some additional staff was recruited for motivation, home visits, supervision, and record-keeping. A program to follow-up the new acceptors, make more regular home

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[41]United Nations, op. cit., p. 46.

visits, and provide more convenient access to supplies and services was being added to the program. Preventive health care, including family planning, was provided free of charge, although a small registration fee (about $0.20) was usually requested from the clients who could afford it.

As indicated in the June 16, 1973 announcement, the following attitude in regard to the program policy is:

> "To facilitate socio-economic growth, the official policy is to reduce the population growth rate from 3.2 percent to one percent over 20 years."[42]

Following this announcement a New Penal Code was passed by Parliament to repeal the restrictive abortion laws. According to the new law:

> "Any type of medical or surgical procedure can be performed by a recognized physician with the agreement of those who have the right to consent to the procedure in accordance with the rules and regulations approved by the government and announced."[43]

The Literacy Corps, the Development Corps, and the Health Corps (military conscripts), the Women Corps, and Armed Forces health personnel are trained to work in the program. University and high school curricula include family planning materials. In addition, the government is planning a project for comprehensive study of Iranian law and population.

The Program Organization

The government has given to the Ministry of Health the responsibility to plan, organize, and carry out the family planning program. The special

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[42]Population Council, Report on Population/Family Planning, New York, September 1973. (My Italics)

[43]Ibid.

division in the Ministry of Health, which is headed by an Undersecretary of State for Health and Family Planning, is organized into five units: 1) Training and Communication; 2) Clinics and Supplies; 3) Planning, Demography, Evaluation and Research; 4) Maternal and Child Health Services; and 5) Administration.[44]

The Family Planning Division works closely with other parts of the Ministry to ensure coordination and to obtain technical assistance. The implementation of the program calls for use of personnel and clinics belonging to a number of other government and private organizations. To achieve coordination of activities carried out through these different agencies, a high council has been instituted under the chairmanship of the Undersecretary for Health and Family Planning.[45] The units under family planning will now be discussed briefly, based upon the United Nations Population Council mission report.

Communication and Training

The two major tasks of the national family planning program are to deliver information and services to Iran's population. During the first three years the family planning division concentrated its efforts on developing family planning and contraceptive services through clinics and on training people at different levels for various kinds of work. For supplying necessary information to the people, the Family Planning Division

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[44]Population Council, op. cit.

[45]United Nations, op. cit., p. 49.

established a unit for motivation and communication in 1969 as part of its technical affairs section. At present, this section produces public displays such as graphs and calendars, prepares and shows family planning films, produces and distributes leaflets and pamphlets, and publishes family planning bulletins in both Farsi (Monthly) and English (Quarterly), with a total circulation of over 50,000. Radio and television have a major role in communication affairs and potentially are the most useful media in the program. But the division basically relies on face-to-face methods of contact and communication. Films and film strips are produced for cinema and television.

A network of mobile education and communication units, each manned by a health or family planning education officer, an assistant, and a driver, is being developed to operate out of smaller cities. These units will serve small urban areas and, where possible, reach out into rural areas. Their task is to promote, arrange, and coordinate communications for adult education and social welfare through all existing channels.[46]

By 1971, the Family Planning Division developed and distributed more than 431,750 copies of 75 publications among different population sectors in Iran.[47] The publications are related to the various aspects of the family planning and population. Number, type and circulation of these materials under four major categories are shown in Table 11.

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[46]Friesan and Moore, op. cit., p. 12.

[47]Paydarfar, Ali, The Population and Family Planning Program in Iran, Chapel Hill: University of North Carolina Press, 1972, p. 52.

The most important individual communication project undertaken thus far is a Family Planning Division/Population Council project conducted in Isfahan province which began in 1970 and ended in 1971. The object of the Isfahan Communication Project (ICP) was to determine the impact of an intensive education and communication program. ICP was to use mass media and agents such as doctors, teachers, revolutionary corps men and women, in addition to full-time family planning workers. ICP's goals were to assess knowledge, attitudes, and practices of family planning and to measure acceptances at clinics at various stages of the project as compared with acceptance previous to the program.[48]

Table 11. Number and Total Circulation by Major Subject Area

Major Subject Area	Number	Total Copies
Family planning, medical and technical	34	254,400
F. P. Communication and motivation	28	10,700
Demography and population	9	4,800
Nutrition	4	160,000
Total		431,750

Source: Paydarfar, Ali, The Population and Family Planning Program in Iran, Chapel Hill: University of North Carolina Press, 1972.

[48]United Nations, op. cit., pp. 82-83.

The ICP tried to avoid the shortcomings of previous family planning communication programs. In some respects, however, the achievements of ICP were unsatisfactory, and the shortcomings of earlier programs were duplicated.

> "the effectiveness of the ICP was hampered by a contraceptive delivery system that was inadequate in rural and poor urban areas and by the need to promote contraceptives that require a high degree of commitment on the part of the user (the pill and the condom). The identification of these limitations of ICP was in itself a major achievement, in that it pointed out those areas in which future programs should be modified."[49]

Beyond these limitations, the major contribution of ICP can be summarized as follows:

1) The ICP demonstrated that a properly developed multimedia campaign can achieve an increase in the new acceptance rate, for family planning, can increase continuous use of services, and can expand sources at a reasonable cost.
2) The program pioneered in developing procedures for creating message content relevant to the local population and developing methods of evaluating results of media campaigns.
3) Five target groups for education and communication were identified: the government and political elite, family planning administrators, the medical profession and family planning staff, functionaries and opinion leaders, and general public.
4) Mass media programs were integrated with promotion of family planning by field workers and functionaries.

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[49]Lieberman, S., Gillespie, R., Loyhmani, M., "The Isfahan Communication Project", Studies in Family Planning, April 1973, pp. 98-99.

5) The ICP started to explore the types of reward systems that would be most acceptable to persuade couples to both desire and achieve replacement size families.

Basic to the implementation of the national family planning effort is a supply of trained personnel. This personnel must include the following: medical (doctor and nurses); administrative and supervisory; functional specialists (information, motivation, education, and technical); paramedical (nurses assistant midwives, and rural mid-wives); and field staff (home visitors, motivators and public educators).[50]

The Firou Zgar Center in Tehran is the oldest and largest family planning center in the country. This center offers various intensive family planning training courses for many of the medical, paramedical, and the field personnel who will be performing family planning functions within the government context.

Clinics and Supplies

The major problem of family planning in Iran is to reach not only the country's urban population, but also the people in its 50,000 villages, many of which are in remote rural areas. To meet the demand, 1,529 clinics were operating by mid-1971, 79 of which were opened in the first three months of that year. Most of these clinics were in urban areas and very few were devoted primarily to the delivery of contraceptive services.[51]

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[50]Ibid.

[51]Friesen and Moore, op. cit., p. 10

To expand clinical services in rural areas, 37 semi-mobile family planning clinics were in operation in 1971. The staff of such family planning semi-mobile units consists of physican or a mid-wife, a nurse assistant, two motivators (usually Health Corps girls), and a driver. These mobile teams together with health corps units, operate as an extension of permanent clinics for health and family planning. Agencies are being encouraged to offer extra clinic hours in the evening devoted exclusively to family planning in order to reach clients who are unable to attend the clinics during normal daytime hours.

Planning, Evaluation, Research and Demography

This unit is concerned with the further development of the program, including new methods of population control, and with the planning of activities and methods for evaluation and research. An evaluation unit headed by an experienced public health physician was formally established in the Family Planning Division late in 1970. After a request to the U. N., an expert on demography was assigned to the unit to help improve the service statistics, to carry out KAP surveys, and to set up an evaluation system for the program. When new patients are enrolled at a clinic an acceptor card is completed and a duplicate card sent to Tehran. Complete records of women who fail to return to the clinic are reviewed, thus allowing a comparison of drop-out cases with new cases. New acceptor cards and drop-out records are analyzed at periodic intervals by the central evaluation unit.

In addition, KAP surveys and other family planning-related studies conducted either by the Ministry or other personnel are reviewed for their relevance to the program.

> "To improve the evaluation system further, a one-month ECAFE sponsored evaluation workshop was held in Tehran during November-December 1971 for 30 field staff. With the conclusion of the workshop the staff members return to their provinces to form the basis of a much more rigorous and efficient national family planning evaluation system."[52]

Some biomedical research is being carried out, mainly in the country's universities, and the government intends to develop or strengthen research on biomedical, clinical and epidemiological aspects of human reproduction. According to Friesen and Moore:

> "The government is considering a central, multidisciplinary institute for research in human reproduction and population dynamics and for post-graduate research training. It is anticipated that such an institute will help guide the planning and implementation of the family planning program."[53]

Although the country has developed some capacity for research, and census and statistical evaluation, there is much to be done to strengthen and expand these efforts. This will be done through a more carefully designed and more frequent census, a streamlined annual demographic survey, improved registration statistics, and special studies.

Maternal and Child Health Services

There is a Director-General of Maternal and Child Health (MCH) under the head of the Family Planning Division. This illustrates the policy decision to link family planning services to MCH Services. The MCH clinics are used as service points for contraception. I quote:

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[52]Ibid., p. 14.

[53]Ibid., p. 14.

> "The objective is not merely an integration of MCH and family planning services in terms of using the former as a vehicle for the latter. The recent up-grading of the Directorate-General, the plans to support non-government and private agencies to strengthen their MCH activities and intention to include applied nutrition and education in the family planning educational approach to public, indicate that there are intentions to make MCH and family planning service mutually supportive."[54]

Administration

As previously mentioned, the Health Ministry has been appointed by the High Plan Council to implement the family planning program. The High Council has been instituted under the chairmanship of the Undersecretary for Health and Family Planning. The following agencies and organizations are represented in the High Council.[55]

1) Armed Forces Health Services
2) Gendarmerie Health Services
3) Police Force Health Service
4) Red Lion and Sun Society
5) National Iranian Oil Company Health Services
6) Imperioa Organization for Social Services
7) Institute for the Protection of Mothers and Children
8) School of Social Work (Tehran)
9) Family Planning Association
10) Insurance Organization (Ministry of Labor)
11) Rural Insurance Organization (Ministry of Land Reform)
12) Women's Organization

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[54]United Nations, op. cit., p. 48.

[55]Ibid., p. 46.

In this context the United Nations mission recommended that:

> "Leadership as to training of clinical staff and provision of contraceptive services has been taken by and should remain with the Ministry of Health. The coordination of contraceptive services offered by agencies other than the Government health authorities should also be obligated to the Family Planning Division and exercised through the High Council for Family Planning."[56]

The Central Ministries are represented at the provincial level by Directors-General. The Family Planning Division of the Ministry of Health is represented in the provincial Health Department. Many non-governmental and private agencies also have branches in the provinces which report to their headquarters in Tehran.

Contraceptive Methods

Oral contraception is currently the most widely used method in the family planning program. Condoms are available at the Ministry of Health Clinics but not regularly at other clinics. Condoms have not been promoted presumably because of their meager contraceptive effectiveness. The use of chemical methods and diaphragms is insignificant. Coitus interruptus and condoms to be the most common non-clinical contraceptive methods. The Ministry of Health has delegated to a non-profit making company the purchase and supply for government health centers of drugs, including oral contraceptives.[57] In 1972 the percentage of married women aged 15 - 44 using government supplied contraceptives in Iran was nine percent. (Others, of course, use contraceptives from non-government sources).[58]

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[56]Ibid., p. 49.

[57]Ibid., pp. 47, 59, 60 and 65.

[58]Berelson, B., "World Population: Status Report, 1974" Report on Population/Family Planning, The Population Council, New York, 1974, p. 27.

Foreign Assistance

The United Nations and the Population Council are two foreign organizations which have been cooperating with the Iranian Family Planning Program since its beginning. In early 1971 the United Nations carried out a comprehensive review of the Iranian program through a UN-WHO-UNESCO team. After this team had submitted its interagency report in mid-1971, the government prepared a series of project requests that were directed to the UN Fund for Population Activities (UNFPA) and other donor groups. UNFPA indicated its intention to support a number of these projects. In addition, the UN has provided or has agreed to provide two long-term demography consultants, fellowship and study grants for visits to the U. S. - sponsored workshops; a short term consultant each to Institute of Labor and Social Insurance organizations, utilities and especially equipped vehicles, and several other forms of assistance.[59]

In 1966 the Government of Iran invited the Population Council to send a mission to undertake an initial survey of the population problem. Since then, the Population Council has provided consultants, assisted the Ministry of Health and the University of Tehran with research grants, donated IUD supplies, and supported training abroad. Also, the Farah Maternity Hospital in Tehran has participated in the international post-partum program, sponsored by the Population Council. Since 1968, the Council has had a resident consultant to the program. Since its inception up to 1972, the Council's grants to the program amounted to nearly $800,000.[60]

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[59]Friesen and Moore, op. cit., p. 16.

[60]Ibid., p. 17.

Factors Related to Levels and Trends of Fertility

Demographers and sociologists have found that economic, social and cultural conditions are among the factors responsible for varying levels of fertility. Some sociologists argue that social organization affects fertility by influencing the norms related to family size and supports these norms by providing important social rewards and punishments. The manner in which social structure functions to elevate or retard family size, should be considered in studying fertility behavior in a given society.

The United Nations document on the world social situation reported that:

> "In nearly all countries of the world, government measures favoring high fertility are found along with those likely to have a depressing effect upon fertility. Such measures generally fall into the four categories:
>
> a. Measures related to the family, such as family allowance programs, system of taxation on income, and to maternity and rewards to mothers.
>
> b. Measures of social reform, including compulsory education and child health laws, social security programs, and laws and programs intended to improve the status of women.
>
> c. Laws relating to abortion, contraception, and sterilization.
>
> d. Laws relating to marriage and divorce."[61]

Using the above paragraph as a guide, the situation for Iran may be summarized as follows:

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[61] United Nations, 1970 Report on the World Social Situation, New York, 1971, p. 159.

Measures Related to the Family. As mentioned earlier, before 1967, the general policy was in favor of large families. But since that time and after realizing the high growth rate in Iran, public policy switched toward one favoring smaller families. Although quite meager child allowances had been provided in the previous employment laws. This provision has been dropped from the new Civil Service Code.[62] In the five-year plan it is stated that:

> "During the plan period it is intended to establish for the rural population crop insurance against pests and extension of life disability insurance to 1.5 million heads of families."[63]

It is true that security for old age is an important motivating factor leading to larger family size in rural areas, such insurance could have been expected to lead to smaller families.

Measures of Social Rank. Education is one of the most important factors which affects fertility. A survey of fertility as related to social and economic status in the city of Shiraz, conducted by A. Paydarfar and M. Sarran of Pahlavi University, showed that the mean number of children born was inversely related to levels of income, occupation and education. The results of this study are shown in Table 12. [64]

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[62]Behnam, Djamshid, op. cit., p. 457.

[63]Plan Organization, Five-Year Plan 1968-73, Tehran, p. 323.

[64]United Nations, op. cit., p. 92.

Table 12. Mean Number of Children Born to Husbands, Categorized Under Four Levels of Different Factors

Categories	I	II	III	IV
Income	3.0	4.7	5.5	6.0
Occupation	2.9	4.9	5.3	6.1
Education	2.3	3.3	5.2	5.9

Source: United Nations, Population and Family Planning in Iran, 1971.

One can speculate that these three variables are highly inter-correlated. In any case, they are often used to indicate the socio-economic status of family heads. For example, the higher the level of the husband's literacy, the higher his occupational status, and the greater his income, the greater the probability that the number of children desired will be small. Those holding high socio-economic status are more involved in social and economic activities, and children tend to interfere with their role performance. By contrast, for those holding low status, children, in fact, provide a kind of disability insurance in old age.

The literacy level of women is also an important factor in the fertility rate. A K.A.P. study conducted in the city of Tehran and the City of Isfahan indicates that the fertility of literate women is considerably lower than that of illiterate women in both cities.[65] This is a very important point in fertility behavior in Iran where a large number of

[65]Amani, M., Khazaneh, H., and Mirzaee, M., Study of the Impact of Education on Fertility and Family Planning in the City of Tehran and the City of Isfahan, A UNESCO Project, Tehran, 1971.

illiterate people, particularly women, are living in rural areas and small cities. Many traditions, cultural values and other social factors affect attitudes toward family size and the status of women in the family as well as in society. Small family size was often taken as a sign that a husband lacked affection or esteem for his wife. The mother-in-law often influenced her daughter-in-law to have many children, because with each child her power and authority in the family increased.

Preference for sons is strong particularly among traditional families. Families who have only daughters, produce more children in order to have a son. As the result of these factors family size in Iran is still large. The urban-rural differential in terms of the mean number of live births for each married woman up to age 45, as already mentioned, ranged from 6.5 in Tehran to 8.5 live births in rural areas. This indicates that a large family size is still a strong value among Iranian people. These facts demonstrate an important role for cultural and other social factors in determining the fertility rate.

Laws Related to Abortion, Contraception, and Sterilization. In 1961 the importation of oral contraceptives was allowed by the Iranian government.[66] Before 1973 abortion was granted only on strict medical grounds, to preserve the life of the mother. The technical committee of the Family Planning Division recently appointed a sub-committee to study the abortion problem and to propose amendments in the interpretation of the law (Criminal Law, articles 180-183), which prescribed imprisonment of three to ten years

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[66]Driver, Edwin D., World Population Policy: A Annotated Bibliography, Massachusetts, 1972, p. 748.

for the woman herself and for the aborter. Following the announcement in June 1973 to reduce the growth rate, a new penal code was passed by parliament which repealed the restrictive abortion law.

The position as to sterilization is not detailed in any law in Iran, and it remains a matter between the doctor and his patient. Written consent by the wife and husband is usually required and sometimes an additional statement by a specialist in psychiatry, internal medicine, etc., or a police surgeon, is also required in order to protect the operating physician in case the patient would later change her mind. Very few sterilizations are in fact performed, and those performed are tubal ligations. Setrilization cases brought to the court are extremely rare.

A Tehran University study in 1971 indicated that 63 percent of married women felt that birth control and family planning were acceptable practices in light of the Islamic faith. However, statements by the authoritative Iranian religious leaders have specifically opposed sterilization and any form of contraceptive that would result in abortion even from the very beginning of conception.[67]

Laws Relating to Marriage and Divorce. Article 1041 of the Iranian Civil Law specifies a minimum age at marriage of 15 and 18 for females and males, respectively. If a girl wishes to marry before the age of 15 years, legally she must not only have the permission of her parents, but also must be examined by a court doctor to establish whether she has reached the age of puberty.[68]

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[67] Amani, M., A Note on Fertility in the City of Tehran, Tehran University, Tehran, 1973.

[68] Touba, Jacquelene R., Marriage and Family in Iran, Tehran, Institute for Social Studies and Research, 1972, p. 12.

It is useful to show the mean age at first marriage for the population of Iran in 1956 and 1966 since it suggests demographic consequences for the next decade (See Table 13).

Table 13. Mean Age at First Marriage for Population of Iran, 1956-66.

Year	Groom	Bride
1956	25.2	19.1
1966	25.0	18.4

Source: Mirzaee, M., "Applying Some Conconventional Methods for the Population of Iran', University of Pennsylvania, 1974, (Unpublished paper).

It can be seen that the mean age at first marriage has decreased from 1956 to 1966, a decline that is more pronounced for the female population. This decline could lead to a rise in fertility.

Until the passing of the Family Planning Protection Law of 1968, in almost all cases, it was a man's prerogative to initiate divorce. Although it was sometimes possible to include a promise of equal divorce rights in the marriage contract under certain conditions, in practice such guarantees were not successful in the actual event of divorce. However, after the passage of this law, women were empowered to initiate divorce. Moreover, all cases of divorce were henceforth to be mediated by the courts.[69]

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[69]Ibid., p. 32.

Program Costs and Expenses. As we have shown, in order to facilitate social and economic growth the government of Iran adopted an official policy to reduce the population growth rate. The Government gave strong and constant support to the program organizations to implement this policy.

Iran allocated a very high per capita budget for family planning programs in comparison with many other countries with official family planning programs. In 1972, per capita expenditures for Iran's family planning program amounted to 29 and 35 U. S. cents from government sources and all sources (including government sources), respectively.

The total budget for various family palnning activities was $281,866 in 1968 and increased to $4,186,640 in 1971. This represents a 1385.3 percent increase within four years. The substantial increase is accounted for by larger allocation for salaries, wages, and nondurable supplies. Because of the priority of the family planning program in 1971, an additional $289,633 was allocated from the national budget, mainly for salaries, wages, and nondurable supplies. Thus, in 1971, approximately $4,476,273 was spent by the Family Planning Division of the Ministry of Health for various population and family planning activities.[70]

A $16.5 million loan was approved in May 1973 by the World Bank for Iran's national family planning program.

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[70]Paydarfar, Ali., op. cit., pp. 78-80.

> "The World Bank has approved a loan of $16.5 million for Iran's national family planning program. The Iranian Government is greatly expanding the program during the Fifth plan period (1973-77) with the objective of reducing population growth which is now about 3 % annually. The project for which the bank loan is being made will assist this effort by extending family planning activities to small towns and rural areas, providing training facilities, and exploring means of improving the management and administrations of the program."[71]

The basic studies that have been financed include a management study, a technical study of how to deliver health and family planning services to rural areas, and a feasibility study in the nutrition field.

In addition to the Family Planning Division, a few other agencies such as INCO (Iranian National Oil Company) reported estimated costs of their family planning and population activities. The I.N.O.C. spent roughly $133,333 in 1971 for its family planning program.[72]

The Population Council reported a budget of $19,830,000 for 1974 to expand the program throughout the country. These funds were devoted to the following parts of the program:[73]

Contraceptive Services	25 percent
Information and Education	50 percent
Personnel Training	11 percent
Research and Evaluation	8 percent
Administration	6 percent

The Population Council's major budget priority was for information and education services that had been neglected in the previous programs. Whether or not this tremendously large budget will be effective in reducing the

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[71]World Bank, Bank Press Release, No. 73/26, 1973.

[72]Paydarfar, Ali., op. cit., p. 78.

[73]Northman, Dorothy, op. cit., 1975.

annual rate of growth to one percent, it will be the task of the program to carry out a continuous evaluation of the consequences.

The preceding discussion indicates that a serious effort in family planning is being made in Iran. The effort has solid government support, and the program has been expanded rapidly. It would appear from the evidence that family planning up to this time has had little impact in substantially reducing the high growth rate.

CHAPTER IV

SUMMARY AND CONCLUSION

This thesis is an attempt to paint a picture of Iran's population in the recent past, at the present time, and to project the population into the future. In light of this demographic setting, the family planning program is presented and evaluated. In view of the fact that Iran does not have a long history of census taking or vital registration, an attempt has been made to draw together diverse sources of Iran's population as well as data from the relatively recent official censuses.

The population of Iran shortly before 1900 was less than 10 million, and the annual growth rate as of 1891 was estimated to have been .75 percent. The total population of the country at the time of the first census in 1956 was 18.9 million, grew to 28 million in 1966 at the time of the second census, and grew to 33.3 million in 1975, the latest figure given in Iran's survey enumeration. The 1966 census suggested an average growth rate of 3.2 percent resulting from an estimated crude birth rate of 48 per 1000 and a crude death rate of 16 per 1000. The crude birth and death rates based on the 1975 survey changed little; these rates were 46 and 16 per 1000 population respectively. Life expectancy for males and females for 1965-70 was 50 years, as computed by the United Nations. The extent of illiteracy estimated in 1971 was 62 percent for the population as a whole and 74 percent for the female population.

Much of Iran's land is desert and waste with only about 13 percent of the country's area being cultivatable. Less than one-third of the cultivatable land is actually under cultivation.

Iran's family planning program offers contraceptive information and services through the growing national network of family planning clinics, relying almost exclusively on pills as the contraceptive technique. The strength and sense of urgency of the national commitment can be seen both in the rapidly increased channeling of financial resources into this effort and in the ambitious national goals to drastically reduce the current high population growth rate. Recent funds allocated to the program ($19.8 million) suggest the serious intention of the government in the family planning program.

The overall goal of the family planning program by the end of the fifth five-year plan in 1978, is to reduce the annual 3.2 percent rate of natural increase to 2.4 percent. Such an achievement would require that the crude birth rate of 48 per 1000 would need to be reduced to 38 per 1000. To accomplish this reduction, the program will have to provide contraceptive services to 3.6 million women and avert approximately one million births annually. Thus, the present target would seem to be virtually unattainable.

The Family Planning Program of Iran is a very serious national effort which has been given strong monetary support by the government. Apparently, the ambitious goal of achieving a one percent growth rate during the next 20 years, announced by the government, was thought to demand the very large financial support allocated. Clearly, the budget is one of the important parameters in the program, but other elements are important in evaluating the probable success of family planning efforts.

Iran has a youthful population and such a structure in all probability will not permit the achievement of the government's goal. The present opulation has already produced a large number of daughters which will be the source of further reproduction in Iran's population. Iran's problem is that it is attempting to start its fertility transition a century after that of Northwestern Europe - and from much higher initial levels of fertility. The United Nations mission reported that:

> "The problem of Iran and all countries beginning fertility decline is that they will have a disproportionate number of potential mothers 20-25 years from now - the number will be large because women 20-40 years of age will not have had their number reduced by the fertility decline subsequent to their birth, and will be proportionately larger than in a constant fertility population because the fertility decline will have reduced the potential size of the whole population. A twenty-year target is the most difficult of all to choose for a marked decline in population growth rates."[74]

The United Nations mission then explained that even a very steep fall in fertility (which is improbable) can hardly reduce the rate of population growth to one percent in 1990. If the number of children to which women on average give births were to be halved in the next 24 years from about 6.8 to 3.4 - a very steep decline by most historical precedents - the rate of population growth would still be two percent per annum in 1995.[75]

Another important problem has appeared in Iran's family planning program, namely, low contraceptive continuation rate. A follow-up survey of Farah Maternity Hospital's family planning acceptors indicated adjusted 12 and 24 months continuation rates of 33 and 23 percent, respectively, for the pill;

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[74]United Nations, op. cit., p. 37

[75]Friesen and Moore, op. cit., p. 14.

38.5 and 27.5 for the IUD; and 34 and 23 for all methods. The 12 and 24 month figures for all acceptors still practising some contraception were 46 and 34 percent, respectively.[76] These figures are for Tehran. Outside the capital probably even fewer women who discontinue the pill resort to another reasonably effective method.

The reason for low continuation rates is that the clients are not well motivated. So far, there has not been much attention given to communicating the family planning message. Most of the energy and funds have been spent in the clinics, rather than for communication campaigns directed to the society at large. As we can see in the latest financial information cited in the previous Chapter, 50 percent of the total budget was devoted to information and education, which would be a reasonable policy for a country like Iran.

The following, it seems to me, are some of the major barriers to progress of Iran's family planning programs:

1) A high illiteracy rate, especially in the rural areas.

2) Inaccessability of the remote rural areas due to the lack of adequate roads and transportation facilities.

3) The normative value of expecting children to be a source of emotional and economic support, as well as a mode of building a family's power position in rural areas.

The growth rate of the population of Iran, if not higher than, is as high as it was at the beginning of the family planning program. The program, so far, has not been able to bring about any reduction in the population growth rate. In the city of Tehran a comparative study indicated that fertility trends were stable during the 1966-1971 period.[77] The most recent

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[76]Friesen and Moore, op. cit., p. 14.

[77]Mirzaee, M., "A Comparative Study of Fertility: Tehran, 1966-71" (Unpublished paper, University of Pennsylvania, 1971).

demographic information reported that birth and death rates were 46 and 16 per thousand, respectively. A large scale evaluation of Iran's Family Planning Program has yet to be undertaken. Thus, an overall statement about the accomplishments and the degree of acceptance of the program remains the task of future research.

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