Family Planning Program and Recent Fertility Trends in Iran

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I. BACKGROUND

Iran is a Middle Eastern country that shares Islam as a religion with other countries in the region. The majority of Iranians practice the Shiat sect of Islam, which differs in some details from the Sunit sect practiced in most of the Arab countries of the Middle East. From the pre-Islamic era, Iran has inherited the Persian culture and language. The pre-Islamic religion in Iran was Zoroastrianism, a polytheistic religion. Formerly known as Persia, the modern state of Iran has emerged as a strong and rich civilization. The Iranian socio-cultural system has evolved through an interaction of Islam and the pre-Islamic Iranian civilization. During the spread of the Islamic Empire, Iranian society made great contributions to eastern culture, literature, philosophy and science. However, after suffering several devastations, such as Mongul and Timurid invasions, Iran entered the 20th century with an underdeveloped economy, weak central government, and strong internal interference from the European colonial powers.

Western culture first impacted Iran in the early years of the 19th century and this built up into a full scale westernization of Iranian society in the 1970s (Banani, 1961; Menashri, 1992). The first half of the 20th century saw a sustained effort at modernization and westernization by the government. Political centralization and exportation of oil facilitated some industrial development and modernization of the infrastructure (Abrahamian, 1982; Lapidus, 1988). Economic development and modernization were accompanied by the growth of a strong and modern army, a secular educational system, and a strong nationalistic ideology.

During the postwar period, 1955-1979, Iran was characterized by rapid economic growth and modernization supported by government spending and fueled by oil exports (Bill, 1988) . Structural changes in the economy were accompanied by social reforms, such as an effort to redistribute farm land in order to provide a more favorable social milieu for economic development. Legal and symbolic changes were introduced to enhance the social status of women and increase their participation in social and economic domains outside the household. These changes included granting women the right to vote and political participation, and placing women in high positions within the government bureaucracy. A new set of family laws were passed to improve the legal status of women within marriage and the family. These legal and symbolic changes were aimed not only at promoting the status of women, but also at affecting patterns of family formation and levels of fertility and family growth.

Despite a relative improvement in the well-being of the urban population (especially those in certain regions), the Monarchy's modernization process in Iran generated a growing regional and ethnic polarization (Aghajanian, 1983). The massive economic growth of the 1960s and 1970s benefitted the central and northern regions of Iran but left the population living in the marginal areas deprived (Amirahmadi, 1987). Notwithstanding a remarkable improvement in economic growth, the society faced growing ethnic, regional, and class inequalities in the 1970s. Along with modernization efforts, a strong infiltration of Western culture, and especially those components of Western culture that were at odds with Iranian Islamic traditions, created other divisions among the populations of various areas. Cultural, religious, economic, and social discontent accumulated over the years and culminated in the 1979 Islamic Revolution.

The Islamic revolution was a turning point in the social and economic history of Iran. The revolution changed the social fabric of the society and the economy of Iran through policies aimed at revitalizing Islamic values in all aspects of life. Legal changes introduced to implement these policies, and a cultural shift toward Islamic values were reinforced by mass media, especially television, as well as formal and informal educational programs. Unfortunately, eight years of war with Iraq, 1981-1988 (Chubin, 1988), drained off a significant portion of the social and economic resources which otherwise would have been available for infrastructure development and social programs after the revolution. In recent years, there have been new efforts made to faster economic development and reconstruction in the wake of this destructive war. Serious efforts have been made by the Islamic government to improve living standards and to provide basic amenities to the rural communities and villages. A second economic development plan has been implemented, and a strong program of basic health care and family planning established.

The existing institutions and social arrangements in Iran reflect influences from the pre-Islamic civilization, long-standing Islamic values and prescriptions, the earlier (1960s and 1970s) modernization efforts, the Islamic Revolution, eight years of destructive war, and the more recent efforts toward economic development. In addition to the historical influences, the physical and ethnic diversity of Iran has always influenced family formation and child bearing in local areas and among the major ethnic communities. Although the inhabitants of Iran are both ethnically and linguistically diverse, they have in common that over 99 percent are Moslems. There are a limited number of Jews and Armenians in Iran, but they have never constituted a significant proportion of the population. The most important ethnic groups are the

Persians, Turks, Baluchis, Arabs, and Kurds. Apart from Tehran, the capital city, and a few other major industrial centers, such as Isfahan, that have drawn a large number of migrants from different ethnic groups, the other regions in the country are ethnically and linguistically homogeneous. Three provinces in the Northwest have Turkish communities. Two provinces in the west include Kurdish communities. In the southern part of Iran, three provinces on the Persian Gulf include a mixture of Arabs and Persians. In the East, Baluchis live in the province of Baluchistan. The Central Plateau of Iran is populated by Persians.

The recent history of Iran can be divided into three periods. Each period approximates contrasting eras in terms of ideology, economic growth, modernization, and population policy. The 1966-76 period approximates an era of government policies that sought to accelerate economic growth, control the birth rate, and promote modernization. The 1976-88 period approximates an era of revolutionary changes and a return to the basic principles of an Iranian Moslem society, deterioration of the economy due to the war, and a lack of government policy on population growth. Since 1988, a new direction of reform and change has been established in Iran. Soci-economic planning has been taken seriously as a means for achieving economic growth and increasing living standards. Economic modernization is promoted while at the same time preservation of Iranian and Islamic values and orientations are encouraged. During this period, a high population growth rate has been viewed as an impediment to economic development. Therefore, a population policy has been established and a fertility control program vigorously implemented.

II. POPULATION SIZE, GROWTH RATE AND COMPOSITION

Table 1 shows population size and growth rates in Iran during the period 1900-1996. Population size for the years before 1956 are based on the best available estimates (Bharier, 1968). Since 1956, decennial censuses carried out in 1956, 1966, 1976, 1986 provide useful benchmarks of demographic change in recent decades. Iran's first modern census (in 1956) counted a population of 18.9 million. Twenty years later (in 1976), the count was 34.3 million and this increased to 49.5 million in 1986. Data from the 1991 short census indicated a population of 55.1 million. In the 1996 census, the population of Iran had reached 60.5 million.

Population growth in Iran was slow up until the end of the first quarter of the

twentieth century (see Table 1). Bharier (1968) estimates that from 1900 to 1926 the average annual rate of population growth was less than one percent per year. The rate of population growth doubled during the second quarter of the century. By then, the population of Iran had entered the middle stage of demographic transition characterized by continuing high fertility and slowly declining mortality. After World War II, the population growth rate accelerated further, due primarily to improvements in public health and to the notable eradication of Malaria (Banai, 1961). Between 1941 and 1956, the annual rate of population growth averaged 2.2 percent. As the central government became stronger and more stable, improvements in the standard of living and in health conditions appears to have reduced mortality rates (Majadabadi, 1978).

In 1966, the population of Iran had reached 25.7 million, implying an average annual rate of growth of 3.1 percent during 1956-66. The third census of Iran, which is considered to have been of a high quality, reported a population of 33.7 million in 1976. On the basis of this census, it appears that annual population growth rates declined during the 1966-1976 period. The average annual growth rate during this period was 2.7 percent and this rate suggested a slowdown in future population size increases. However, the slow down did not continue. By 1986, a total of 16 million had been added to the population of Iran, indicating a growth rate of 3.8 percent per year during the postrevolutionary decade. Part of this added population is accounted for by the Afghan refugees. Excluding the estimated number of Afghan refugees would give a growth rate of about 3.4 percent. In 1991, the Statistical Center of Iran for the first time carried out a mini-census. Results from the mini-census indicated that the annual growth rate had declined to 2.5 percent during 1986-91 period, a surprising reversal in the direction of the population growth rate in the Islamic Republic of Iran. This decline in the population growth rate seems to have continued, as indicated by the results of the 1996 census. Accordingly, during the first part of the 1990s, the population of the Islamic Republic of Iran has been increasing at a rate of 1.5 percent. Such a reversal in the rate of population growth was not expected so soon, given the ideological issues and the limited government resources available after an eight-year war. This report examines the forces contributing to this unexpected shift in population growth patterns.

Table 1. Population size and growth in Iran, 1900-1996

Year	Population Size (millions)	Growth Rate
1900	9.9	-

Table 1. Population size and growth in Iran, 1900-1996		
Year	**Population Size (millions)**	**Growth Rate**
1927	12.0	0.8
1935	13.5	1.5
1941	14.8	1.5
1956	18.9	2.2
1966	25.7	3.1
1976	34.3	2.7
1986	49.5	3.8
1991	55.8	2.5
1996	60.5	1.5

Source: Data for 1900 to 1941 are estimated by Bharier, 1968; data for 1956 to 1996 are based on the censuses.

The age distribution of the Iranian population for 1986-1996 period is shown in Table 2. Two distinct features are apparent. First, the Iranian population is very young. A notable increase in the younger age groups began with the roughly 14 million births between 1976-1986. Although the population is very young in general, there are signs of change in the age structure. The percentage of population in the 0-4 age group was slightly more than 18 percent in 1986. According to the 1991 short census, the percentage in this age group declined to about 15 percent. During the 10-year period between the 1986-1996, the percentage of population in the age group 0 - 4 declined from 18 percent to 10 percent, a decline of about 44 percent. An important issue may be the possibility of an undercount in this age group in the census. However, the pattern of undercount should be the same across the censuses. Therefore, there is definitely a decline in the percentage of population in the age group 0 to 4. Given the continued improvements in child survival, this may indicate a birth rate decline attributable to the family planning program revitalization since 1989.

Table 2. Age distribution of the Iranian population, 1986-96			
Age	**1986**	**1991**	**1996**
0-4	18.3	14.9	10.3

Table 2. Age distribution of the Iranian population, 1986-96			
Age	**1986**	**1991**	**1996**
5-9	15.2	16.1	14.1
10-14	12.0	13.5	15.1
15-19	10.5	10.5	12.0
20-24	8.5	8.8	9.0
25-29	7.4	7.2	6.6
30-34	5.9	6.3	6.0
35-39	4.3	5.1	4.6
40-44	3.3	3.6	3.3
45-49	3.2	2.8	2.6
50-54	3.2	2.8	2.2
55-59	2.7	2.5	2.3
60-64	2.4	2.3	2.3
65+	3.1	3.6	4.3

Source: Iran Statistical Center, 1997

III. POPULATION POLICY AND FAMILY PLANNING IN IRAN

Population policy and family planning programs were implemented in Iran informally in early 1960s. Most of this effort came through international nonprofit organizations. Modern contraceptives were introduced when the commercial sector was allowed to import pills for the private market in 1960s. Historically, however, traditional methods of contraception, including "coitus interruptus", have been practiced in Iran from earliest time (Moore et al. 1974). An official population policy, first established in 1967, has gone through several changes up to the present time.

Population Policy 1967-1979

After results from the second National Population Census of Iran were announced in 1966, it became obvious to concerned government officials that family planning programs were needed, to help protect health of the mother and child and the

socio-economic future of the family and the country. The Council of Family Planning was established in the Ministry of Health in 1967, and the official family planning program began with the appointment of an under-secretary in the Ministry of Health.

The goal of the program was defined as "the betterment and promotion of the physical, mental and socio-economic welfare of the family". The objective of the national policy was to increase health and welfare standards and to decrease the annual population growth rate. Later, in the Fifth Plan period of development (1973-78), it was suggested that a national family planning program would facilitate socio-economic growth through a reduction in the population growth rate from 3.1 percent in 1971, to 2 percent in 1978 (Plan and Budget Organization 1973). Furthermore, Article 42 of the new penal code, passed by the Parliament on 16 June 1973, repealed the restrictive abortion and sterilization laws. The new law, put into effect in November 1976, stated that "*any type of medical or surgical procedure can be performed by a recognized physician with agreement of those who have the right to consent to the procedure in accordance with rules and regulations approved by the government*." This law created a loophole for abortion as a family planning method. In addition, university and high school curricula were permitted to include family planning information and population education (Nortman and Hofstatter, 1978). The government's stand on family planning changed from one emphasizing family planning choices, and availability of contraceptives through the commercial sector in the early 1960s, to an active government concern with family welfare and the distribution of contraceptives through public clinics in the later part of the 1960s and early 1970s. The third stage was a huge mass media campaign to promote family planning, as concern over the effects of population growth on national economic growth heightened in the mid-1970s.

The 1979 Islamic Revolution began a new era of social and cultural life of Iran. Within the revolutionary context, a family planning program did not seem relevant and the population policy was undermined by the Islamic government. Almost immediately after the triumph of the Revolution, the post of the under-secretary for family planning was abolished, the High Council for Coordination of Family Planning was disbanded. Family planning services were put under the Office of Family and School Health, under the Deputy Minister for Public Health in the Ministry of Health. There was a severe cut back in the provision of family planning services, although the services continued to exist and to operate at a very low level, and mostly in urban areas. The private sector continued to provide contraceptives, especially the pill and IUD. However, there are no

data to determine the amount and variety of contraceptives supplied through the private sector.

Revitalization of Population Policy

During the decade 1976-86, the size of the Iranian population increased from 33.7 million to 49.4 million. This implied an average annual growth rate of 3.8 percent during the post- revolutionary era. This high rate of population growth is partially counted for by the influx of 1.8 million Afghan refugees between 1980 and 1986. However, analysis of the available data suggests marked increase in the crude birth rate during the 1976-86 period and an increase in the level of fertility (see Figure 1). Also, the government of Islamic Republic had launched rural reconstruction activities which resulted in the continued decline of infant and child mortality. Infant mortality was estimated at about 112.4 per 1,000 live births during 1973-76 (Iran Statistical Center, 1990). Estimates from the 1986 census revealed a rate of 88 per 1,000 by 1980 and a rate of 68 per 1,000 by 1986 (United Nations, 1992). It seems that infant mortality decline accelerated during the late 1980s. By 1992, an infant mortality rate of 43 per 1,000 live births was reported for Iran (Population Reference Bureau, 1992). This is a decline of almost 60 percent in infant mortality during 1976-92 period.

The increase in fertility and decline in infant mortality accelerated population growth in Iran during 1976-86. Despite the alarming figures from the 1986 census, the Islamic Republic government did not consider population growth a problem. In 1986, Prime Minister Moosavi, enthusiastically announced the population count of Iran as 50 million, according to the 1986 census. Yet, two years later, by 1988 the short-term and long-term problems of a fast growing population loomed. The government was faced with a large population demanding food, health care, education, and employment. In February 1988, for the first time, the prime minister issued a statement to members of the cabinet regarding consideration of the topic of population as an issue. In March, a committee was organized in the Ministry of Plan and Budget, consisting mostly of economists in the Ministry and a few demographers from universities, to prepare for organization of a population seminar in August 1988. To facilitate the work of the conference committee, the prime minister issued a memorandum to all government ministries, to the effect that the government of the Islamic Republic is “reconsidering the issue of population growth.” The conference was held for 3 days in August 1988 and a number of people from government offices and universities participated and presented papers on various aspects of population. A very important resolution of the

conference was that the rate of population growth in Iran is high and that this will have a negative effect on the welfare of the people. Hence, the participants strongly urged the government to set up a family planing program and include population issues in policy making.

After the announcement of the resolutions of this conference, the Secretary of Health reiterated Ayatollah Khomeini's *Fatava* (direction) regarding family planning in a press conference, and for the first time in the Islamic Republic announced that a family planning program would be established. The prime minister considered "birth control" to be a"***destiny factor***" for the country, and publicly asked women interested in preventing an unwanted birth to get help in government health clinics and health houses around the country.

While the official commitment of the government to a family planning program was announced in August 1988, the actual program was not established until 1989. In December 1988, the High Judicial Council announced that, "family planning does not have any Islamic barrier." This opinion allowed the health secretary to prepare for the family planning program and to order supplies of contraceptives in 1989 (Nikzad, 1988). The government became seriously committed to the family planning program in 1989 when Prime Minister Moosavi announced that, "none of the government programs [for development and welfare of the people] work without a serious family planning program." He explicitly referred to the need for a solution to the population problem and referred to numbers and figures reported as alarming for future prospects (Moosavi, 1989). **A family planning program was proposed in December 1989 with three important goals: (1) to encourage a spacing of 3 to 4 years between pregnancies; (2) to discourage pregnancy among women under 18 years of age and over 35 years; (3) to encourage limiting family size to 3 (Kalantary, 1989).**

In 1990, the Council of Ministers approved the creation of the Birth Limitation Council and its implementation with participation from various ministries and departments. This led to creating goals for:

1. Organized educational programs for the general public in regard to population issues
2. Increasing access to free contraceptives for married couples
3. Providing a wide spectrum of family planning methods with appropriate quality
4. Conducting research on various aspects of family planning delivery and population policy

Objectives of Program designed by the Birth Limitation Council:

A. Decrease in the birth rate
B. Decrease in population growth rate
C. Increase in the rate of contraceptive prevalence among married women
D. Decrease the total fertility rate

A collective strategy, with the following components, was conceived by the council for attaining the specified goals:

1. Improving the social and economic indices of the society
2. Increasing the level of income and standard of living for low income groups
3. Enhancing women's participation in economic, social, cultural, and political affairs
4. Decreasing child mortality by expanding public health services
5. Increasing public awareness with respect to population issues through mass media
6. Utilizing existing resources and improving the quality of family planning services
7. Monitoring and evaluation of the programs

The three main components of the envisioned program were

1. Family planning educational activities
2. Expanding the availability of a diverse mix of contraceptives through family planning services which are easily accessible and at a close proximity to the target population
3. Continuous research and evaluation about the program and its implementation

Religion and Population Policy: Pragmatism

A pragmatic approach toward the population issues has emerged in the context of the Islamic Republic of Iran since 1988. Documents expressing the government position regarding population issues bring up clear Islamic support for the adoption of a population policy when necessary (MHME, 1994). The basis for this support is that:

"According to the narrations, quotations from prophet Mohammad, Hadis, and verses of holy Quran, the top priority for the Muslim community is the social

welfare of the Muslims".

"Benevolence, virtue and prosperity in life is the first principle of living under the shade of the tremendous palm tree of religion. This notion can be conceived from every line of Quran narrations and the quotations from Prophet Mohammad".

The pragmatic approach is clearly shown in the following government statement (MHME 1994):

"The Islamic community might need the crowd and multitude of people in certain times and thus it would encourage reproduction, while in other times, due the existence of massive labor power and the reduction of employment opportunities, it would consider it necessary to set limits for population and thus implement restrictions, with the aim of providing people with relative social welfare. Under the present circumstances, when the world is striving to achieve relative social welfare, the urgency of the restrictions is felt more than ever, and therefore the religious Alims and scholars have embarked upon implementation and execution of these laws. Legal contraceptive methods which are in conformity with Islamic laws are one of the ways and means for implementation of fertility regulation. ***The question of application of contraceptives has been studied by religious scholars and jurists, and they have come to the conclusion that preventing pregnancy while observing the principle of exigency and divine virtue, not only is not prohibited, but even emphasized by religion."***

Supplementary Policies Aimed at Support for Family Planning

1. ***Expansion of Literacy program***

A program of adult literacy has been established since early 1990s and promoted in the rural villages and small communities where the literacy rate has been very low, especially for women. The government of the Islamic Republic of Iran has considered improvement of the literacy rate of the population, and particularly literacy among women, as an important element in the success of the family planning program. The government has taken serious action toward implementation of an adult literacy program which has been very productive in improving the literacy rate of the adult population. This has been a successful program (see Figure 2), led by one of the prominent religious leaders.

In 1986, about 700 thousand adults participated in this program at the elementary level and about 400 thousands participated at the secondary level. Between 1987 and 1995, at least 500 thousand adults have been participating annually at the elementary level and at least 400 thousands have been participating at the secondary level of adult education (Iran Statistical Center, 1996).

2. ***Women's Participation in Socio-economic Activities***

Women's participation in socio-economic activities and policy making is accepted as a key component in the success of population policy program. It is stated that "*healthy and constructive participation of women in the policy pertaining to reconstruction of the country is essential. It is expected that by expanded investment made in education [of women], especially technical, vocational and higher education, the participation [of women] could be increased correctly and appropriately.*" "*...women should be equipped with education and elevation of the level of their knowledge and information. Therefore, hoisting the status and position of women and their enjoyment of human rights and freedom which are closely related to the objectives of birth reduction, is among the prime responsibilities of the Government of the Islamic Republic of Iran*" (MHME, 1994) .

3. ***Limitation of Social Welfare Benefits Based on Family Size***

The provision of subsidies is considered justified in increasing the living standard of the population. However, it is recognized that social welfare programs which are linked to the size of the household, can increase the level of fertility through their encouraging effects. Hence, the government policy has been redirected toward limiting the welfare programs to families and households that participate in the family planning program. A law has been proposed and approved to limit the benefits to families with 3 children or fewer.

4. ***Mother and Child health***

A reciprocal impact of fertility regulation and mother and child health is clearly recognized in implementation of the family planning program by the Government of the Islamic Republic. The provision of health care for mothers and children has been one of the major complementary policies of the family planning program in the Islamic Republic of Iran. This supplementary policy has focused on the decline of infant and child mortality, and maternal mortality due to complications of pregnancy and child

delivery. Through the establishment of nearly 12,000 health houses and 4,000 health centers, a health care network was established which currently covers 75 percent of rural villages and most of the urban areas (MHME, 1994).

5. ***Collaborative Arrangements Among Government Ministries***

A very important aspect of the new direction in family planning in Iran was the creation of a legal framework for the collaboration of various ministries for implementation of the family planning program. This legal framework was created as part of ratification of the law related to the First Economic, Social and Cultural Development Plan of the Islamic Republic of Iran in 1989. As a result, the Council of Ministers adopted and approved a series of tasks for each ministry. These tasks would contribute directly or indirectly to the implementation of the family planning program. The specific tasks for the relevant ministries are:

Ministry of Education

A. Elevation of literacy among all social strata, especially through adults education. Increasing enrollment for the female school-age population, particularly in rural areas
B. Incorporating population education materials in high school textbooks for the purpose of increasing awareness (especially among girls) of high fertility and determinants of high fertility

Ministry of Islamic Culture and Guidance

A. Increasing programs for enhancing knowledge among the general public regarding the importance and exigency of reducing the rate of population growth, and the disadvantages of high growth rates
B. Increasing programing related to women's social and economic participation in society and creating a supportive environment for this issue

Ministry of Higher Education

A. Increasing the enrollment of female students in teacher training programs with a commitment to work in underdeveloped areas
B. Adding demography and population courses into the core curriculums of various universities and colleges

C. Increasing university research on topics related to population and family planning

Ministry of Labor and Social Affairs

A. Increasing the employment of women

Civil Registration Organization

A. Increasing efforts to achieve complete registration of vital events, particularly births and deaths in rural and deprived areas of the country

IV. ORGANIZATION FOR FAMILY PLANNING DELIVERY

Up until the end of the Iraqi war in 1988, family planning services were delivered through the Family and School Health program of the Ministry of Health. This was basically an understaffed unit which had several other duties. In addition, most of the rural areas were not covered by activities of the Family and School Health Office.

With the revitalization of an interest in family planning and birth control, free contraceptive (mostly pills and condoms) were reintroduced into the primary health care delivery system that was developing after the Iraqi War. In 1991, separate department of Population and Family Planning was established to oversee the family planning service delivery within primary health care network. Since then, development of the primary health care network has facilitated the delivery of family planning services and program services have penetrated to the remote villages.

Figure 3 shows the levels of the primary health care network. At the core of the delivery system is the health house. A health house is staffed by a community health worker (Behvarz). She works in her village of residence and covers about 5 villages as her satellite villages. These villages are no more than a one hour walk from her own village. The population covered by the health worker in her village of residence and the satellite villages is between 500 to 2000, depending on regional population distribution and the density of villages. The average number of population covered by a health house was 1,550 in 1994.

The health worker has completed primary education and might have more education. She has had special health training for a period of two years. She provides primary health care services in maternal and child health, pre- and post-natal care,

environmental health, immunization, first aid, treatment for local diseases, referral to the health centers, and maintains the statistics by using a vital horoscope (this is a unique and effective statistical system). **There are also male health workers who are trained in a similar program. They participate in the activities of the health house. But the delivery of information regarding family planning and contraceptives is carried out by the female health workers.**

At the next level of primary care is the Rural Health Center that supervises and supplies the health houses. Each center supports up to six health houses, covering on average a population of 8,600. There is one physician in each health center who supervises the center and the allied health houses. The physician is expected to visit the health houses on a regular basis and also takes care of patients who are coming from the villages covered by the health center. **Within the health center there are other types of trained health personnel, including**:

1. The person in charge of dental hygiene
2. Local trained midwife
3. Physician assistant help for patient care, injection, and first aids
4. Technician for disease prevention
5. Family health technician to educate families regarding the general health of family members, the needs of children below age 5, to teach health education at schools, and to educate women of child-bearing age about family planning
6. Other health technicians who help in evaluation and data gathering in the villages covered by the health center.

The next level of the network is the District (Shahrestan) Health Center that supports the Health Centers in rural areas and villages and coordinates their need for referrals to hospitals, specialized clinics and training centers. Each district has an administrative unit (Directorate of District Health Network) which coordinates and manages all health care and family planning activities at the district level. The district (Shahrestan) is the third level of administrative unit in Iran. The census data is tabulated at the district level. Each director of heath network at the district level has a training center for health workers (Behvars) and a specialized multi-clinic support for referrals from smaller units. There is also a general hospital at the district level which is managed by the Directorate of District Health Network.

Management of family planning activities at the provincial level is at the

provincial health center that has a department of family planning. The person in charge of the family planning report is the assistant to the provincial level Directorate of Health and Health Education. At the national level, the Director of the Family Planning Program is under the direction of the Assistant Minister for Health within the Ministry of Health and Medical Education. The Assistant Minister coordinates all the policy issues at the level of executive body of the ministry, and the family planning department implements the policies designed.

Table 4 provides data related to the number of rural health houses operating in 1991-1994 and the predicted number needed for 1996. The number of health houses needed to cover the rural population at a 100 percent level in 1991 was 16,654 (MalekAfzali, 1991). Existing facilities provided 63 percent of services needed. During the 1991-1994 period, the number of rural health houses has grown to 13,225 (Iran Statistical Year Book 1995). This represents a growth of 35 percent over the 5-year period. However, the number of health houses operating in 1994 is 20 percent less than the number needed for the 1991 population. In 1996, the rural population of Iran had not changed from the 1991 level of 23.6 million. This is due mainly to a high rate of out-migration. In fact, it appears that the rural population has declined slightly through out-migration and changing size of localities. Using an average number of population to be served by each health house (set at 1,550 in 1994) it can be estimated that a total of 15,333 health houses would be needed to cover the rural population in 1996. Accordingly, between 1994 and 1996, a total of 2,078 health houses should have been added. This would require an annual increase of 8 percent in building and staffing the new health houses, and of course would require significant resources.

Table 4. The Number of Existing Health Houses, Estimated Number Needed, and Estimated Deficit During the 1991-1996 Period

	Number in 1991	**Number in 1996**
Rural Population	23,600,000	23,100,000
Health Houses Established	10,666	13,255
Health Houses Needed (est.)	16,654	15,333
Deficit	5,988	2,078

Source: Iran Statistical Center, 1997; MalekAfzali, 1991

V. EVALUATION SYSTEM

At the national and provincial level a unit of research exists that compiles and analyzes various data at the national level and at the provincial level. These data are collected at the village level through a system called the "vital horoscope." An example of the tool used for this method of data collection is attached to this working paper as Appendix A. This tool is a chart that is kept pinned to the wall of Health House throughout the year, and it is overlaid with a new chart at the beginning of each new year. Information on various vital events and population changes are continuously recorded on this chart and used for calculating heath and population indices for the population covered by each health house. These data are collected quarterly by the district data collection personnel and sent to the provincial office where tabulations will be done at the level of each district and at the level of the province. The data are then sent to the national office for the preparation of indices of the rural population covered by the health houses. The indices are constructed at the national level and provincial level. Since the health houses do not cover all the rural areas, coverage must be interpreted with caution and there may be an underestimation of the vital rates. This is one of the major sources of the discrepancy in the vital rates estimated from different sources in the Islamic Republic of Iran.

A second source of the data that is used in the research and evaluation department is the yearly KAP surveys which have been carried out in the spring of every year since 1992. These surveys are based on a standard KAP questionnaire, with a few questions regarding the fertility of married women during the last 12 months before the survey. The survey is carried out in April, which is right after the end of the Iranian year. Hence, the questions refer to the year just finished. The sampling for these KAP surveys are based on a block list that is available in the Ministry of Health and together with the list of rural villages covered by rural health houses. The sample size for these surveys is about 10,000 households in rural areas and 10,000 in urban areas. The results from the last survey was (April 1997) were reported in the population and family planning conference in July 1997. Since 1992 these yearly conferences have been a forum for data presentation and evaluation of the program. It is obvious that the data available are not adequate for systematic evaluation of the program. The evaluation indices which can be complied from KAP and other surveys are very limited. At this stage, the program needs to implement a demographic and health survey to obtain in-depth data on fertility history and contraceptive practice history.

VI. CONTRACEPTIVE PRACTICE AND USER CHARACTERISTICS

In this section, I utilize the data available from KAP surveys and other sources to provide an analysis of contraceptive practice and some related issues.

Level of Contraceptive Prevalence

Estimates of contraceptive prevalence among married women 15-49 are available from four KAP surveys implemented since the revitalization of the family planning program by the Islamic Government. For comparison, contraceptive prevalence rate from the 1977 Iran Fertility Survey and the recent KAPs are reported in Table 5. The estimated contraceptive prevalence rate in 1992 is 65 percent, after a little less than 4 years of program effort. This rate is much higher than the rate at the peak of program activity during the previous regime. While rural-urban differences exist, rural areas have a much higher rate in 1992 than in 1976. The rate of contraceptive prevalence increased to 72.2 percent in 1994, and the differences between rural and urban areas continued to decline. The latest data from the 1997 KAP reveal a rate of 80 percent for urban and 70 percent for rural areas. Note that between 1992 and 1997 the contraceptive prevalence rate increased from 52 to 70 percent in rural areas. This is a remarkable shift for rural areas, where experience with contraceptives has been very limited, even with respect to traditional contraceptives.

Table 5. Contraceptive Prevalence among Married Women Aged 15-49

Region	1976	1992	1994	1996	1997
Urban	53.8	74.1	77.6	80.7	80.2
Rural	19.9	51.5	63.5	70.6	70.1
Total	37.0	64.6	72.2	74.2	76.3

Source: Published tabulations of KAP Surveys distributed at the annual conferences.

Modern Versus Traditional Contraceptives

Traditional methods of contraceptive use have been practiced in Iran. The most popular traditional contraceptive is withdrawal. This method has been popular historically in urban areas. In fact, the main instrument of marital fertility decline in the urban areas of Iran in the 1970s was withdrawal. Traditional contraceptive method account for about one third of the urban contraceptive prevalence rate (CPR) in 1992 (Table 6). In rural areas, the contribution of traditional contraceptive use is small,

accounting for one-fifth of the rural CPR in 1992. As the contraceptive prevalence rate increases, the level of traditional method remains the same. Between 1992 and 1997, there appears to be a slight decrease in the rate of traditional contraceptive use. With respect to modern contraceptives there is a sharp increase in use between 1992 and 1994. After 1994, however the increase in CPR slows with little change evident between 1996 and 1997 CPRs.

Table 6. Distribution of contraceptive prevalence by type of method

	1992		1994		1996		1997	
Region	**Modern Method**	**Trad. Method**	**Modern Method**	**Trad. Method**	**Modern Method**	**Trad. Method**	**Modern Method**	**Trad. Method**
Urban	47.1	27.0	51.7	25.7	54.3	24.2	54.4	24.2
Rural	41.1	10.4	52.4	10.1	55.5	9.6	55.5	9.5

Modern Method Mix and Changes in Method Mix

The modern methods of contraceptive use in 1992 are dominated by the pill in both rural and urban areas (Table 7) . About 43 percent of rural contraceptive users report that they use the pill. In rural areas, 64 percent of modern contraceptive users report the pill as their contraceptive. The IUD is the next most popular method in 1992 in urban areas. In rural areas, tubectomy is the second most popular contraceptive method in 1992. Vasectomy has become acceptable in urban areas, with 2.7 percent of married women who reported contraceptive use reporting vasectomy. In rural areas, use of this method in 1992 was very negligible.

There is a shift in the modern contraceptive mix in use between 1992 and 1997. The shift is away from the pill and condom. Pill use declined from 43 percent in 1992 to 33.6 percent in 1997 in urban areas for a decline of about 20 percent in the use rate. For rural areas, the decline in the share accounted for by the pill is 39 percent. The main component of the shift in method mix is an increase in the choice of tubectomy among modern contraceptive users. Tubectomy increased from 16 percent of modern contraceptive use in 1992 to 28 percent in 1997 in urban areas. In rural areas, the increase is from 18 percent to 39 percent. Vasectomy has had its own significant increase in urban areas. Two new methods, injection and NORPLANT are opening their way among contraceptive users. In rural areas, 10 percent of the modern contraceptive

users reported using injection in 1997. NORPLANT is still at the very first stage of adoption and only 1 percent of modern contraceptive users have tried it.

Table 7. Distribution of Method mix of modern contraceptive use

	1992		1997			
	Urban	**Rural**	**Urban**	**Percent Change 1992-97**	**Rural**	**Percent Change 1992-97**
Pill	42.6	63.6	33.6	**-20.4**	45.0	**-29.2**
Condom	17.1	10.2	12.0	**-29.4**	6.4	**-37.3**
IUD	21.3	7.5	19.3	**-9.4**	8.4	**12**
Vasectomy	2.7	1.0	4.3	**59.2**	1.8	**80**
Tubectomy	16.3	18.0	27.5	**68.7**	39.1	**62.0**
Injection	0.0	0.0	2.5	**NA**	10.0	**NA**
Norplant	0.0	0.0	1.0	**NA**	1.3	**NA**

Source of Contraceptive Method

Since revitalization of the population policy, a favorable environment for the supply of the contraceptives through the private sector has emerged. Data from the 1992 KAP survey show that 57 percent of modern contraceptives are supplied through public hospitals, health centers, health houses, and pharmacies. The remainder are supplied through the private sector. The role of private sector is made more clear by data from the Household Budget Survey which asks a question about this issue. According to this source, 55 percent of married women reporting contraceptive use had received their supplies from public centers (Iran Statistical Center, 1995). There are indications that the private sector plays a very important role in the supply of contraceptives. Yet, more data are needed to understand this important issue and to determine how private sector access can be expanded.

User Characteristics

Historically, contraceptive use varied by socioeconomic and demographic

characteristics of women. Data from the 1977 Iran Fertility Survey that gathered detailed information about contraceptive practice, reveal strong differentials in contraceptive use (Aghajanian, 1992) . The report from recent KAP surveys in the Islamic Republic of Iran does not provide contraceptive prevalence rate by detailed user characteristics. However, Table 8 provides some data on user characteristics. Data from the 1977 Iran Fertility Survey are also tabulated for comparison. According to these data, rural origin had a strong negative effect on contraceptive use in the mid-1970s, when the original family planning program was at its highest level of effort. Data from the revitalized program shows that, 4 years after renewal of efforts toward family planning, the gap between rural and urban areas declined in the Islamic Republic of Iran. In 1997, rural areas have a lower contraceptive prevalence rate than urban areas. But if the focus is on modern contraceptives the difference between rural and urban areas is trivial.

Table 8. Contraceptive use rate among currently married women ages 15-49 by background characteristics

	1976	**1992**
Place of Residence		
Rural	53.9	74.1
Urban	19.9	51.5
Age at the time of Survey		
15-19	16.5	34.4
20-34	31.4	64.4
35+	41.4	70.9
Woman's Literacy		
Literate	40.4	73.2
Illiterate	25.3	52.6
Number of Living Children		
Iran: 3 or fewer	31.2	56.9

Table 8. Contraceptive use rate among currently married women ages 15-49 by background characteristics		
	1976	**1992**
Iran: 4 or more	41.1	72.5
Urban: 3 or fewer	49.8	69.6
Urban: 4 or more	56.1	81.0
Rural: 3 or fewer	10.4	39.3
Rural: 4 or more	27.9	60.8

There is a strong positive relationship between level of education and current contraceptive use. Literate women have a much higher rate of contraceptive use in 1976 and 1992. The effect of literacy on contraceptive use is less strong in 1992 than it was in 1976. While the relationship between education and contraceptive use continues to exist, there are indications that contraceptive use is breaking through educational and social-class boundaries.

Age and number of living children are two important demographic variables in relation to current contraceptive use. The data presented in Table 8 suggest that most women who practiced contraception in 1976 were older women (above age 35) who had more than 4 living children. In recent years, more younger women also use contraceptives. The 1992 data show that 34 percent of women in age group 15 to 19 use contraceptives. It is clear that the use of contraception for the purpose of postponing fertility and spacing children is emerging. In the past, the main reason for practice of contraception was to terminate childbearing among older women. Data from recent surveys indicate a role for contraceptive practice in limiting the number of children at a lower level and the use of contraceptives for spacing by younger married women. For example, according to the 1995 Household Expenditure survey 53 percent of married women in the age group 20-24 reported using contraceptives (Iran Statistical Center, 1996).

Vasectomy and Tubectomy

The use of vasectomy and tubectomy as irreversible methods of birth control is growing in the Islamic Republic of Iran. Interestingly, these methods are expanding in provinces that are considered religiously conservative, such as the Isfahan and Yazd provinces. But the 1996 KAP shows that the average age of women who get a

tubectomy is 33.1 for urban areas and 34 years for rural areas. The average age of women whose husbands get a vasectomy is 32.4 years in urban areas and 31.8 in rural areas. It is clear that most of these couples have completed at least 10 reproductive years and are at high parity.

The examination of data from one province, Isfahan, with the biggest share of vasectomy and tubectomy among the provinces, can be very illustrative. Table 9 shows the age distribution of women who used tubectormy or whose husband had a vasectomy. In both rural and urban areas, the women are generally more than 35 years old. However, there are women who are less than 30 years old and have had a tubectomy. About 19 percent of all women who have had a tubectomy were less than 30 years old. With respect to vasectomy, about 28 percent of women whose husband had a vasectomy were in the age group 15-29 years.

Table. 9 Age Distribution of Women using Sterilization: Tubectomy (wife) or Vasectomy (husband)

	Tubectomy			Vasectomy		
Age	**Total (%)**	**Urban (%)**	**Rural (%)**	**Total (%)**	**Urban (%)**	**Rural (%)**
15-29	18.5	21.6	23.5	27.6%	24.2	32.8
30-34	33.2	34.2	31.6	30.1%	31.1	28.5
35+	48.3	44.2	44.9	42.3%	44.7	38.8
Total	100.0	100.0	100.0	100.0	100.0	100.

Education does not differentiate among the couples who use tubectomy. About 60 percent of women who use tubectomy are illiterate (Table 10) . In rural areas, 70 percent of women who have had tubectomy are illiterate. On the other hand, education seems to be important with respect to acceptance of vasectomy. About 70 percent of women whose husband had a vasectomy had some education, and about 8 percent of them had a high school diploma or college education.

Table 10 . Percent distribution of women using sterilization by level of education and urban-rural residence						
Education	**Tubectomy**			**Vasectomy**		
	Total (%)	**Urban (%)**	**Rural (%)**	**Total (%)**	**Urban (%)**	**Rural (%)**
None	59.7	47.6	69.8	33.1	25.9	43.8
Elementary	30.0	33.0	27.4	49.6	51.6	46.8
Some high School	5.5	9.6	2.1	9.7	13.1	4.7
High School Diploma +	4.8	9.8	0.7	7.6	9.4	4.7
Total	100.0	100.0	100.0	100.0	100.0	100.0.

The number of children for couples who had vasectomy or tubectomy is reported in Table 11. The average number of children for both groups is 5.4 and over 50 percent of women who have had a tubectomy had more than 5 living children. The women whose husbands have had a vasectomy had slightly fewer children compared to women who had a tubectomy. In general, these two method are used by very high parity couples.

Table 11. Distribution of women who had a tubectomy or their husband had vasectomy by number of living children						
Number of Children	**Tubectomy**			**Vasectomy**		
	Total (%)	**Urban (%)**	**Rural (%)**	**Total (%)**	**Urban (%)**	**Rural (%)**
1-2	2..7	4.2	1.5	4.3	4.0	4.7
3-4	32.2	39.0	26.8	48.1	53.0	40.9
5+	65.1	56.8	71.7	47.6	43.0	54.4
Total	100.0	100.0	100.0	100.0	100.0	100.0

Provincial Variation in Contraceptive Practice

The provinces in Iran are economically, geographically and ethnically diverse (Aghajanian, 1983). Some of this diversity is reflected in the rate of contraceptive use

(Table 12) . However, a consistent relation between level of development and contraceptive prevalence is not found. Some of the very religiously conservative provinces have the highest level of contraceptive practice. Also some of the least developed provinces have a very high level of contraceptive prevalence. For example, the provinces of Isfahan and Yazd, considered the most seriously committed to the tradition of Islam, are also among the provinces with a very high rate of contraceptive use. Some of the provinces have a much higher rate of traditional contraceptive use. Also, urban-rural differences in the rate of modern contraceptive use and traditional contraceptive use vary across the provinces. Existing data do not allow any further exploration of the factors behind these differentials.

Based on these data, it appears that currently the contraceptive prevalence rate in Iran, especially in urban areas, is among the highest levels in the world. The rates in urban areas of some of the less developed provinces also are among the highest in the world. While these high rates are very impressive, they should be considered cautiously. There is a possibility that the high rate is due to the sampling of the areas that are covered by the health workers. This is not clear from the reports of the surveys. However, the sample sizes are very large. For example, the rates reported in Table 12 are based on a sample of 21,003 women in urban areas and 20,344 women in rural areas. An indication that these rates might be overestimated is the rates obtained from the Household Budget Survey of 1995 that is lower than these rates. According to this survey 58 percent of married women in age group 15-49 were using contraceptives. This is the national rate. However, it is significantly lower than the rates of 80 and 70 percent for rural and urban areas from KAP.

Table 12. Contraceptive prevalence rate among women 15-49 by province, 1996-97

Province	Urban				Rural	
	Total	Modern	Trad'l	Total	Modern	Trad'l
East Azarbayjan	80.1	52.3	25.7	76.5	65.9	5.1
West Azarbayjan	78..6	57.3	19.7	67.3	59.7	4.1
Ardabil	80.4	63.9	14.6	68.7	59.4	6.1
Isfahan	84.5	51.4	31.1	81.8	62.3	2.6
Ilam	75.2	65.0	3.0	66.1	57.9	7.5
Busher	74.6	55.0	17.4	59.2	49.1	4.6

Table 12. Contraceptive prevalence rate among women 15-49 by province, 1996-97						
Province	**Urban**				**Rural**	
	Total	**Modern**	**Trad'l**	**Total**	**Modern**	**Trad'l**
Teharn	83.9	52.5	30.0	79.9	56.3	2.2
Ghazvin	77.8	51.8	22.6	73.8	56.9	6.9
Chaharmohal	78.4	61.4	15.0	67.4	56.1	7.2
Khorasan	80.2	51.2	26.3	68.8	53.3	7.2
Khuzistan	73.0	56.5	13.7	57.7	47.9	5.8
Zanjan	78.5	64.3	11.1	69.3	60.8	6.8
Semnan	85.2	51.2	31.7	84.5	63.8	1.4
Sistan	68.1	53.2	6.0	55.8	45.0	7.8
Fars	77.7	61.8	13.2	68.8	57.0	5.3
Kordestan	78.1	65.2	11.0	67.3	59.5	5.1
Kerman	80.8	46.4	32.4	71.2	49.4	6.8
Kermanshah	77.3	65.9	9.1	69.6	65.1	3.8
Kokiluyer	73.6	60.6	8.7	54.2	46.2	7.5
Gilan	82.1	45.0	35.5	77.5	51.5	1.6
Lorestan	74.9	58.7	12.3	61.1	49.3	8.3
Markazi	86.3	55.2	28.8	78.1	60.1	2.9
Hormozgan	74.9	51.3	21.6	42.5	31.8	5.4
Hamedan	80.8	59.4	20.6	70.4	60.3	3.8
Mazandran	80.6	47.8	31.5	74.8	55.4	3.2
Yazd	87.2	54.0	32.7	84.9	61.6	2.3
Total	80.6	56.4	24.2	70.1	60.1	9.6

Source: 1997 Annual Conference on Population and Family Planning, Tehran

VII. QUALITY OF SERVICE DELIVERY

Examination of the quality of service delivery is an important aspect of the growing family planning program in the Islamic Republic of Iran. The reports available from the mini-surveys do not allow any evaluation of the quality of service delivery.

However, some questions from the most recent surveys (1996-1997) can be viewed as measures of service delivery.

Correct Use of Pill

While the distribution and delivery of pills, especially in rural areas, is a challenge, ensuring correct use of this widely accepted method is even more important. Table 13 shows the rate of error in pill use according to the 1996 KAP and as recorded by the interviewers. Incorrect use refers to a variety of factors leading to a failure to take the pill on a regular daily basis. The main reason for this incorrect use is lack of an adequate understanding of the pill and how it works. Education is part of the delivery of contraceptives. In 1996, about 30 percent of pill users did not use it correctly as recognized and recorded by the interviewers. In urban areas, 33 percent did not use it correctly. Surprisingly, in rural areas the rate of incorrect use is less than in urban areas. This suggests that rural health workers are doing a slightly better job in terms of educating pill users about the method and how to use it.

Table 13. Percent Distribution of Pill Users by Correct Use* Status in 1995-1996

Place and source	Correct		Incorrect	
	1995	1996	1995	1996
Total	N.A.	69.6	N.A.	30.4
Urban	61.1	67.2	38.8	32.8
Rural	64.4	71.8	35.9	28.2
Public Clinic	N.A.	49.8	N.A.	50.2
Private Physician	N.A.	72.7	N.A.	27.3

*Correct use is determined and reported by the interviewer after probing the respondent about how she has been using the pill

Contraceptive Failure

Table 14a shows the distribution of pregnant women by contraceptive use status when become pregnant. The table includes all women who were pregnant some time

during the 12 months before the survey, (March 22, 1995- March 21, 1996 overlaps Iranian year 1376). About 25 percent of urban women report becoming pregnant while they were using contraceptives. Among this group, one-third were using the pill and 18 percent were using the condom as a method of birth control. These rates are much higher than the failure rates for these methods. As such, the rates can be interpreted as representing low quality of service delivery in terms of educating users and providing information about the methods.

Table 14a. Percent distribution of women who became pregnant in 1995-1996 by contraceptive use status and method of choice

Residence	No Use	Pill	Condom	Withdrawal	Other
Urban	74.5	7.3	4.5	10.2	3.5
Rural	77.3	12.0	2.2	6.7	1.9

VIII. DEMAND FOR CONTRACEPTIVES

There are several indicators of demand for children. One of the indicators available from the KAP survey reports is the wanted status of pregnancy. Table 14b shows the wanted status of pregnancy by parity **among the women who became pregnant during the 12 months period between March 22, 1995 to March 21, 1996**. There is a strong negative relationship between the wanted status of pregnancies and parity. High parity pregnancies among high parity women are unwanted and unplanned. There is strong evidence of demand for family planning services reflected in these data. The data can be used also as a measure of unmet need for family planning.

Table 14b. Percent Distribution of Pregnant Women in 1995-1996 whose Pregnancy is Unwanted, by Parity

Parity	Total	Urban	Rural
First pregnancy	4.0	4.1	3.8
Second pregnancy	17.0	19.1	15
Third pregnancy	20.0	22.3	17.9
Forth pregnancy	59.0	54.5	63.3
Total	100.0	100.0	100.0

Another indication of demand for family planning is the planning status of last pregnancy by parity. Women who were pregnant during the 12 months (March 22, 1995-March 23, 1996) were asked if either their husband or themselves or both wanted the pregnancy. The results from this question are reported in Table 15. Among women of high parity, 4 or more, 59 percent reported that neither their husbands nor themselves had any intention of pregnancy (Table 15) . For the second and third parity women, there is evidence of husband and wife differences in the demand for children.

Table 15. Percent Distribution of Pregnant Women in 1995-1996 by Planning Status of Pregnancy and Parity

Parity	Neither Husband nor Wife wanted a child	Either husband or wife wanted a child	Both wanted a child
First pregnancy	4	10.3	45.9
Second pregnancy	17	20.6	24.2
Third pregnancy	20.1	19.7	12.3
Forth pregnancy	58.9	49.4	17.6
Total	100.0	100.0	100.0

IX. MEASURING THE FERTILITY IMPACT OF FAMILY PLANNING PROGRAM

Several indicators may be used to measure the fertility impact of family program (Bertrand et al. 1994). For example, the crude birth rate, age-specific fertility rate, and total fertility rate can reflect changes in fertility control levels. For each of these indicators, time series data are needed to allow for measurement of change. There are three major sources of demographic data in Iran. The Statistical Center of Iran conducts censuses and population surveys that generate demographic data. The Civil Registration Organization maintains a register of the vital events that can be used as source of data for indicators of fertility impact. The major problem with Civil Registration data is under-registration of births, though the coverage of births has been improved recently. The Ministry of Health and Medical Education also generates demographic data through yearly KAP surveys. For methodological and coverage reasons, these three sources of

data are not always consistent. For purposes of the analysis here, data from all three sources will be used and the reader is asked to focus on trend rather than which source might provide the most accurate information on levels of fertility.

Crude Birth Rate

The crude birth rate is the number of births occurring in a given year or a reference period per 1,000 population. The birth rate for the Islamic Republic of Iran can be estimated from vital registration data after correction of the data. Fouladi (1996) utilized birth registration data from Civil Registration Organization and estimated that during the period 1976-1993 the birth rate declined from about 43 per 1,000 people in 1986 to about 25 per 1,000 people in 1994. These estimates show a steep decline in the birth rate. The decline observed on the basis of registration data is also consistent with the decline in the birth rate indicated in surveys conducted by the Ministry of Health and Medical Education between 1988 and 1995 (Table 16). The initial birth rates estimated from the KAP surveys are lower than the birth rates estimated from the vital statistics, but the patterns of decline are consistent.

Table 16. Crude birth rate estimates from Civil Registration Organization and Ministry of Health KAP Surveys

Year	Civil Registration Organization	Ministry KAP Surveys
1986	43.4	N.A
1987	42.0	N.A.
1988	38.6	35
1989	36.7	31
1990	33.6	27
1991	30.4	23
1992	27.6	22.5
1993	25.3	20.3
1994	24.3	20
1995	N.A	17.7

Source: Fouladi, 1996; Ministry of Health and Medical Education, 1997

Age-Specific Fertility Rate

Another indicator of program fertility impact is the age-specific fertility rate. Table 17 shows the age-specific fertility rates for 1986 and 1993 by region as estimated from the 1986 census and a 1993 population sample survey carried out by the Statistical Center of Iran. The age-specific fertility rate has declined in all age groups and particularly in the older age groups. It is clear that fertility levels for high parity women and women older than 35 years of age have decreased as much as 40 percent in some age groups. Note that, considering the fact that almost 92 percent of women are married by age 30, the decline in age-specific fertility after age 30 is related to a decline in exposure to pregnancy through the use of contraceptive methods, both traditional and modern.

The decline in urban marital fertility in Iran is not new. Urban Iran experienced a notable decline in marital fertility in the 1970s (Ratery, Lewis, Aghajanian, 1995). This was not true for rural areas in the 1970s. A remarkable change observed in the data shown in Table 17 is the decline of marital fertility in rural areas for the first time in 1990s. The downward shift in the age-specific fertility level for women aged 30 years and older is very significant and almost certainly reflects influences of contraceptive use on lowering the risk of pregnancy.

Table 17. Changes in age-specific fertility rates in Iran, 1986-93

	Iran			**Urban**			**Rural**		
Age	**1986**	**1993**	**Change (%)**	**1986**	**1993**	**Change (%)**	**1986**	**1993**	**Change (%)**
15-19	149	105	-27.0	122	97	-20.0	157	117	-25.4
20-24	303	264	-13.1	232	237	2.0	350	307	-12.3
25-29	313	253	-19.0	231	219	-05.2	380	321	-15.5
30-34	274	201	**-27.0**	197	160	**-19.0**	340	285	**-16.2**
35-39	211	137	**-35.1**	143	97	**-32.2**	272	208	**-24.1**
40-44	112	65	**-42.0**	72	43	**-40.2**	148	99	**-33.1**
45-49	29	16	**-45.0**	17	10	**-41.0**	40	28	**-30.0**

Source: Estimated from the 1986 Census and the 1993 Population Sample Survey.

The level of age-specific fertility in Iran continues to decline according to

several sources of data including the KAP surveys from the Ministry of Health and Medical Education. The 1996 KAP survey provided the rates presented in Table 18. These rates are lower than the rates estimated from the census and from surveys implemented by Iran Statistical Center, and should be interpreted with caution. The rates from the KAP surveys may be an underestimation, possibly due to over-representation of areas covered by the rural health workers. However, they are consistent with the hypothesis of a decline in level of fertility as an impact of the family planning program.

Table 18. Urban and rural age-specific fertility rates estimated from the 1996 KAP Survey

Residence	15-19	20-24	25-29	30-34	35-39	40-44	45-49	TFR
Urban	32.8	128.5	120.7	88.9	55.2	18.8	2.0	2.2
Rural	50.3	155.7	168.1	133.9	109.6	65.1	8	3.5

Total Fertility Rate

This measure can be estimated using data from the 1986 census, the 1993 population sample survey and the 1996 census of the Iran Statistical Center. A total Fertility rate is also estimated from vital registration data and the KAP surveys. These rates are all reported in Table 19. They consistently show decline in the level of fertility and imply strong support for a fertility level impact of the family planning program. The more conservative estimates are those based on the census and surveys of the Statistical Center of Iran. However, in terms of change, all three sources reveal close to a 40 percent decline in total fertility. This decline in total fertility is remarkable, especially in rural areas. Estimates for the rural areas show that, for the first time, total fertility declined in rural areas. According to estimates from the Iran Statistical Center data, the total fertility rate has declined to a level between 3.7 to 4 in 1996. This is a strong departure from the level observed in 1986. Such a sharp decline in fertility is not likely to have happened in the absence of an active family planning program during 1990 and 1996.

Table 19. Total Fertility Rate in Iran			
Year	**Iran Statistical Center**	**Civil Registration Organization**	**MHME**
1986	7.0	6.2	5.2
1991	6.3	4.2	5.0
1993	5.1	3.5	3.6
1996	4.1	N.A.	3.5

X. OTHER FACTORS INFLUENCING FERTILITY LEVELS

While the fertility impact of the revitalized family planning program is implied by data generated from several different and independent sources in the Islamic Republic of Iran, the role of other social changes and socio-demographic factors can not be discounted. This section provides an overview of these changes and the factors that influence fertility decline.

Demographic Factors

Table 20 shows the age structure of the female population between 1986 and 1993. A notable change across these three years is the absence of a decline in the proportion of the female population in reproductive age groups. In 1986, 33 percent of females were in the prime reproductive ages of 15 to 34 years. The proportion of women in the reproductive age group increased to 35 percent between 1986 and 1993. Hence, changes in age structure would not be expected to explain a decline in the birth rate. In fact, since there was a higher percentage of women in the reproductive age groups, age structure of the female population should have had a positive effect on the birth rate. Despite this, the birth rate has declined.

Table 20. Age structure of female population, 1986-93.			
Age	**1986 %**	**1991 %**	**1993 %**
0-9	33.6	31.1	27.3
10-14	11.8	13.5	14.4
15-34	33.0	33.2	35.0

Table 20. Age structure of female population, 1986-93.			
Age	**1986 %**	**1991 %**	**1993 %**
35-49	11.0	11.7	13.1
50 +	10.6	10.3	10.2

Source: Iran Statistical Center, 1993, 1995, 1996

Decline in exposure to marriage

In Iran, fertility occurs in the context of marriage. Hence, a decline in exposure to marriage has a direct influence on the birth rate. Table 21 shows the proportion of women who were married at the time of the census or survey by age of the women. From this Table, it is clear that exposure to marriage has decreased notably since 1986 . In the period 1986-93, the proportion ever-married among women age 15 to 19 decreased from 33.5 percent in 1986 to 21 percent in 1993, a decline of 46 percent. Among women aged 20-24, the proportion ever-married declined slightly more than 9 percentage point, a decline of 13 percent over the 8 year period. The pattern of decline in exposure to marriage is seen in rural as well as urban areas. In rural areas, the proportion married among women 15 to 19 years old decreased from 34 percent in 1986 to 22.7 percent in 1993. This is a decline of 11.3 percentage points. For the age group 20-24, the decline in percent married was 10 percentage points. In comparison to urban areas, these changes in the level of exposure to marriage in rural areas are remarkable.

The declining pattern in exposure to marriage is the outcome of a continuous increase in the age of marriage. Between 1986 and 1996, female age at marriage increased from 19.8 years to 22.5 for all women in Iran. In urban areas, singluate mean age of marriage increased from 20 years to 22.5. For the first time, a remarkable rise in the age at marriage of rural women is observed. The singulate mean age of marriage for rural women was 22.3 years according to the 1996 census. Age at first marriage was about 19.6 years in 1986. This is an increase of 15 percent in female age at marriage in rural areas (see Figure 4).

Table 21. Percent Currently Married among female Population 15-49, 1986-93						
Age	**Iran**		**Urban**		**Rural**	
	1986	**1993**	**1986**	**1993**	**1994**	**1993**
15-19	**33.2**	**21.5**	**31.8**	**20.4**	**34.0**	**22.7**

Table 21. Percent Currently Married among female Population 15-49, 1986-93						
Age	**Iran**		**Urban**		**Rural**	
	1986	**1993**	**1986**	**1993**	**1994**	**1993**
20-24	**72.6**	**63.5**	**73.9**	**63.8**	**73.8**	**63.1**
25-29	90.0	84.5	87.1	84.7	89.8	84.2
30-34	92.1	91.6	91.5	91.1	93.5	92.6
35-39	92.2	93.4	92.2	93.0	94.0	94.0
40-44	90.1	91.9	91.2	91.5	92.4	92.6
45-49	83.7	89.1	88.5	88.3	89.3	90.0
15-49	72.4	68.8	72.9	70.1	**73.3**	**66.9**

Source: Calculated from Iran Statistical Center, 1991, 1994

Decomposing The Decline in Total Fertility

Changes in fertility levels are reflected in the amount of change in the total fertility rate. The decline in the total fertility rate can be decomposed into two components: (1) changes in exposure to marriage; and (2) changes in exposure to pregnancy. The latter is related to the use of contraceptives. Table 22 shows the decomposition of total changes in the total fertility rate into these two components for 1986 and 1993. Using standardization procedures, age-specific fertility rates for 1986 and 1993 are standardized on the basis of marital status distribution for 1993. The results show that for all Iran, total fertility declined about 1.9 children and 80 percent of this decline was due to a decline in the exposure to the risk of pregnancy resulting from modern or traditional contraceptive use. In rural areas, the total fertility rate declined by about 1.6 children and 79 percent of this decline was due to a decline in exposure to the risk of pregnancy. Results from this decomposition of decline in the total fertility rate (TFR) imply a fertility impact of the family planning program about 4 years after it was established. Even more important is that the marital fertility decline attributed to the use of contraceptives is not limited to urban educated women, but it also appears that the fertility impact of family planning is spreading to rural women.

Table 22. Decomposition of Decline in Total Fertility Rate, 1986-1993			
	Total	**Urban**	**Rural**
Amount of TFR decline	1.7	0.7	1.6
Exposure to Pregnancy	78%	80%	79%
Exposure to Marriage	22%	20%	21%

Source: Estimated from the 1986 census and 1993 population sample survey.

XI. FERTILITY DEMAND AND IDEATIONAL FACTORS

The recent declines in fertility resulting from a decrease in exposure to marriage and pregnancy reflects a decline in the demand for children and ideas about lower family size among Iranian couples. Two important factors appears to account for the declining demand for children. On the one hand, a continued decline in infant mortality has increased child survival and extra births are not needed for compensation. Second, a marked increase in the cost of living and strong economic pressures on families have influenced the demand for children.

One factor that helps to account for ideas about smaller family size is the level of educational attainment of married women. The literacy rate and educational attainment of married women influences their views concerning both the quality and quantity of children. Higher levels of education have changed women's view about their roles and increased their prospects for assuming economic roles supplementary to their familial roles. Currently, the economic participation rate of women is at a low level, but the ideology and desire for economic participation among women has emerged which influences their views on family formation. The following sections describes these demand and ideational factors.

Demand Factors

1. *Decline in Infant Mortality*

The most recent data on infant mortality rate suggest that a significant decline in infant mortality had occurred by 1995 (see Figure 5). In 1995 Iranian government reported 43 infant deaths per 1,000 births. This is almost one-third of the rate estimated

from Iran fertility Survey and the Population Growth Survey in the 1970s, and implies that during the 1975-95 period, the infant mortality rate declined by about 64 percent. This amount of change is remarkable and suggests a significant accomplishment by the Islamic Government of Iran. Such a decline in infant mortality has been made possible largely by decrease in infant mortality in rural areas. No detailed data with urban-rural breakdowns are available for recent years. In the 1970s, infant mortality in rural areas was almost two times the rate of infant mortality in the urban areas. Thus, any decline in rural infant mortality could have resulted in a notable decline in the national rate of infant mortality. It is now well established that improvements in sanitation and access to clean drinking water in developing countries can reduce the infant mortality rate by about 37 percent (Galway et al. 1987). During the post-revolutionary era, the Ministry of Reconstruction was formed and implemented a large number of village development projects to provide clean drinking water and electricity. According to the 1986 census, about 51 percent of households in rural areas had access to piped water in 1986, compared to 21.5 percent of rural households in 1976 (Iran Statistical Center, 1981, 1989). Similarly, the percent of rural households with access to electricity in their houses increased from 14 percent in 1976 to 65 percent. These local development efforts have been an important force in improving the environment for child survival, and increased child survival has been an important factor in lowering the demand for children and increasing the acceptability of family planning services.

2. *Economic Pressures on the Family*

In the 1990s, Iranian families have experienced significant economic pressures as their purchasing power has declined (Hoogland, 1995) . Continued dependency on oil revenue as the source of government spending, absorption of a significant portion of the oil revenue for defense purposes, devaluation of Iranian money, removal of a number of government subsidies on imported goods, and an increase in average family size during the 1980s, have generated strong economic pressures on the Iranian family. The economic belt has become tighter and tighter. To avoid slipping into poverty, Iranian breadwinners are working more jobs and more hours. Couples are also adjusting through a reduced demand for children and by using contraceptives. Note that economic pressure is not arising in the context of poverty. Rather economic pressure is the outcome of knowledge of, and desire for, various goods and services in combination with the cost of raising children. A very important cost of children in Iran is the increasing cost of education. In addition, there appears to be a shift towards demand for

a higher level of consumption of modern goods not produced in Iran. This higher level of consumption has become incompatible with children in recent years because the inflation rate has been increasing and the availability of modern imported goods has become more and more limited. This competition for resources has led to a lower demand for children.

Ideation factors

1. ***Government Promotion of Fertility Control***

The religious and political authorities have convincingly argued that family planning and birth limitation is for the good of society and the family. Religious pragmatism is advocated by the rank and file of the clergy. The Islamic Republic authorities' support for the family planning program bestows acceptability of family planning as a way things should be. Government officials, religious leaders and special television programs have reinforced and promoted family planning policy, birth control, and the quality of children. Legal changes that affect providing support for women after the third pregnancy have had a strong symbolic effect on ideational change in the direction of smaller family size. **These new political expressions by the clergy and politicians have created an environment of acceptability and permissibility with respect to the idea of birth control and family size limitation.**

2. ***Changing Educational Attainment of Women.***

There is a well-established literature showing the relationship between the educational attainment of women and fertility desires. Educational attainment influences fertility outcomes through its effects on the postponement of marriage and decreasing the number of children born. Education also reduces the desire for children through ideational change among women. Educated women receive higher status within the context of the husband's household, and adopt new attitudes, aspirations, and role perceptions.

Contrary to early speculations (Nashat,1980), educational attainment for women in Iran increased significantly during the post-revolutionary era, and especially during the last 10 years (Table 23). This happened despite a significant rise in the size of the school age population. As a simple measure of educational attainment, the literacy rate among women shows a remarkable increase. While 1976 saw the peak of social reforms designed to improve the status of women, the census data showed a relatively low

literacy rate, for women in general, and for rural women in particular. In 1976, the literacy rate for women 6 years and older was 35.5 percent. This rate was 23 percentage points lower than the rate for men. The situation for rural women was worse. The rate of literacy among the rural female population 6 years and older was 17.3 percent. In 1986, these rates increased to a higher level. The female literacy rate almost doubled in both rural and urban areas. By 1996, 74 percent of women age 6 years and older were literate in Iran. The literacy rate for rural women increased from 17.3 percent in 1976 to 62.4 percent in 1996 This increasing trend in the female literacy rate during the 1990s was achieved through various programs, including the adult literacy program.

Literacy Rates for Males and Females Aged 6 Years and Older

	Iran			Urban			Rural		
	1986	**1991**	**1996**	**1986**	**1991**	**1996**	**1986**	**1991**	**1996**
Male	71.0	81.0	84.7	80.4	86.7	90.0	60.0	72.6	76.7
Female	52.1	67.0	74.2	65.4	76.8	82.0	36.0	54.2	62.4

Source: Iran Statistical Center, 1997.

A more important indicator of educational attainment is the school enrollment rate. In the 1970s, school enrollment rates for females in the middle and high school levels were very low. For example, less than 50 percent of the eligible female population was enrolled in middle school and only about 25 percent of those eligible for high school level were enrolled in high school. In rural areas, only 7 percent of the eligible female population was enrolled in high school. There was an impressive rise in the level of school enrollment during the 10 years following the 1986 census. School enrollment for females at the elementary and middle school levels approached 100 percent. At the high school level, it increased to about 50 percent of the eligible population (see Figure 6). Obtaining a high school diploma before marriage appears to have become the norm, at least in urban areas (Aghajanian, Tashakkori, Mehryar, 1996).

3. *Female Employment*

Iranian women consistently have contributed to the economic production of the household through their unpaid labor on the farm and in the production of carpets and rugs as part of their household activity. However, their participation in the formal labor force and in paid employment has not been significant. In the 1970s, during a time of

special programs and conscious efforts made to increase the employment of women, only 10 percent of eligible women were gainfully employed. In the 1980s, the rate of paid employment declined, due to an increase in the general level of unemployment for men and women as a result of economic circumstances, and also women were discouraged from assuming non-household roles. According to the 1986 census, the rate of female paid employment among Iranian women was about 7 percent. The recent trend emerging from the 1996 census indicates a rise in female paid employment to a level of slightly more than 10 percent for all women, and about 14 percent for women in age group 20-29 years old. Of course, the rate is higher in large urban centers such as Tehran, the capital city, and other large cities and provincial capitals. While the current level of paid employment is relatively low, there is a new attitude about women's work outside of the house. This new attitude is expressed strongly by young women entering their reproductive ages. As the education continuation rate rises among the female population, the idea of working outside of the house is becoming more and more prevalent. In a recent study of adolescents in high school over 90 percent expressed their intention and desire to work after marriage (Aghajanian, Tashakkori, Mehryar, 1996). The majority of male adolescents indicated that they would support a wife's decision to work outside of the house. Families seem to be much more comfortable with having their daughters employed in a gender segregated working environment. The idea of women working outside of the house appears to be developing further, because the government is also promoting women's status and social participation.

Financial and Political Commitment

Government financial commitment to the family planning program has increased since the start of the program in 1989, when no specific budget line was appropriated for family planning activities. By March 20, 1991 (the end of the Iranian year 1370), a total of 1,200,000,000 Rials (about $17,142,857) had been spent on the program. In January 1992, the president of Iran designated an extra 50,000,000 Rials (about $714,286) for operation of the family planning program. This was not only an increase in the budget, but gave a symbolic boost to the importance of family planning for other programs and affairs of the society and also was a sign of government commitment to the goal of reducing the birth rate.

In total, the budget for the family planning program was 13 billion rials in 1992. Using an official exchange rate of 3000 rials for each US dollars, this budget translates to about 43 million dollars. In 1993, the budget was increased to 53 million dollars for

1994 (MHME, 1994). The budget is mainly spent on the purchase of contraceptives , tubectomy / vasectomy operations and the purchase of technical equipment and facilities. This budget is separate from the development budget for building and renovating the health facilities within which the family planning services are delivered.

The Islamic Government has consistently increased its commitment to the expanding of the family planning program since its revitalization. As a result of this commitment, the government has approved the use of aid from international agencies such as United Nations Population Fund, the World Health Organization, and United Nations Children Fund. There have been close ties with these organizations and the family planning program has taken the utmost advantage of their scientific, technical and financial assistance. Help from these organizations has been in the areas of technical assistance for research, program consultation, scholarships for training, and support for preparation of educational material.

The commitment of the government of the Islamic Republic of Iran continues to increase, as reflected in the second Social, Economic, and Cultural plan of Iran (1994-1999). As part of this commitment, family planning became an integrated component of the Primary Health Care Project that is partially funded by loan from the World Bank. The Primary Health Care project receives $141.4 million in World Bank financing as part of a US $294 million project. Plans call for about 35.7 million of this to be allocated to family planning as a component of the Primary Health Care project over a period of 5 years. The family planning components of this project is supposed to focus on:

1. Provision of new contraceptives, especially those that can replace complicated sterilization procedures
2. Increasing the skills of service providers through training up to 15,700 staff
3. Development of a management system
4. Expansion of an information-education-communication system
5. Expansion of research and evaluation through the implementation of surveys similar to Demographic and Health Surveys at the beginning of the Project period and at the end of the period.

The Primary Health Care Project is being implemented and some components of the family planning program are well-established as planned. The Islamic Government has funded the construction of Health Centers from domestic sources, but continues to finance other part of the project from the World Bank loan fund. There is no clear

indication of how much is currently specifically spent on family planning, but there are signs of a continued commitment to the program.

As another indication of government commitment to family planning, the view of the executive bodies at different government branches is important. The size of the population is seen as a serious bottleneck to progress at all levels and branches of government. There has been a great deal of government publicity about the importance of limiting family size to two or three and increasing the quality of children. Government officials and religious leaders have reinforced and promoted family planning, birth control, and the quality of children through special television programs. As part of this political commitment, representatives from various government agencies attend a yearly national seminar on population and family planning and express their support and commitment to the program. They report in detail on the activities that their office or agency are undertaking to help expand the use of birth control and the limitation of population growth.

Representatives from the religious community always attend and express their support for the family planning and birth control at the annual population and family planning conference. They have tried very hard to clarify the issues related to religious aspects of birth control. They express their strong opposition to any act that endangers the life of the mother and the child especially anything leading to an abortion. However, they are very agreeable to the issue of birth control and bring the support from various religious sources necessary for implementation of such a program in the context of the Islamic Republic of Iran. A clear indication of support from the religious leadership is reflected in the conclusion to the presentation by the representative of Vali-a- Faghi, the highest religious authority and currently Ayatolah Khameni, at the 1994 population conference:

> *"Since this issue [birth control and family planning] is with the support of the Islamic Government and it is related to the social justice and growth of quality of life for the Islamic society [of Iran] and considering the contemporary problems and bottlenecks, we avoid all emotions [ideals] and support bravely the principle of family planning for a better Islamic society"* (Abdous, 1995).

In this regard, it is also noticeable that contrary to a large number of political and economic issues that have been controversial for representatives in the Islamic Assembly (*Majles*), representatives of various factions have completely agreed and supported the issues related to family planning and have consistently approved any law

which would help the success of this program. New directions in population policy have included negative incentives for families with more than 3 children. The assembly of representatives (*Majles*) recently approved a law regarding public benefits for the fourth child. Accordingly, the fourth child will not receive the government benefits, such as paid leave for birth delivery or social welfare subsidies to low income women through the Mother and Child Health Clinics. The law has been in effect since 1995. The most important aspect of this law is its symbolic implication of the seriousness of the population policy and the political commitment to its implication.

XII. CONCLUSION

Iran is a Middle Eastern Country with Islam as the dominant religion. Contrary to the situation in East Asia, the countries in the Middle East region have high fertility levels, and there are no indications of fertility transition in most of these countries. Some of these countries have government-sponsored family planning programs. Yet the process of fertility decline and spread of the practice of family planning among couples has been slow. Contrary to this general situation, recent data from censuses, surveys, and vital registration reveal a notable decline in the birth rate in the Islamic Republic of Iran. There is evidence to suggest that some of the fertility decline is due to a revitalization of the family planning program by the Islamic Government.

After a slow down (or maybe a complete halt) for about 8 years, the government of the Islamic Republic of Iran revitalized the family planning program. As results from the 1986 census became a cause for alarm by 1988, a family planning program was established in 1989. It has been growing with strong political and economic support. There is a strong suggestion that the level of contraceptive use is increasing and spreading across rural areas as well as urban areas. The use of very effective contraceptives, such as female sterilization, is increasing significantly. Knowledge about contraceptives appears to be widely spread. While it is difficult as yet to estimate the exact amount of change in fertility levels, it is clear that fertility transition is happening in a Muslim country where Islam as a religion is not separate from the state, and where public policies are strongly influenced by the a state affiliation with a strong commitment to Islamic endorsements.

In addition to the demand factors that have played significant role in the recent decline of fertility, a strong family planning program, with both political and religious

support from state leadership, shares credit for fertility decline. A large body of data, as reviewed in this report, indicate success of the family planning program in the short period of almost 8 years since its re-establishment. However, a more detailed evaluation of the program must await the availability of more data.

There are a number of factors which account for the relative success of the family planning program in the Islamic Republic of Iran and have implications for other Islamic countries. These factors should be viewed both at the household level and the societal and ideological levels. Although the supplies and services for contraception at the government level were stalled for some years, there is no doubt that at the family level there was an increasing demand for contraception. This was mainly due to the continuous increase in child survival during the 1980s and its recent acceleration to the point where the estimate of infant mortality is about 33 per 1,000 live births. At the same time economic pressure at the family level has been increasing, due to high rates of inflation and unemployment. These two factors that have sustained the demand for contraception at the household level.

At the societal level, the role of government did not end with re-instating contraceptive supplies and services, but intensified through greater commitment and continuous support. Once the program started, the Islamic government showed a strong commitment to its goals and objectives. Concern over the negative impact of population growth has been shared by various rank and file members of the government. Yet, the most important element of the success of this program lies the interest, support, and guidance from religious leaders. Such support has been nurtured in the context of the flexibility of Islam in dealing with social issues. Once the high population growth rate was identified as a threat to the welfare of the family and society, it was discussed as a problem with the highest Islamic authority, and he was asked for direction. There is no doubt that the *Fatava* (direction by Islamic leader) and its reiteration at various times and by various members of the government, was a powerful boost for success of the family planning program. The *Fatava* made the issue a matter for the common person and an issue to be considered by all groups and classes, rather than just a select group of highly educated urban women, as in the past. ***Note that this aspect of family planning in the Islamic Republic of Iran has significant implications for other Moslem countries dealing with the issue of population growth.*** Among those populations where *Shiat* Islam is the sect of Islam, Ayatollah Khomeini's *Fatava* can be easily adopted and supported by the Shiat Faqih (the highest religious leadership). Such adoption is consistent with the adoption of other

political views and issues among Shiat populations in other countries. It is obvious, however, that a large number of Islamic countries practice other sects of Islam. Yet, in all these countries, regardless of the particular sect of Islam, *Fatava* (direction) plays a very important role in the views, attitudes, and practices of common men and women. Based on experiences in the Islamic Republic, the process of obtaining *Fatava* from the Faqih, seems to be very relevant for the promotion of family planning among the common classes and groups in these countries.

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Figure 1:
Trends in Birth Rate from 1986-1995, as Estimated by Civil Registration Organization (CRO) and Ministry of Health and Medical Education (MHME)

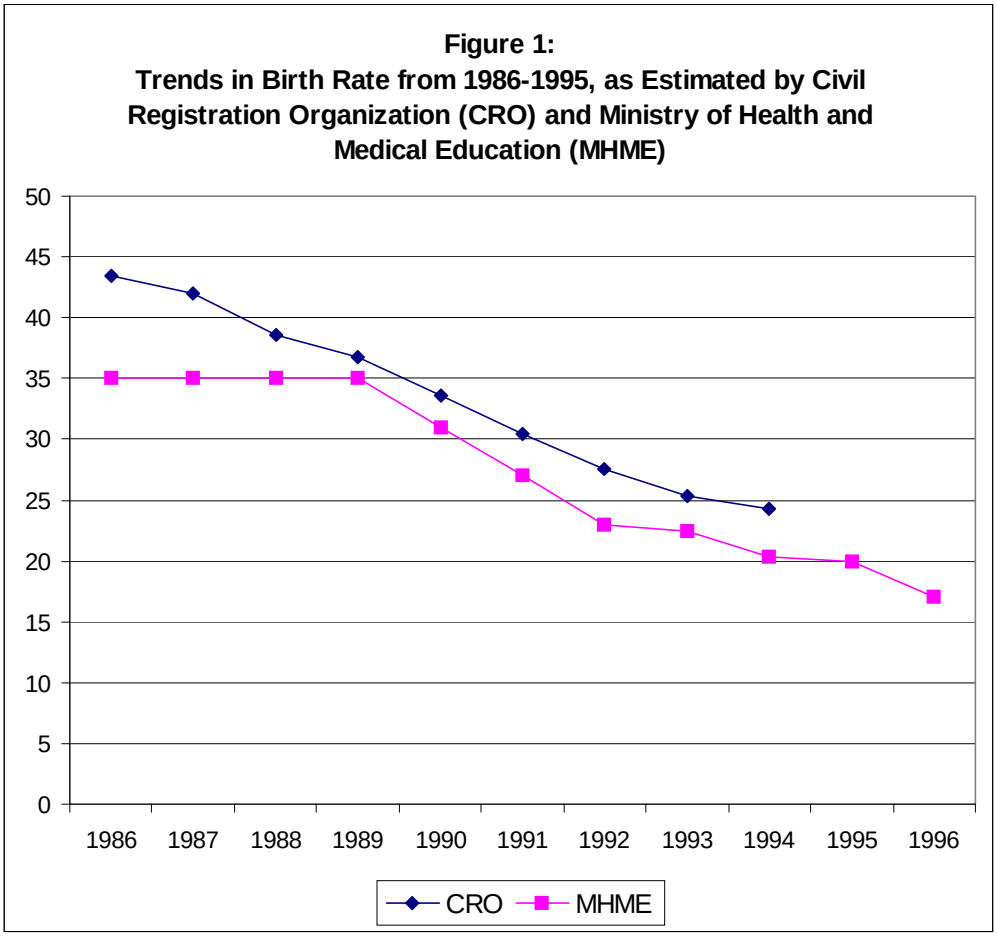
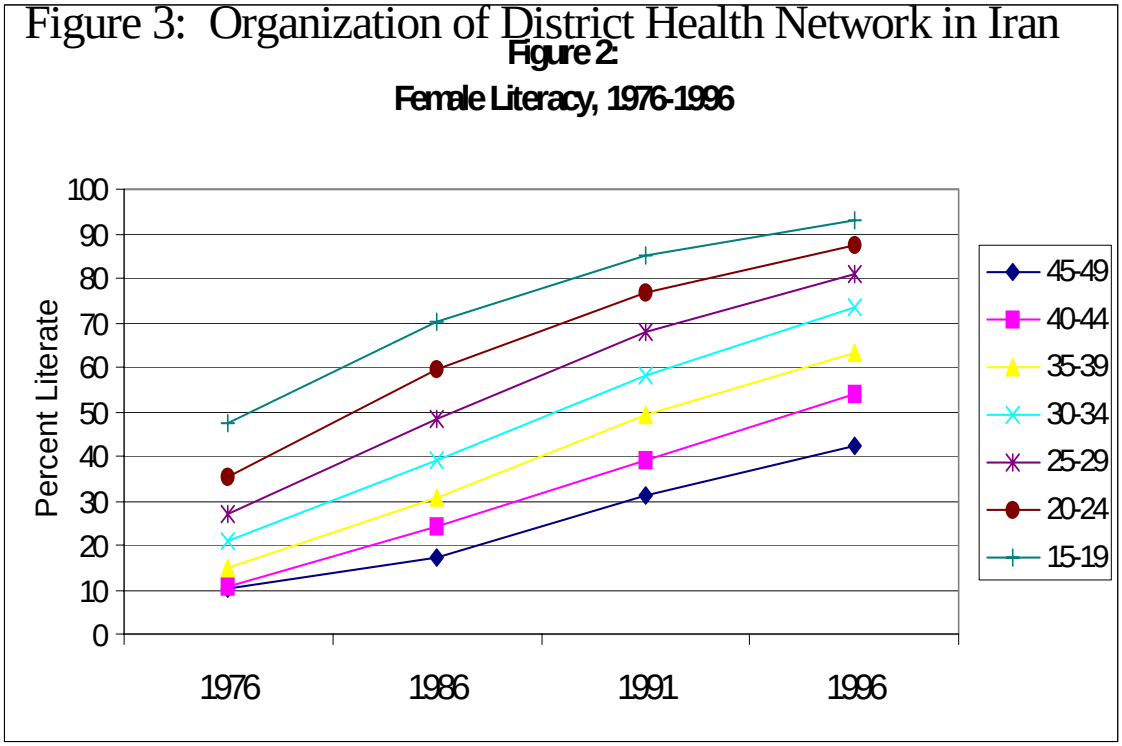


Figure 3: Organization of District Health Network in Iran



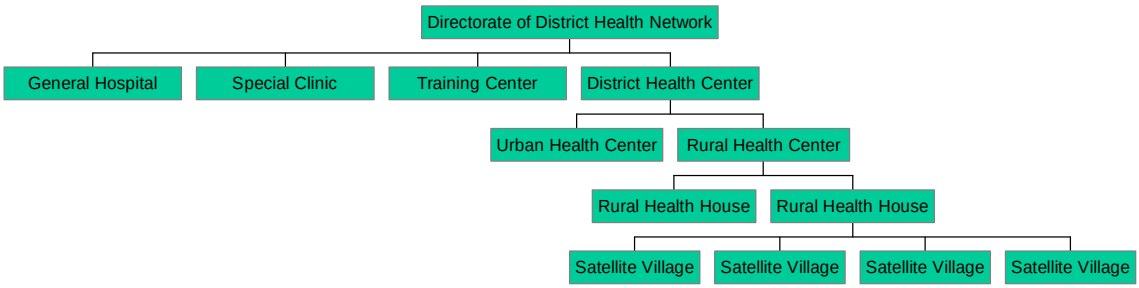

Directorate of District Health Network
General Hospital
Special Clinic
Training Center
District Health Center
Urban Health Center
Rural Health Center
Rural Health House
Rural Health House
Satellite Village
Satellite Village
Satellite Village
Satellite Village

Figure 4:
Singulate Mean Age at Marriage for Females, 1956-1996

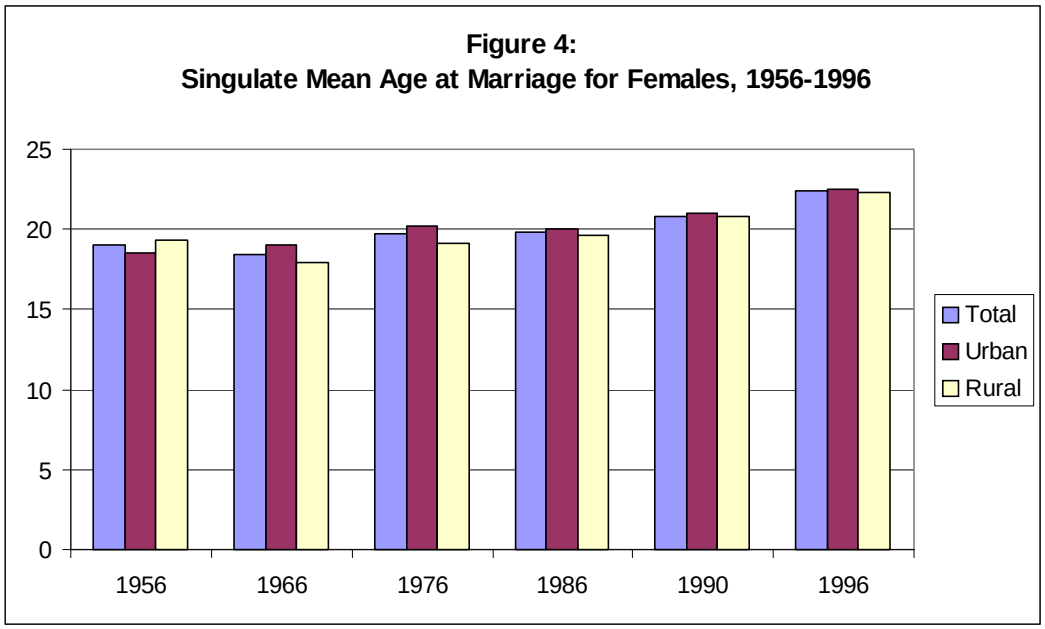


Figure 5:
Estimated Infant Mortality Rate, 1950-1995

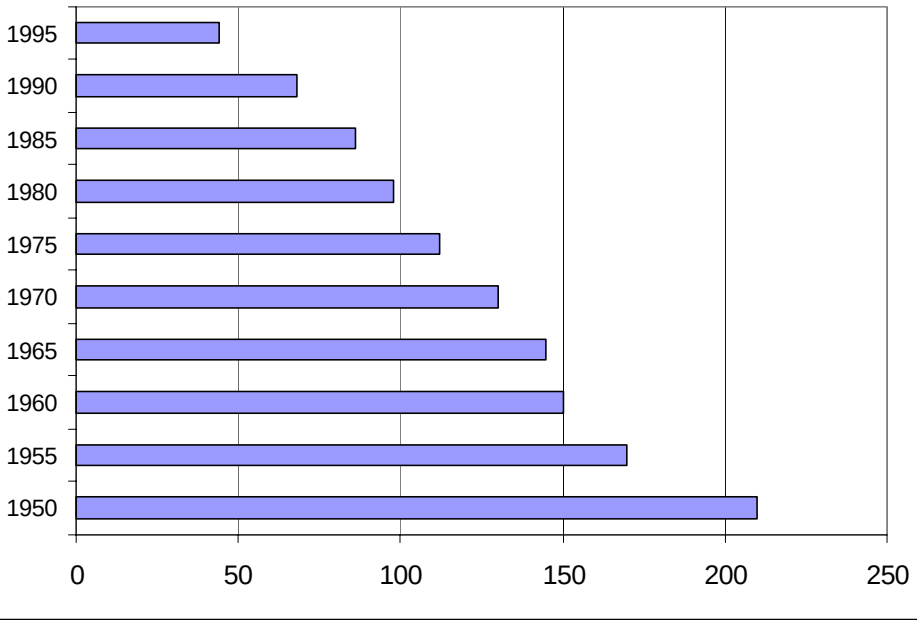


Figure 6:
School Enrollment Rate: Female Population Aged 15-24 Years