

**REPRESSION AND REVIVAL OF THE FAMILY
PLANNING PROGRAM AND ITS IMPACT ON THE
FERTILITY LEVELS AND DEMOGRAPHIC
TRANSITION IN THE ISLAMIC REPUBLIC OF
IRAN**

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Working Paper 2022

Abstract

The aim of this paper is to review the performance of the family planning program initiated in 1989 in the Islamic Republic of Iran. Following a quick look at the family planning program that existed before the Revolution (1967-1979), the paper documents the fate of the program during the first decade after the Islamic Revolution (1979-1988) and its official revival in 1989. It is shown that the provision of family planning services was not banned during the period 1979-1989. Because of the marked rise in the education, urbanization and modernization levels of Iranian society, and thanks to the support of the religious and political leaders, the revived program faced little public resistance and would seem to have already achieved all of the demographic and health targets set for it. By 1997, contraceptive prevalence rate had risen above 70 percent, most couples were using a mix of modern methods, including male and female sterilization, and the traditional gap between urban and rural areas had largely disappeared. Moreover, about 85 percent of the enormous fertility decline achieved since 1986 would seem to have been due to reduction in material fertility due to contraceptive.

1. Historical Introduction

After some flirtation with a pronatalist policy, the Imperial Government of Iran adopted a national Family Planning Program (FPP) in 1967. At the time, Iran and Turkey constituted the largest non-Arabic speaking Muslim population of the Middle East. Surrounded by the ideologically challenging Soviet Union on the north, and the often hostile Arab nationalism on the south, Imperial Iran had every reason to aim at a larger and rapidly growing population, both to protect it against its rapidly growing Arab neighbors and to support the creation of the regional power that the Shah had long aspired to. Thus, the hesitation shown by the government of Iran to sign the first UN resolution on the responsibility of national governments for controlling the growth of their population in the early 1960s, was less surprising than its decision to adopt a birth control policy and launch a serious national FPP a few years later.

The population and FPP of Iran was launched in an environment that could hardly be regarded as favorable for its survival and success. The general intellectual consensus of the country, like that of many other developing countries of the decade, was not convinced of either the dire impact of rapid population growth on socioeconomic development, or the inability of a vast and oil rich country like Iran to accommodate a much larger population than the figure of 26 million according to the 1966 census. Moreover, the majority of the population, particularly those living in rural areas, was illiterate and highly tradition bound. Infant mortality was high and due to the absence of a social security system most parents regarded high fertility not only of religious value but also as insurance against potential loss of children and old age poverty. Giving birth to a large number of children, particularly boys, was not only a source of pride and prestige, but also economic security for most Iranian women who could easily be divorced if they were unable to produce a son (Behnam, 1961). Early marriage was universally encouraged by both Islamic traditions and the national culture of Iran, since it was considered as a major and almost unbeatable obstacle to fertility decline (Momeni, 1975). Under the circumstances, a low profile FPP might have had a better chance of success. Instead, the leadership of the program began with a good deal of publicity, and paid relatively little attention to existing political and religious sensitivities. They showed much more interest in building tactical political alliances with the then prevalent sources of political power, than establishing strategic links with religious leaders and low profile political and professional organizations and community leaders, that might have provided them with longer term public credibility and support.

In the late 1960s, Imperial Iran was regarded as one of the most important, rapidly modernizing, and dependable allies of the United States in the Middle East. Every effort was made to turn it into a showcase of western style development strategies, and to utilize its military might in dealing with regional trouble makers (e.g., in Zofar). Thus, a host of advisers from the Population Council and US universities, active in the area of population and family planning, were sent in to help the Iranian government with the implementation of its FP program. To ensure that the new program would not be stifled by the crusty bureaucracy of the MOH, a new post of the Deputy Minister for Health and Population was created and a close relative of the Shah's most trusted and longest serving prime minister (Amir Abbas Hoveyda) was chosen to fill the post.

Partly due to his own managerial skills and devotion, and partly because of his close ties with the prime minister and upper echelons of power, planning and budget allocation, the deputy minister of health and population - the late Dr Amir-Mansoor Sardari - soon emerged as the senior deputy to the minister of health. He was then able to take over responsibility for PHC services in rural areas and the implementation of such innovative, but politically controversial, schemes as the health, development, education and, later, religious guidance corps. Introduced as part of the Shah's much publicized program of the White Revolution (or revolution from the throne), these corps had been created to improve the living standards of the underprivileged rural population of the country, by requiring all young men and women with a secondary and higher education to spend their military service working as teachers, health workers, and development agents in rural areas. Most political opponents of the regime, however, viewed the whole scheme as a means of extending the control of the Shah's military and security forces over the rural population. This segment had earlier been granted some measure of policy-related privilege by the creation of the Land Reform Program in the early 1960s, which had weakened the traditional power of the landlords.

Thanks to the political support of the prime minister, and the ungrudging financial and technical assistance received from USAID and other international agencies, the FP Program soon dominated the whole MOH. Later on, to gain more political support and resources, the FP Program aligned itself with the Shah's powerful but highly unpopular sister, Princess Ashraf, and the Iranian Women's Organization led by her. As a result of this alliance, the FPP became involved in the promotion of certain well intended, but highly sensitive legislation aimed at raising the age of marriage and curtailing the sole right of men to divorce as stipulated in the Islamic

Shariah.¹ The involvement of the FPP with these initiatives further affected its acceptability by the increasingly politicized religious leadership and their followers among both the modern and conservative segments of the population.

As an indication of the insensitivity of the program to the traditional values of Iranian society, it may be worth noting that during its 12-year history, no official effort was made to obtain a formal ruling (*fatwa*) in support of contraception and family planning from any of the top level religious leaders, then reigning in the Iranian theological centers of Qum and Mashhad. In fact, the only *fatwa* on the permissibility of contraceptive use issued by a relatively senior religious leader (*ayatullah*) inside Iran before the Islamic Revolution, is the one made by the late Ayatullah Baha-ud-Din Mahallati of Shiraz (Omran, 1992). This *fatwa* had been issued in response to a written question by a religiously oriented, US trained, gynecologist (Dr Mahmood Sarram), then working at Shiraz University. It dates back to 1963, almost five years before the inauguration of the FP program.

This highly positive *fatwa* issued by one of the relatively senior, although parochial, Shiite leaders, who had sided with Imam Khomeini in his 1961 revolt against the Shah, and who was also deeply involved in events leading to the triumph of the Islamic revolution in 1979, deserves much more attention than it has received. It clearly indicates that, contrary to the stereotypical picture often presented by the Western media, the politically minded Shiite *ulama*, who emerged as the leaders of the Islamic revolution, were by no means against family planning. This is also supported by the radically positive attitudes towards contraception in general, as well as the use of such controversial methods as sterilization and even abortion expressed by the two eminent Shiite participants (Shaikh Mohammad Mahdi Shamsuddin and Shaikh Mohammad Hossain Bahishti) in the Rabat Conference on Islam and Family Planning in 1971. Interestingly, both of them later emerged as highly influential members of the coalition of revolutionary Shiite clergy who actively supported Ayatullah Khomeini in his final battle against the Shah in 1978 (Mehryar, 2000).

2. Achievements of the Family Planning Program during the Pre-Revolutionary, Period, 1967-1978.

Despite all the resources allocated to the FPP, and the aggressive publicity and social marketing activities undertaken in the early 1970s (e.g., Gillespie, 1972), its achievements during the decade preceding the revolution can only be judged as

modest. According to official statistics, by 1975 the annual expenditure of the Iranian government on the FPP had risen to \$28,000,000 (Nortman and Hofstatter, 1976). This is the second largest amount earmarked for family planning among the 16 nations listed by Nortman and Hofstatter. In comparison, the figures for India and the Republic of Korea are \$75,699,000 and \$5,901,000, respectively. In contrast, the total number of acceptors of government supported FP services in 1975 was 506,000, the overwhelming majority (96 percent) of whom were using oral contraceptives. The figure had changed little since 1971, when it had been 385,000.

By 1977, the total government expenditure on family planning had risen to \$31,000,000, and there were 621,000 contraceptive acceptors using government supported FP services. Official statistics supplied to the Population Council for 1978, the last year before the revolution, give the estimated number of contraceptive users from all sources as 1,358,000, of which 905,000 (67 percent) had used government supported FP services. The figure indicates a surprising rise in the number of contraceptive users since 1977. Compared with the number of married women aged 15-44 in the estimated population of Iran, it indicates an overall contraceptive prevalence rate (CPR) of 24.3 percent of which 16.2 percent were using the publicly supported services. The overwhelming majority (1,172,000, or 86 percent) of all service users were still using oral contraceptives (Nortman and Hofstatter, 1979).

The Iran Fertility Survey (IFS, 1977), the last and probably the most reliable source of information on the performance of the Iranian FP Program shortly before its suspension (SCI, 1986; Aghajanian et al, 1995), gives a somewhat higher CPR (37 percent), which is mainly due to the inclusion of a large proportion of women who reported using the traditional method of withdrawal. The rates of then-current contraceptive use were however much lower for rural (20 percent), and illiterate (25 percent) couples, those aged below 20 years (16.5 percent), and those with lower parities (31 percent). Among rural women with three or fewer children, only 10 percent were using a contraceptive.

In view of the modest performance of the FPP during its first decade of existence, the slight decline in population growth (from 3.1 percent to 2.7 percent) and fertility (from a TFR of 7.0 to 6.3) rates between 1966-1976 as revealed by the 1976 census could hardly be attributed to the program. In fact a sophisticated analysis of the 1977 IFS has led Raftery, Lewis and Aghjarian (1995) to the conclusion that:

Marital fertility in Iran increased during the 1950s and started to decline around 1959, a few years after the beginning of massive economic growth around 1955. The decline continued until 1977, the

¹ While this is the common interpretation regarding divorce, women actually have the right to obtain a divorce, albeit with various requirements that must be satisfied

year in which IFS was conducted. This decline was largely urban, amounting to about four children per married woman in Tehran, somewhat less in smaller cities, and very little in rural areas. It closely paralleled the large increase in primary school participation. More than one-quarter of the decline can be attributed to the reduction in child mortality, a key mechanism of demand theory. There is no evidence that the Family Planning Program or the Family Protection Act, both instituted in 1967, accelerated the decline; certainly neither caused its onset. (Raftery, Lewis and Aghjanian, 1995, P. 175).

It may be of interest to note that in 1978, at the height of the economic boom and the FPP in Iran, Bernard Berelson (quoted by Mauldin and Ross, 1994) had classified major developing countries of the day, into three main categories, according to their likelihood of reaching a crude birth rate of 20 by the year 2000. The three categories were called: 1) The Certain (which included Taiwan, South Korea, and Chile); 2) the Probable (that consisted of China, Brazil, Mexico, Philippines, Thailand, Turkey, Colombia, Sri Lanka, Venezuela, and Malaysia); and 3) the Possible (including India, Indonesia, Egypt, and Peru). Despite ten years of family planning effort, Iran was not among these three hopeful groups. It belonged to a fourth category of "The Unlikely" which included: Bangladesh, Pakistan, Nigeria, Iran, Zaire, Afghanistan, Sudan, Morocco, Algeria, Tanzania, Kenya and Nepal!

3. The Islamic revolution and Suspension of the Family Planning Program

3.1 Early Demise and Suspension of the Program

As a result of its close identification with the Shah's regime, particularly its alliance with the Iranian Women's Organization led by Princess Ashraf, and its lack of attention to religious and cultural sensitivities surrounding contraception, when the Islamic revolution erupted suddenly in mid-1978, the FPP could count on few friends among the lay and religious groups involved in the revolution. Moreover, both the rank and file personnel running the program, and the public interested in using its services were uncertain as to the place of contraception and family planning in the new array of values and virtues ushered in by the revolution. Due to the inadequate attention given to propagation of well-known traditions supporting the practice of *Azl* (withdrawal), and by extension other contraceptive practices, the majority of people did not know whether family planning would be permissible in the drastically changed social and cultural environment that had been created by the revolution. Professional cadres trained to run the program seemed to have been equally uncertain, if not utterly confused, with regard to their possible role and

position in the new social and political environment being ushered in by the revolution.

The Iranian revolution of 1979 was a truly nationwide phenomenon that had attracted the participation of the overwhelming majority of the population. Individuals and groups with quite contrasting characteristics, beliefs, and expectations took part in it. The relatively organized groups which played a decisive role in the success of the revolution ranged from, frankly atheist Marxist groups or devout Muslims with Marxist orientation (both with records of staging armed guerilla activities against the Shah's regime), to liberal middle class organizations that had long opposed the Shah's abuse of his constitutional power, to conservative Islamic organizations with varying degrees of fanaticism. They had all been united by their shared opposition to the Shah's regime.

The situation was no different in the case of the professional and administrative staff of the MOH and the FPP. Like the rest of the population, while a small minority of them belonged to extreme political or religious organizations calling for drastic changes in the basic fabric of the society, the majority supported the revolution because of long standing grievances against the Shah's increasingly arrogant abuse of political power and his alleged tendency to squander national resources on grandiose, self-serving projects. There was a general feeling among these middle class professional groups that Iran had the necessary material and human resources to develop rapidly and enjoy a better standard of living under a democratic regime, the structure of which was already in place as introduced by the 1906 constitution. In retrospect, it would seem that neither the extreme leftist and rightist groups that had borne the brunt of the revolution, nor the conservative religious leaders who had emerged as the main winners, really believed in population and high fertility as a major social problem of immediate relevance to the revolution.

Many of the western trained academics and technocrats who returned to Iran after years of self imposed exile and were given top level responsibilities by the revolutionary government, also believed that underdevelopment and dependency on the western imperialist world order was the main problem facing Iran. They further thought that Iran had the necessary resources and manpower to embark on rapid development and modernization. The most vociferous of them, (like the French trained first elected president of the IRI) believed that development was the best method of family planning. This did not, however, mean that either they, or even the majority of old and conservative *ayatullahs*, were in any way against birth control through contraceptive use as a matter of individual choice. This is clearly reflected

in the *fatwas* issued by Imam Khomeini, and three other grand *ayatullahs* a few months after the triumph of the revolution.

Thus, the suspension of the FPP immediately after the triumph of the revolution in early 1979, was probably due more to the uncertainties noted above, than to any formal policy change by the revolutionary government or serious opposition on the part of the religious leaders. Although the head of the program had left his office and the country before the old regime was toppled, the post of the deputy minister of health for family planning and population was not abolished until at least two years later, and the program was, initially, expected to continue its normal activities. It was only after 1981 that the program lost its independent status and was integrated into the newly created family and school health department of the ministry of health.

3.2 Efforts to Keep the Program Alive

The general impression given by most foreign commentators on the IRI, is that the Shiite clergy leading the Islamic revolution were vehemently against family planning, and that all FP services were suspended after the revolution. This is only partly true. There is no doubt that the FPP, like most other modernization efforts initiated by the Shah's regime, was viewed with suspicion by the majority of political groups involved in the revolution. Most of them did not believe that population growth was a serious problem for an oil rich country like Iran. Many of them also considered the whole birth control movement as an American inspired plan to keep the population of Iran and other developing countries down. The close link between the FPP, and the Iranian Women's Organization headed by the Shah's powerful, but highly unpopular sister, Ashraf Pahlavi, had further damaged the program. Thus, as described above, when the revolution succeeded most of the professional personnel involved in the day-to-day administration of the program were not sure about its future and possible position within the new regime. Some service providers and users who were not familiar with traditional Islamic views on contraception may have had serious doubts regarding the religious permissibility of contraceptive distribution and use.

These uncertainties do not seem to have been shared by the more religious and medically trained people who were given the leadership of the MOH immediately after the revolution. Among the latter was the late Dr Kazem Sami, a founding member of the Socialist Muslim Party of Iran, who had been imprisoned several times by the Shah's regime and was chosen as the first minister of health in Mahdi Bazargan's caretaker government. Despite his leftist views and deep religiosity, he would seem to have been well aware of the deleterious health and personal consequences of high fertility and rapid population growth. So, less than four

months after the triumph of the revolution, around June 1979, he had an audience with Imam Khomeini, during which he raised the issue of birth control and the need for family planning. At the end of this meeting, Dr Sami informed reporters that the Imam had agreed with his suggestion to keep the FP program alive. A few months later, in September 1979, the MOH submitted a written report on the health situation and the need for continuation of FP services to the *Imam*. This report described the implications of the high rate of population growth, which was believed would add a potential one million to a population needing food, shelter, health services and education. In addition, the importance of providing modern contraceptive services had been underlined, and the *Imam's* explicit guidance on the matter had been requested. The *Imam* had written the following note on the margin of the report:

If the use of these methods does not expose women to any health problem (or harm) and it is also approved by her husband, [their use] to solve the problems [mentioned in the report] is religiously permissible. (Verbatim translation from the text given by Ashofteh-Tehrani, 1985, P.321).

This statement was taken as an official *fatwa* by the MOH and distributed among the relevant departments of the ministry. There were, however, some lingering doubts in the minds of program personnel and the public. So several other efforts were made to obtain written statements from Imam Khomeini. One of these is a letter written by Dr Muhammad Reza Motamadi, deputy minister in charge of the Family Planning Program, which was apparently submitted to the Imam while he was hospitalized in the Tehran Heart Hospital in the summer of 1980. In this letter, the Imam's views on the permissibility of using the IUD and female and male sterilization are specifically requested. The letter starts with a brief description of each method and goes on to add that the methods were used in Iran before the revolution, but since the revolution their provision by the public health department has been officially suspended. It adds, "Certain people are however still eager to use them and the MOH does not know how to respond to their demands". In a brief response, the Imam wrote back:

Prevention of pregnancy is not forbidden. As long as it is done with the consent of the couple, does not expose them to any harm, or require action inconsistent with religion, it is permissible. (Verbatim translation from the text given by Ashofteh-Tehrani, 1985, P.323).

These *fatwas* were quickly distributed to regional Health Departments all over the country. The copy sent to the health department of Isfahan province is dated [13]59/06/23 (14 September 1980) and signed by the director general for family health of the MOH. Almost a month later in a circular signed by Dr. Motamadi,

deputy minister of health for public health, population, and family planning, and dated [13]59/7/22 23 (14 October 1980) the recipients are informed that:

As some Regional Health Organizations and other executive centers continue to raise questions regarding the permissible methods of family planning, the subject has been shared with the *Maraje'e Taghlid* (Top Religious Leaders) and the results are as follows:

1. None of the methods, devices and drugs currently supplied by family planning clinics including pill, condom, IUD, and other available devices are prohibited and they should be made freely available to couples who consent to use them;
2. Sterilization is not currently among the free of charge methods offered by the MOH. It is thus necessary that all executive agents of the program as well as service receivers be properly instructed on this matter and all resources should be mobilized to [re]activate the program. (Verbatim translation from the text printed in Ashofteh-Tehrani, 1985, Pp. 324-325).

As an indication that the circulars sent by the central authorities were not sufficient to convince the rank and file of the program, and to relieve their concerns once and for all, there is evidence that some provincial officials also went out of their way to directly share their concern with Imam Khomeini and other *Maraje'e* (leading religious leaders). One such letter is written by Dr Esmail Akbari, director general for health of Isfahan province, and dated 1359/11/7 (31 January 1981) in which Imam Khomeini's views on IUD, tubal-ligation, and vasectomy are specifically asked for. In response to this letter, the Imam had written:

Prevention of pregnancy with the consent of husband and wife is not prohibited. But if it entails physical damage or sterility it is not permissible. (Verbatim translation from the text printed in Ashofteh Tehrani, 1985, P.327).

In a letter sent by the deputy minister for public health, population and family planning to the health department of Isfahan province (dated [13]59/12/27 (17 March 1981), reference is made to a then recently held seminar on the "Problems of Implementing the Health Program", which apparently also dealt with family planning. The recipient of the letter is advised to ask for additional budget for maternal, child health, family planning and nutrition services envisioned for the financial year 1360 (1981-1982). It goes on to add that:

According to the final resolution of the said seminar, Imam Khomeini's views will be the basis for the operational and educational

activities related to family planning so that no doubts and hesitation will occur among applicants, users and demanders of services or service providers regarding their permissibility. (Verbatim translation from the text printed in Ashofteh Tehrani, 1985, Pp. 327-8).

To provide further support for the continuation of the program or its activities, one of the technical officers of the FPP, Mr. Aliakbar Rezai Ashtiani, sent a letter dated [13] 60/3/28 (18 June 1981) to Grand Ayatullahs Najafi Marashi and Shirazi, asking for their views on the use of such contraceptives as the pill, IUD, condom, cap or diaphragm, crème, jelly and injectibles as well as withdrawal. Ayatullah Najafi Marashi wrote back:

In the name of God almighty: It is permissible [to use] the said methods". (Verbatim translation from the text given by Ashofteh Tehrani, 1985, Pp. 329-330).

Grand Ayatullah Shirazi, the reigning religious leader of Mashhad, one of the most important centers of Shiite jurisprudence in Iran, sent a more detailed response:

In the name of God the compassionate and merciful: The use of pills, injections, etc, as well as the cap and intrauterine device which prevent fertilization of the sperm and also the use of the plastic cover [condom] is permissible with or without the consent of man or woman but the use of anything that may affect the [health] of husband or the uterus of wife is prohibited regardless of whether they consent to it or not. (Verbatim translation from the text given in the Ministry of Health and Medical Education, 2000, P. 57).

3.3 Suspension of the Family Planning Program

From the foregoing account, and the numerous *fatwas* obtained during the first two years after the revolution, it would appear that during this period both the top level managers responsible for the administration of the health services of the IRI, and at least some of their middle level technical administrators, were deeply concerned with the population problem and made several attempts to keep the FPP alive. This impression is supported by the fact that the draft outline of an unpublished national plan concerning problems facing the country prepared in 1981 by the office of the deputy prime minister in charge of revolutionary projects, has listed rapid population growth among the major problems facing the revolutionary regime. The numerous attempts to get *fatwas* from as many *ayatullahs* as possible, also may be taken as indicative of the presence of nagging doubts in the minds of some middle-level political and religious leaders as well as program managers and field workers,

concerning the permissibility of contraception or the place of the family planning program in the order of priorities of the revolutionary regime.

With the increasing radicalization of the IRI regime after the American hostage issue, and the resignation of Bazargan's caretaker government (which had been criticized as being liberal by both rightist and leftist forces involved in the revolution), the situation started to worsen. After the sudden Iraqi invasion in September 1981, and the start of the eight-year war, population and family planning would seem to have lost their priority. In fact, the political and psychological atmosphere created by the Iraqi invasion may have been one of the major factors that transferred the issue of a large population and its rapid growth into a matter of comparative advantage rather than liability.

Following the hostage crisis, the young IRI regime had been formally blockaded by the United States and had lost almost all international sympathy and support. While Iraq was receiving generous financial aid from most Arab countries, and thus had no problem in buying modern weapons from its traditional arms suppliers, France and the Soviet Union; Iran was forced to use its dwindling oil resources to buy spare parts for its largely American made weapons and aircraft, from international black markets, or to depend on untested Asian arms producers and suppliers (China and North Korea) for meeting its increasingly crucial need for modern weapons. Under the circumstances, the creation of a sizeable volunteer army ready to fight for the revolution and the country seemed vital. The universal rationing program, introduced as part of the national war effort, also provided some tangible economic incentives for having more children. Under this program, all household members, regardless of age and sex, were entitled to relatively generous coupons, which covered almost all their basic needs, as well as such modern consumer goods as radios, televisions, carpets, refrigerators and washing machines. Having a new baby meant an additional share of the rationed goods. Thus, couples as well as the government had good reasons to prefer high fertility and large families.

As a reflection of the changed priorities, it may be of interest to note that a preliminary draft of the First Five Year Plan of Development, prepared in 1984, does not even mention population growth as a problem. This is despite the fact that around the same period, one of the pro-family planning technical staff of the ministry of planning and budget had tried to keep the debate on family planning alive, by putting together available arguments for permissibility of contraception by Islamic writers, including most of the above mentioned *fatwas* by Imam Khomeini and other grand ayatollahs (Ahmadi, 1984).

3.4 Continued Provision and Use of Family Planning Services

Contrary to the general belief outside Iran, the suspension of the official family planning program after the revolution did not mean the total discontinuation of family planning services and supplies by either the public or the private health sector. In fact, despite the abolition of the FP department, and the discontinuation of all IEC activities, the provision of FP services by the MCH facilities run by the ministry of health (renamed ministry of health and medical education [MOHME] in 1986), and the private health clinics and practitioners, were allowed to continue throughout the period 1979-1989. As evidence of the continuation of family planning services, it is worth noting that the '*Statistical Yearbook of Iran*', published annually by the Statistical Center of Iran (SCI), includes full page tables of the family planning services rendered by the 'Office for Family Health and Family Planning' of the MOH for most of the years between 1981-1988. A similarly long list is given in the *Annual Report* of the MOHME for 1992. A summary of these statistics is given in Table 1.

In view of the existence of a relatively well developed private health care sector, particularly in the urban areas of Iran, statistics collected by the MOHME on publicly provided services and contraceptives, most likely under-represent the level of contraceptive methods and services that were actually available to Iranian couples during this period. Nevertheless, the huge number of women who have used public health clinics for family planning services between 1979-1988 bear witness to the magnitude of the demand for birth control during this period. These figures will stand out more clearly if we compare them with the estimated number of women using government provided FP services in 1975 (854,000, or 16.5 percent of married women aged 15-44, Nortman and Hofstatter, 1976, Table 23, P. 90) and 1978 (1,358,000, or 24.3 percent, Nortman and Hofstatter, 1979, Table 23, P.159).

As another reflection of the continuing demand for contraceptives, it may be of interest to note that a survey conducted by the evaluation department of the IRI Broadcasting Organization (IRIB) on a sample of married couples aged 20+ years in 1983, found that the majority of families surveyed were in favor of limiting the number of children. This was in spite of the explicitly pro-natalist policy adopted by the government after the Iraqi aggression and the beginning of the eight year war in September 1981. Interestingly, despite the relatively generous material incentives for large families offered by the war-time rationing system, most of the respondents interviewed by the IRIB survey had cited economic costs of raising children as their main motive for family limitation (IRANDOC, 1992, p.66).

The findings of the first large-scale family planning Knowledge, Attitude, Practice (KAP) survey conducted by the ministry of health and medical education in 1989 (Malekafzali, 1989), shortly before the official inauguration of the FPP, also confirms the conclusion that the public demand for, and practice of, family planning had been far from negligible during the preceding decade. According to this survey, almost two-thirds (64 percent) of urban and one-third (31 percent) of rural women interviewed, reported to be using a family planning method. However, just over one-half (52 percent) of urban women, but two-thirds of rural women were using a modern method. The contraceptives used included the pill, condom, and IUD, which were used by 60 percent, 23 percent, and 17 percent of urban and 83 percent, 6 percent, and 12 percent of rural women, respectively, using a modern contraceptive. The relative prevalence of these effective methods among all women who claimed to be practicing family planning was 68 percent, 18 percent, and 14 percent for pill, condom, and IUD, respectively. Thus, just under one-half (49 percent) of all married women aged 15-49 years, were using a family planning method, 28 percent of them a modern one, in 1989 when birth control had just been publicly endorsed by the IRI authorities and there was barely an official FPP. Among reasons given for not using a contraceptive by women surveyed in 1989, “religious prohibition” was mentioned by only about one percent.

The significance of the 1989 findings will become more apparent if one compares them with data for the final years of the pre-revolutionary period. According to the official statistics submitted to the Population Council, in 1978 women using the pill and IUD, accounted for 86.3 percent and 9.3 percent of all users, and 20.9 percent and 2.3 percent of married women aged 15-44 (Nortman and Hofstatter, 1979, Table 23, P.159). A similarly low level of contraceptive prevalence is also revealed by the Iran Fertility Survey (IFS), the last and probably the most reliable source of information on the performance of the Iranian FPP carried out in 1977 (SCI, 1987). According to the IFS, over one-third (36 percent) of all currently married women were using a contraceptive. The rates of current contraceptive use were, however, much lower for the rural (20 percent) and illiterate (25 percent) couples, those aged below 20 years (16.5 percent), and those with lower parities (31 percent). Among rural women with three or fewer children, only 10 percent were using a contraceptive.

4. 1986 Census and Policy Reversal

As noted above, shortly after the revolution, the young IRI fell victim to open military invasion by Iraq, and the country had to suffer an eight-year modern war, as well as the international economic embargo imposed by the United States. Under the

circumstances, population size was bound to emerge as a measure of ‘comparative advantage’ and as a major propaganda issue, if not a real asset. The Iranian leadership went out of their way to present the relatively large size of Iran’s population (estimated as 40 million) as a major source of military strength and national security. Thus, the honorific title of “the 20-Million Man Army”, was coined to refer to the huge number of young, middle-aged and old men (and women), who had voluntarily taken arms to defend their country against Iraqi aggression.

4.1 Initial Euphoria over the Huge Population Growth Rate Revealed by the 1986 Census

In this context, it was not surprising that many of the top leadership of the country did not hide their sense of relief and joy when the first results of the 1986 census were published. According to this census, the population of Iran had increased at the staggering rate of 3.9 percent per year since 1976, and stood at above 49 million. The incumbent prime minister (Architect Mir-Hossein Moosavi) openly hailed the enormous growth of the population as a ‘God sent’ gift. Even the more realistic speaker of the Islamic assembly (parliament) – and later president- Hashemi-Rafsanjani, hailed the unexpectedly high population growth rate, revealed by the 1986 census, and claimed that Iran could and should aim at a population size of 200,000,000.

4.2 Gradual Appreciation of the Implications of the 1986 Census Results

As the detailed results of the census became available, and the leadership of the IRI realized their immediate and long-term implications for the war-shattered economy of Iran, the situation changed from one of public euphoria to private concern. This was not unexpected in view of the fact that by this time the IRI had depleted almost all of its foreign exchange reserves inherited from the old regime and, due to intensified Iraqi air attacks on oil installations and tankers, her capacity for oil production and export had been seriously curtailed. Other sectors of the economy and the industrial infrastructure built during the preceding three decades had also suffered enormously, due to continuous Iraqi air attacks and loss of access to spare parts caused by the American imposed embargo.

The Plan and Budget Organization (PBO), the main government agency responsible for the overall monitoring of government revenues, expenditures, development efforts, and allocation of national resources, was well aware of the vulnerable state of the economy and its inability to bear the burden of a rapidly rising, young population. The PBO was at the time working on the preparation of a new version of

the long-shelved First Five-year Plan of Development, which was expected to be implemented immediately after the cessation of hostilities. Partly in preparation for this plan and partly to get an estimate of the damages suffered by the Iranian economy during the 8-year war, the PBO had collected a vast amount of data on a variety of issues, including employment and demand for basic services.

4.3 Preparation for the Adoption of a Population Policy

This evidence, which was later published as a supplement to the FFYDP Bill (PBO, 1989), went a long way in alerting the leadership of the IRI to the fact that the nation's dwindling resources were insufficient to meet the high cost of war, as well as to provide the variety of social and welfare services envisioned by the IRI constitution. Ministers responsible for such basic services as agriculture and food production, health, and education, as well as the technical staff of the PBO, took every opportunity to call attention to the inevitably grave consequences of unchecked population growth, and to emphasize the need for a population and birth control policy.

In response to the evidence and arguments presented by the PBO and other economic experts, in February 1988, Prime Minister Moosavi sent a secret circular to all ministries and government departments asking them to carefully consider the impact and implications of the high rate of population growth revealed by the 1986 census in preparing their proposals for the FFYDP. In March, 1988 a committee was organized in the ministry of plan and budget, consisting mostly of the technical staff of that ministry and a few academic demographers, to prepare for the organization of a population seminar. To facilitate the work of the conference committee, the prime minister issued a memorandum to all government ministries declaring that the government of the IRI was "reconsidering the issue of population growth".

4.4 The First (Mashhad) Seminar on Population and Development, 1988

Having convinced the president, the prime minister, and heads of the legislative and judiciary branches, and other top level policy makers of the urgent need for population control, the PBO and the MOHME saw the necessity of launching a carefully designed publicity campaign to convince other levels of the policy elite, as well as the general public, of the need for a national population policy and birth control program. To this end, a much publicized three-day "Population and Development Seminar" was held in Mashhad city in September 1988. It was opened with a special message from the prime minister and the ministers of planning and budget and health presented detailed analyses of the implications of unchecked population growth for the socioeconomic development of the country, as well as for the health

and welfare of its citizens. Academic demographers as well as experts from such ministries as agriculture, education, economy and health used the opportunity to stress the need for planning and population control as well as other national resources.

The resolution approved at the end of the seminar made a number of specific recommendations regarding the need for, and means of, population control and family planning. The seminar, in effect, publicly declared that the rate of population growth in Iran was too high and that, if left unchecked, it would have serious negative effects on the national economy and the welfare of the people. The participants strongly urged the government to include population issues in policy making. At the end of the Mashhad Seminar, the minister of health and medical education reiterated at a press conference, the late Imam Khomeini's *fatwa* regarding family planning, and announced that a family planning program would be established. Almost simultaneously, the prime minister went out of his way to declare that "birth control" was a "destiny factor" for Iran, and invited women to prevent unwanted pregnancies by seeking help from publicly run health clinics and health houses around the country. Most of the recommendations of the Mashhad seminar were taken into consideration in the preparation of the First Five-year Plan of Development (FFYDP) launched in 1989. More important, as a result of this seminar and its wide coverage by the government controlled national media, the need for a national population policy and an active family planning program became a legitimate topic for public discussion.

4.5 The Isfahan Seminar on Islam and Family Planning for the Top Clergy, 1989

The Mashhad Seminar on Population and Development was a predominantly professional and technocratic gathering, and had thus failed to get the influential clergy (*ulama*) outside the central government involved in its deliberations. To make up for the under-representation of the traditional clergy at this seminar, and to ensure that the proposed population/family planning policy would enjoy their support, family planning was singled out for special consideration and discussion by a group of eminent clergy and physicians attending a seminar on "Islamic Perspectives in Medicine" organized by the Mashhad University of Medical Sciences in February 1989. This was followed by another seminar explicitly dealing with "Islam and Population Policy", which was held in Isfahan in April 1989 and brought together a large number of eminent clergy. As an indication of the public interest in population and family planning stimulated by these seminars, it may be of interest to note that, according to one source, over one hundred articles were devoted to the topic by the major Tehran newspapers between 1988-1990 (Ayazi, 1994). Not all of these were,

however, in favor of the revival of the program. A contributor to the *Jumhuri Islami* newspaper, which was known for its combination of a rightist anti-liberal position with leftist economic policies, saw the hand of western imperialism behind the offer by the UNFPA to partially fund the proposed FPP of Iran (Ayazi, 1994).

4.6 Signs of Persisting Doubt and Opposition to Policy Change

Despite these preparations, some hard-line, but influential clergy, both within and outside the regime, were not convinced with either the urgency of the population problem, or the consistency of public investment in family planning with the basic tenets of Islam. To overcome these objections, the government had to take the issue to the then newly established “Expediency Council to Safeguard the Interests of the [Islamic Government] System”. With the approval of the Expediency Council, family planning and population control became legitimate areas of active involvement by the government. Despite these careful preparations, some conservative clergy outside the government have continued to question the legitimacy of family planning, calling it “a heavy blow to Islam” (Tehrani, 1994).

4.7 Legalization of Family Planning

In December 1988, the high judicial council had issued an official declaration reaffirming that “there is no Islamic objection (or legal barrier) to family planning.” This official pronouncement removed all potential judicial impediments, and paved the way for the initiation of the FPP by the MOHME. The level of commitment of the government to the FPP, is well reflected in the fact that in early 1989 Prime Minister Moosavi announced that “none of the government’s development and welfare programs are likely to succeed without a serious family planning program.” He explicitly referred to the need for a solution to the population problem and referred to figures on Iran’s population growth rate as ‘alarming’ (Moosavi, 1989).

5. Revival of the Family Planning Program

Thus, the way was paved for the reintroduction of a population policy and the revival of the FPP. Several outstanding religious leaders spoke out in favor of population control and Friday prayer leaders were instructed to discuss the issue as part of their weekly sermons. The basic idea was, in principle, approved. However, in view of the existence of certain objections within the Islamic consultative assembly (parliament), the government decided to withdraw the family planning bill that had been submitted to the parliament. Instead, the basic ideas of the population control and family planning were included in the FFYDP bill. Thus, the main elements of a national family planning policy were formally adopted and ratified in

1989 when the First Socioeconomic Development Plan (FFYDP) was approved by the Islamic consultative assembly.

The FFYDP set specific, although modest, targets for the FPP. These include the reduction of the total fertility rate of Iranian women from 6.4 in 1986 to 4.0 by the year 2006, and the decrease of the natural rate of growth of the population from 3.9 percent to 3.2 percent by the end of the Plan (1993), and to 2.3 percent by the year 2006. To reach these goals, the coverage of family planning services was to be extended to 24 percent of the potentially fertile women by the end of the FFYDP (1993).

6. Organization of the Revived Program

6.1 Designation of the Ministry of Health and Medical Education as the Parent Institution

In line with the above mentioned goals, the Ministry of Health and Medical Education (MOHME) was given the mandate, and almost unlimited resources, to provide free family planning services to all married couples, to promote small family size norms and to help individual couples keep their family size at a reasonably low level (two to three children). Several other ministries, as well as the Islamic Republic of Iran Broadcasting Organization (IRIB), were required to closely cooperate with the ministry of health in promoting these objectives. A separate population and family planning directorate was eventually set up within the MOHME in 1991, under the overall supervision of the deputy minister for public health, whose office is also in charge of the primary health care (PHC) and MCH services.

6.2 Provisions for Inter-Sectoral Cooperation

To further ensure the inter-sectoral cooperation needed, an interdepartmental Family Limitation Commission was set up by a cabinet decree passed in September 1990. Headed by the minister of health, the commission was to include the ministers of health, education, higher education, Labor and Social Affairs, Culture & Islamic Guidance, and Plan and budget, as well as the head of the Civil Registration Organization of the ministry of interior. The main functions of the Commission were to:

monitor, supervise and coordinate all government policies and activities bearing on the control of the population growth, to report on steps taken by member organizations, to make recommendations on the formation of a High Council on Family Planning and its functions

and membership, and to review proposals made for changing laws and regulations that may encourage or inhibit population growth.

A remarkable feature of this decree is the attention it has given to such 'beyond-the-family planning' measures as the reduction of infant mortality, facilitation of women's education and employment, and extension of social security and retirement benefits to all parents so that they will not be motivated to produce many children as a source of old age security and support.

6.3 Major Goals of the Revived Program

The FPP, officially inaugurated in December 1989, had three major goals: (1) to encourage a spacing of three to four years between pregnancies; (2) to discourage pregnancy for women aged below 18 and above 35 years; and (3) to limit family size to three children. To remove continuing doubts regarding the acceptability of sterilization, in 1990 the High Judicial Council declared that sterilization of men and women was not against Islamic principles or existing laws. This declaration was essential for the promotion of sterilization as a means of birth limitation, by both the MOHME and the private health sector. It may be of interest to note, that a similar opinion in favor of sterilization had been expressed by the late Dr. Mohammad Bahishti (1974), one of the intellectual leaders of the Islamic revolution and the first head of the judiciary system of the IRI in the Rabat Conference on Islam and Family Planning (1971). The same position has been taken by Sheikh Mohammad Mahdi Shamsuddin (1974), one of the major leaders of the Shiite community of Lebanon, who has been closely associated with the religious leaders of Iran both before and after the revolution (Omran, 1992).

6.4 The 1993 Family Planning Law

The Family Planning Bill, which had been prepared in 1989, was finally ratified by parliament in May 1993. The ratification of this bill not only removed most of the economic incentives for high fertility and large families, but it also provided the necessary legal basis for the population control policy and FPP envisaged as part of the First Five-year Plan of Social, Economic and Cultural Development. The Family Planning Law has also taken due notice of the critical importance of such measures, as the creation of educational and employment opportunities for women, ensuring the survival of new born children through improved MCH services, and extension of the coverage of the social security system.

According to the first article of this law, all social benefits and privileges (including family allowances, social security/health benefits, and maternity leave), allocated according to the number of children, will not include the fourth and later children

born one year after the passage of the bill. The second article obliges the ministry of education to include material dealing with population and maternal and child health in the formal curricula and textbooks of all schools. It also requires the ministries of higher education and health, and medical education to add a two-credit course on population and family planning to the formal curriculum of all university departments. The ministry of culture and Islamic guidance is required to ensure the active cooperation of all newspapers, filmmakers and other artists in raising public awareness regarding the population policy and FPP. The third article of the law obliges the IRIB to develop, commission and broadcast radio and television programs aimed at raising public awareness on maternal and child health and population. According to the fourth article, expenses incurred by different organizations, specified in Articles 2 and 3, are to be covered by savings made through the application of the first article of the law. The Parliamentary Bill, concerning the Second and Third Five-year Development Plans of the IRI, passed in 1994 and 1999 have reiterated the government's commitment to population control and family planning.

6.5 IRI and ICPD: From Family planning to Reproductive Health

In view of the foregoing developments and its commitment to population control and family planning, the government of the IRI welcomed the opportunity offered by the International Conference on Population and Development (ICPD) to share its conception of, and achievements in, family planning and reproductive health with other nations attending the conference (Cairo, 1994). The open discussion of various aspects of reproductive health, with an affably dynamic old cleric acting as the self-appointed leader of the IRI delegation, as well as the enthusiastic participation of the *chador*-wearing women members of the delegation, most of whom were well trained medical specialists, did not fail to impress even the most skeptical observers regarding the commitment of the IRI to family planning and reproductive health.

This did not mean that the IRI was ready to accept all the points included in the agenda and resolutions of the ICPD. While proving more progressive than the Catholic church, and many other religious organizations, with regard to the basic ideals of reproductive health, particularly those concerning the health of women and their right to use contraceptive methods for pregnancy prevention within socially sanctioned marital relations, the IRI delegation openly disagreed with several other recommendations included in the ICPD agenda. Among these were:

The recognition of abortion as a legitimate form of contraception;

The re-definition of the concept of 'family' to accommodate non-marital unions;

Replacement of the term 'couples' by the term 'individuals';
Tacit approval of prostitution by condemning only 'involuntary prostitution';
Recommendation of the universal exposure of all children to 'sex education' programs at an early age (as contrasted with 'an appropriate age');

6.6 Areas of Reproductive Health Emphasized

The major areas of reproductive health included in the national position paper of the IRI, and enthusiastically promoted by the their delegation included:

1. Safe motherhood, including antenatal, perinatal and postnatal care;
2. Family planning aimed at enabling married couples to make informed decisions regarding the number of children they want and to prevent unwanted pregnancies;
3. Treatment of disorders resulting from unwanted pregnancies (including therapeutic abortion when medically indicated to save the life of the mother);
4. Prevention, care, and treatment of sexually transmitted diseases, including HIV and AIDS;
5. Promotion of the reproductive health of adolescents, particularly adolescent girls, through education, information and premarital counseling;
6. Enhancement of the nutritional status of mothers and children;
7. Prevention of violence against women;
8. Screening of all women for cancers of the reproductive system and their timely diagnosis and treatment;
9. Promotion of healthy sexual relations within marital unions;
10. Care of newborn infants and young children.

Thus, in principle, the concept of reproductive health adopted by the IRI covers the whole gamut of a life-span reproductive curve extending from birth to old age. Along this curve, preventive and curative services are expected to be provided for infants, pre-school children, children attending primary school, adolescents attending high school, premarital counseling for people getting married, antenatal care of pregnant mothers and their unborn children, safe delivery, postnatal care for mothers and children, free family planning counseling and services, promotion of breast-feeding, management of problems associated with unwanted or problematic pregnancies/births, prevention and treatment of infertility, management of reproductive health, problems of menopausal women, and specific problems of the aged.

Among the groups and problems listed above, those concerning the health of mothers and children, and the provision of contraceptive supplies and services, have received much more attention than others. As a result, the past decade has witnessed considerable extension in the coverage of vaccination and other preventive health services, and remarkable advances have been made in reducing infant, child, and maternal mortality and raising contraceptive prevalence rates. Thanks to the special attention paid to the extension of the largely rural-based primary health care network, the Iranian public health system has been particularly effective in meeting the basic health needs of the traditionally neglected and deprived rural population.

7. Achievements of the Revived Program

Since its official revival in 1989, the FPP of Iran has taken great strides towards its main objective of offering eligible couples with a variety of family planning services and contraceptive devices. Its relative success in promoting contraceptive use can be assessed through a study of contraceptive prevalence rates, and an analysis of the basic characteristics of the population covered. The annual KAP surveys carried out by the MOHME between 1989-1997, provide a wealth of data on these issues which have not been adequately analyzed. A few independent surveys carried out by individual researchers not affiliated with the MOHME have generally confirmed the results of MOHME surveys. The impact of the program on the fertility rate of the population has also been monitored through periodic data collected by the MOHME, as well as censuses and surveys conducted by the Statistical Center of Iran since 1986. This evidence is briefly reviewed below.

7.1 Surprisingly Sharp Rise in Contraceptive Prevalence Rates

The total contraceptive prevalence rates of rural and urban segments of the population shown by two of the national surveys carried out since 1990 are summarized in Table 2. The table also includes the contraceptive prevalence rates for 1977 and 1989. These provide a good basis for comparing the achievements of the program three years after its inauguration, with the contraceptive use rates that prevailed during the last years of the pre-revolutionary period (1977), and shortly before the revival of the program in 1989.

From Table 2 it would appear that by 1992, that is, only three years after the official revival of the FPP, almost two-thirds of married women aged 15-49 were practicing some form of contraception. The overall contraceptive prevalence level revealed by the 1992 survey (65 percent), is not only respectably high with reference to international standards, but it is almost twice the level of coverage (37 percent), shown by the Iran Fertility Survey in 1977, that is, ten years after the initiation of the

earlier FPP. Five years later, according to the 1997 KAP survey, the CPR had risen to almost 75 percent, which is about twice the level achieved by the pre-revolutionary program in 1977.

7.2 Narrowing of Urban/Rural Gap in Contraceptive Use

More important, according to the 1977 survey, the CPR for urban women (53.8 percent) was almost two and half times that of rural women (19.9 percent). In other words, for every rural woman using a contraceptive, there were 2.7 urban women. In contrast, for 1992 the rural-urban difference in contraceptive prevalence was only 23 percent. This means that, in 1992, for every rural woman using a contraceptive there were only 1.4 urban women. Five years later, according to the 1997 KAP survey, the urban-rural gap had shrunk to only 12 percent. This was mainly due to the fact that a much larger proportion of the urban couples (23 percent), as compared with the rural (nine percent), were using the traditional method of withdrawal which is not encouraged by the program.

Such an outstanding achievement within the limited time period of three to eight years since the inauguration of the program is surprising indeed. But, as indicated by the 1989 survey, the revived program was not starting from scratch. Indeed, even before the program had been officially inaugurated, almost fifty percent of eligible couples had in fact been using some form of contraception. A series of independent surveys carried out by a joint team of Iranian and French researchers in Shiraz county of Fars province in 1996-1998 (Agha et al, 1997; Mehryar et al, 1997; 1999), revealed similarly high contraceptive prevalence rates in both urban and rural areas.

7.3 Increased Use of Modern Contraceptives, Particularly Tubectomy

Some traditional methods of contraception, particularly *coitus interruptus* (withdrawal), have been known and practiced in Iran since time immemorial. The use of this method (under the juristic title of *azl*), has been widely discussed (and mostly approved) by Muslim jurists. There are also anecdotal references to its use in classical Persian literature. From a story narrated by the famous Iranian Sufi poet Jalal-ud-Din Rumi (14th century AD), it would appear that Iranian women were sometimes instructed to ensure the effectiveness of the method by monitoring the eyes of their male partner and by withdrawing as soon as they started to change color! The method would seem to have survived the discovery of modern methods and to be still widely used. As indicated in Table 2, almost one-quarter of urban couples, as compared with about 10 percent of the rural, have reported using a traditional method (mostly withdrawal) in all four surveys conducted since 1992. Although there are signs of a slight decline in the proportion of couples using the

traditional method since 1992, the method continues to account for a large share of contraceptive users. As late as 1997, almost one-sixth (16.9 percent) of all couples were depending on the traditional method (withdrawal) for family planning and it constituted the second most commonly used method (after the pill).

7.4 Provincial Variations in Contraceptive Prevalence Rates

There are interesting provincial differences in terms of both overall CPR and its modern/traditional mix. The data for 1997 (presented in Table 3) clearly demonstrates these differences. In rural areas, total contraceptive prevalence rates vary from over 80 percent (Yazd, 85.3 percent; Semnan, 84.6 percent; Isfahan, 81.8 percent) to below 50 percent (Hormuzgan, 42.5 percent). Other provinces with relatively low contraceptive prevalence rates in rural areas are Kohgiluyeh-Boyerahmad (54.2 percent), Sistan-Baluchistan (55.8 percent), Khuzistan (57.8 percent), and Bushehr (59.1 percent). Total contraceptive use rates for urban areas vary within the much narrower range of 87.2 percent (in Yazd) to 68.2 percent (in Sistan-Baluchistan). In fact, in twelve of the 26 provinces the CPR of the urban couples is above 80 percent and in only one province (Sistan-Baluchistan) it falls below 70 percent. Even in the latter case, over two-thirds of couples are found to be using a contraceptive. As expected, in all provinces urban women have higher overall contraceptive use rates than the rural. This is, however, mainly due to the higher prevalence of the traditional method (withdrawal) among the urban couples. In all 26 provinces, a larger proportion of urban women has reported using traditional methods than the rural.

7.5 Modern Method Mix

The most commonly used modern methods in 1997 were the pill (20.9 percent), IUDs (8.3 percent), condoms (5.4 percent), injectables (2.9 percent), and Norplant (0.5 percent). In addition, over 15.5 percent of women, as compared with only 1.9 percent of men, had undergone sterilization. The mix of modern methods would seem to be largely determined by the MOHME policy and shows some interesting variations across urban-rural areas and over time. These are shown in Table 4, which gives the ratio of women reporting the use of different modern methods to all modern method users in 1992, 1994 and 1997. For this reason, the figures given in Table 4 are different from those discussed above which referred to all contraceptive users, regardless of whether they were using modern or traditional methods. Table 4 also presents changes in the relative prevalence of various modern methods among women using a modern method between 1992-1994 and 1994-1997. It would appear that between 1992-1997, the share of pill and condom users have declined noticeably among both urban and rural users of modern methods. The share of IUD users

among urban women declined noticeably (21.3 percent to 17.0 percent) between 1992-1994, but went up again (to 19.3 percent) between 1994-1997. In the case of rural women, there was some rise (7.5 percent to 9.3 percent) in the proportion of IUD users between 1992-1994, followed by a decline (from 9.3 percent to 8.4 percent) between 1994-1997. Both time periods witnessed a rise in the share of sterilization in both urban and rural areas. The proportionate share of women undergoing tubectomy has risen steadily among both urban (16.3 percent to 27.5 percent), and rural women (18.0 percent to 29.1 percent). A similarly upward trend is also noticeable for male sterilization in both urban (2.7 percent to 4.3 percent), and rural (1.0 percent to 1.8 percent) areas. A marked growth in the proportion of women using injectable contraceptives between 1994 and 1997 is mainly due to the experimental introduction of these methods into the program after 1993. The growth of this method among rural women is a reflection of their dependence on the official program or the public health sector.

7.6 Characteristics of Contraceptive Users in General

Contraceptive use behavior, like most other aspects of human behavior, is known to vary according to such major socio-demographic characteristics as age, sex, urban-rural background and education. Data on some of these variables are available for the 1977 Iran Fertility Survey and the 1992 KAP survey. They are presented in Table 5. Comparing the data for 1977 and 1992, it would appear that the revived FPP of Iran has largely reduced the impact of factors such as rural residence, age, parity and literacy as major barriers to contraceptive use. Nevertheless, as indicated earlier in Table 3, there are significant regional variations in contraceptive acceptance and use, which deserve closer attention. Factors underlying such regional variations are not usually addressed by routine KAP surveys.

7.7 Characteristics of Women Using Specific Methods

An analysis of the independent surveys recently carried out in Shiraz city (Agha et al, 1997; Mehryar et al, 1997), sheds further light on the socio-demographic characteristics of couples using different contraceptives. These are presented in Table 6. From data presented in Table 6 it would appear that while overall contraceptive use rate varies little by such major characteristics as education, labor force participation, and place of birth, these variables play a much more important role in determining the prevalence rate of some specific methods. Better educated women are thus more likely to use an IUD, a condom, and withdrawal than are those with lower levels of education. The latter, in turn, are much more likely to undergo tubectomy. On the other hand, women born in rural areas, who were living in Shiraz

city, were much more likely to undergo tubectomy, but less likely to use condoms and the traditional method (withdrawal) than were women born in Shiraz city.

7.8 Public vs. Private Sources of Contraceptive Supply

In addition to the extensive public health and primary care services offered by the MOHME, the Islamic Republic of Iran has a well-developed private health sector. The private sector is particularly strong in urban areas and may be credited with shouldering most of the responsibility for maintaining family planning services in urban areas when there was no national program. According to MOHME surveys, about 60 percent of contraceptive users obtain their supplies from family planning facilities, clinics, and hospitals run by the MOHME. The role of the private sector is also underlined by data from the nationwide survey on the socio-economic characteristics of Iranian households conducted by the Statistical Center of Iran (1995), which revealed that some 55 percent of married women reporting contraceptive use had received their supplies from the public sector. Quite a similar picture is revealed by Shiraz city (1996), the findings of which are presented in Table 7.

According to the later Shiraz county (rural areas) survey (1997), however, the overwhelming majority of rural couples cite the rural health houses, which form the backbone of Iran's famous primary health care system, as their only and most trusted source of contraceptive supplies and services. These easily accessible, low cost, community based health houses, along with their urban counterparts, have played a major role in the provision of family planning and other health services that have led to the narrowing of the urban-rural gap in contraceptive prevalence and other health indicators in the IRI. Because of their close and continuous contact with their clients, the health workers of the public sector would seem to have been more effective in educating their clients as to the correct mode of using such contraceptives as the pill (Table 8).

8. Demographic Impact of the Family Planning Program

As indicated above, the main impetus for the revival of the FPP in Iran was the extraordinarily high level of fertility and population growth rate revealed by the 1986 census. The FFYDP which provided the program with its initial legal coverage and resources had, in fact, set a number of short-term demographic objectives to be accomplished during its own five-year life as well as longer term goals to be attained later. The program has thus been deeply concerned with its impact on the fertility and population growth rates. Therefore, it is logical to ask if, and to what extent, it has been successful in reaching this major goal.

8.1 Cumulative Sources of Data on Fertility Changes

Fortunately, there is a mass of data, of varying quality and coverage, bearing on the rapid demographic transition that has taken place in Iran over the past two decades. The main sources of data consist of the series of fertility surveys conducted by the MOHME since 1988, the combined census/survey of 1991, large scale population surveys carried out in 1991-1993, the total population census conducted in 1996 by the SCI, and routine statistics on vital events collected by the Civil Registration Organization (CRO). A longitudinal Population Growth Estimation Project launched in 1998 is expected to provide more precise data (SCI, 1999). All three sources are plagued by certain technical and methodological deficiencies that have forced academic demographers to take them with more than a fair share of skepticism. Nevertheless, all three sources suggest a drastic reduction in the fertility rate of Iranian couples since its height in the mid-1980s. This is clearly reflected in a sharp fall in crude birth rates (Table 9), changes in age-specific fertility rates (Table 10), as well as much reduced, general and total fertility estimates (Table 11).

8.2 Converging Evidence of Fertility Decline Since 1986

The first indications of a noticeable decline in fertility were revealed by the 12 round panel survey on the socio-economic conditions of Iranian households conducted in 1987-1989 (SCI, 1992; Mehryar and Gholipour, 1995b). This trend was neatly supported by the findings of the combined census/survey carried out in 1991, which indicated an annual growth rate of 2.5 percent for the period 1986-1991, a 64 percent decline in comparison with the growth rate of 3.9 percent revealed by the 1986 census. Further analysis of the 1991 data, indicated that the total fertility rate of Iranian women had declined from 7.1 to 4.9 during the preceding five years (SCI, 1998, Table 10.1.), although other estimates of the TFR level implied by the 1991 census/survey range from 4.7 (Mirzaie, 1998), to 6.3 (Bulatao and Richardson, 1994, Table 3). Judging by this evidence, the revived FPP would seem to have reached all of the demographic targets set for it in the FFYDP, before the Plan had in fact been fully implemented!

Because of the unexpectedly sharp decline in the population growth rate indicated by the 1991 census/survey, and certain anomalies in the age structure of the population enumerated, most demographers, both within and outside Iran, received these results with some skepticism. Even PBO, the parent organization of the SCI, flatly refused to accept the results of the 1991 census/survey as a basis for the projection of population trends during the period of the second plan (1993-1998), which was then being developed (PBO, 1994). However, large-scale annual population surveys conducted by the Statistical Center of Iran (SCI) in 1992 and 1993 indicated a

continuation of the downward trend revealed by the 1991 census/survey. These were supported by smaller scale, but nationally representative, surveys undertaken by the MOHME, as well as a new set of panel surveys on the socio-economic conditions of Iranian households conducted by the SCI (1992-1995). There was also growing evidence of a sharp decrease in the number of births registered by the CRO. Using the latter data, Ladier-Fouladi (1996) has noted a marked drop (from 43.4 to 30.4 per thousand) in the crude birth rate of Iran, between 1986-1991. The corresponding decline in total fertility estimates is from 6.2 to 4.2.

8.3 1996 Census and Convincing Evidence of More Precipitous Fertility Decline Since 1991

The results of the 1996 census indicated an even more precipitous decline in fertility than the 1991 census/survey. Comparing the population enumerated in 1996 (just over 60 million), with those counted in 1986 and 1991, it is found that the total population of Iran had grown at a rate of 2.46 percent between 1986-1996, and at a rate of only 1.47 percent since 1991. In the absence of any evidence of massive out-migration, or a rise in mortality rates between 1986-1991 or 1991-1996, it is obvious that the observed drop in population growth rate between 1986-1996 was mainly due to a sharp drop in fertility. This inference is clearly supported by the marked decline in the number of children aged 0-4 in 1996 census (6,163,024), as compared with the size of the same age group enumerated in 1991 (8,141,285) and 1986 (9,044,823). A comparison of these figures indicates a 24 percent and 32 percent drop in the number of children born during the five and 10-year periods preceding the 1996 census. The fertility indices officially calculated on the basis of the 1996 census (TFR=2.96, CBR=20.5, General Fertility Rate=84, and Gross Reproduction Rate=1.44), clearly reflect this decline. The TFR (2.96) for 1996 is only 42 percent and 60 percent, respectively, of those for 1986 (7.1) and 1991 (4.9). In other words, the fertility rate of the total population of Iran has dropped by over 58 percent since 1986 and by 40 percent since 1991. The TFR revealed by the 1996 census is only slightly higher than the TFR (2.6) revealed by the large scale KAP survey conducted by the MOHME in 1996. The latter level of fertility is closely in line with the high CPR indicated by the same survey.

Further analyses of the 1996 census results by Mehryar and Tabibian (1997) have revealed several interesting points, which support the validity of the data. First, an examination of the age-specific fertility pattern revealed by the more detailed fertility data collected on a one percent sample of the enumerated population, indicates a remarkable fall in the fertility of all age groups. Secondly, the fertility decline is observable in both urban and rural areas of the country. Thirdly, it was not

limited to any special region or province. Tabibian and Mehryar (1997) have used an econometric model to explore the relative contribution of such major socio-economic factors as literacy, urbanization, labor force participation of women, access to piped water, gas, telephone, and household expenditure to provincial differences in fertility level between 1976-1996. Their findings lend further support to the conclusion that the observed decline in fertility implies a genuine change in fertility behavior which, surprisingly, does not seem to have been much affected by the contraceptive prevalence rates attributable to the revived FPP. The latter finding would seem to be largely due to the fact that a considerably higher proportion of couples in urban areas and the more developed provinces (with very low fertility levels) have continued to rely on the non-program related withdrawal method for controlling their fertility. A recent analysis of KAP data in terms of male and female methods also supports this finding. Couples from urban and better developed provinces with very low fertility levels are particularly likely to use the three inherently male methods of vasectomy, condoms and withdrawal, the great majority depending on the last mentioned method (Mehryar et al, 2000).

Using own-children method of fertility estimation, Abbasi Shavazi (2000) has studied provincial variations in fertility over the period 1976-1996. His findings indicate only a slight rise (6.09 to 6.23) in total fertility rate of Iranian women between 1976-1986, but a profound decline (6.23 to 2.53) between 1986-1996. At the provincial level, fertility changes between 1976-1986 had in all but one province been smaller than one TFR unit. Six provinces had in fact experienced some decline, ranging from -0.04 to -0.79 TFR points. In 17 of the remaining 18 provinces, fertility increase had varied between 0.24 and 0.90, rising to 1.77 in Sistan-Baloochistan province only. In contrast, the amount of decline in provincial fertility rates between 1986-1996 had ranged from 2.71 to 5.54 TFR points. Using child-woman ratios as a measure of fertility, Mehryar, Tabibian and Gholipour (1999) have found a similarly high rate (averaging about 40 percent) of fertility decline across all 252 districts for 1996.

8.4 Share of Family Planning Program in the Observed Fertility Decline in Iran

There is a tremendous amount of data supporting the spectacular fertility decline in Iran since 1986. Analyses by both Mehryar *et al* (1999) and Abbasi-Shavazi (2000), leave no doubt that the bulk of the observed decline in fertility has taken place during the second half of the decade preceding the 1996 census. This period coincides with the revival of the FPP, and it is highly tempting to attribute the observed decline in fertility to the reintroduction of the program. Yet, it is rather difficult to credit a fledgling program with the enormous decline in fertility level that

has taken place all over the country within a short period of seven years. Nevertheless, further analyses by Aghajanian and Mehryar (1999a) and Abbasi-Shavazi (2000), indicate that over 80 percent of the observed decline in fertility is due to a decrease in marital fertility, and only 15-20 percent can be attributed to changes in nuptiality patterns, that is, in age and prevalence of marriage. Abbasi-Shavazi's (2000) analysis has revealed that the relative contribution of the two main sources (that is, exposure to pregnancy vs. exposure to marriage), to fertility decline between 1986-1996 apply across all age groups and urban and rural areas (Table 13). Abbasi-Shavazi (2000) has also found similar trends across all provinces for fertility changes observed between 1976-1986 and 1986-1996 (Table 14).

From these findings, it is clear that the bulk of the observed decline in fertility between 1986 and 1996, has been due to actions taken by married couples who have intentionally controlled their fertility outcomes. The revived FPP has contributed to this process in two important ways. First, by declaring birth control as permissible by religious authorities and as socially desirable, it has reinforced the motivation of couples to limit their fertility. Secondly, by making the means of birth control free and easily available, it has empowered motivated couples to enact their desire for a smaller family through spacing their pregnancies or stopping them altogether. Both of these could have been particularly important for the poorer, less educated, often ignored and traditionally disadvantaged segments of the population, who were more likely to be hampered by religious, political and economic constraints as well as a lack of access to reliable methods of contraception. The striking success of the revived program in reaching rural couples and raising their level of contraceptive use, clearly supports this hypothesis. The fact that family planning supplies and services were offered as part of the primary health care package and addressed other reproductive health needs and concerns of the target population, was bound to play a major role in making it more acceptable.

9. The Social Context of Contraceptive Use and Fertility Decline

Neither the early repression nor the later revival of the family planning program took place in a social vacuum. They occurred as part-and-parcel of a long, complicated and often rapidly evolving series of historical events involving many players with diverse agendas. Western observers often tend to view the social history of Iran after the Islamic revolution of 1979, as a period dominated by fundamentalist Shiite *ulama* (*mullas*) bent on imposing an anachronistic medieval form of theocracy on a nation that was once regarded as a paradigm of western-oriented modernization. Nothing could be farther from the truth. The Iranian revolution was a genuinely popular uprising, directly or indirectly supported by the overwhelming majority of

the population against a regime, that had not only lost its constitutional legitimacy and popular support, but also its ability to defend itself and survive. Hence, the quick and relatively peaceful triumph of the revolution. Although the Shiite clergy surrounding Ayatullah Khomeini came to play a major role in uniting the variety of political groups involved in the initial revolt against the Shah and in leading them to victory, they were in no way the initiators or the main ideological forces behind the revolution.

A number of major social and political groups with diametrically opposed aims and agendas were involved in the revolution. The two main things uniting them were a shared opposition to the Shah and the political organization created by him and his western supporters; and a rather simplistic belief that Iran had all the natural and human resources for rapid socio-economic development, modernization, and free access to modern amenities and services enjoyed by people in the west. Few of the major actors could be regarded as adversarial to development and modernization in the sense of raising the level of education of all people, improving their health status, ensuring the proper satisfaction of their basic needs, as well as providing them with the modern amenities and consumer goods that had flooded Iranian markets after the oil glut of the early 1970s. The fact that even the fundamentalist *ulama*, who quickly filled the power vacuum left by the sudden disintegration of the old regime, were not against these popular ideals, is clearly reflected in several of the speeches made by Imam Khomeini on his return to Iran, as well as in public pronouncements and promises made by many of his close advisers. All these were taken into consideration in the preparation of the constitution of the IRI, drafted hastily and put to public referendum less than a year after the triumph of the revolution. The constitution of the IRI has enshrined many of the ideals advocated by the United Nations as part of its new paradigm of sustainable human development as a basic right of Iranian citizens. The IRI government may be justly criticized for its reluctance to implement some of the principles of the constitution in the area of political rights, freedom of speech, and imposition of restrictions on the public appearance or conduct of its citizens (particularly women). However, it can hardly be criticized for failure in such areas of development, as expansion of public health services, creation of opportunities for education of both men and women at all levels, and genuinely trying to improve the overall living conditions of its citizens. The results of this massive investment in social development are clearly reflected in various indicators of development (Table 15). Of course, due to the eight year war and its enormous costs, the government of the IRI was hardly in a position to devote all its attention and resources to the social development programs and priorities enshrined in the constitution. Nevertheless, a recent study of the share of basic social

services (primarily education and health) of government budget and the GDP revealed that even at the height of the war period investment in the basic social services accounted for a sizeable proportion of the annual budget of the IRI government. In fact, without any access to international assistance, the government of the IRI has neatly succeeded in meeting the goals of the 20/20 initiative recommended by the United Nations (Mehryar, Farjadi and Abbasi, 1999).

Because of this huge investment in social services and human development, the IRI has emerged as one of the better developed, modern, and in many respects westernized developing countries of the Middle East and North Africa region. Thus a good part of the success of the FPP, can be attributed to the high level of social development and modernization achieved by the IRI over the past two decades. As a result of these changes, the age of marriage has gone up significantly and a much smaller proportion of Iranian men and women now marry at such early ages as 15-19 or 20-24 (Table 16). Interestingly, these changes in age and universality of marriage have taken place despite explicit efforts by the IRI regime, religious propaganda, and charitable foundations created since the revolution to promote and reward early marriage as a basic Islamic virtue.

10. Program Related Factors underlying its Success

A number of factors associated with the organization of the FPP, and the delivery of contraceptive and reproductive health services, have been identified as other potential contributors to the success of the Iranian program. Among these, the following deserve particular attention (Roudi, 1999; Aghajanian and Mehryar, 1999a):

Integration of family planning with primary health care

Family planning services are provided as part of a PHC package. As a result, no stigma is attached to visits to family planning clinics, even by unmarried women who are not supposed to be sexually active. The Iranian government began promoting PHC centers and breastfeeding when it revived the FPP. This integrated approach has helped lower mortality among the young. According to the ministry of health and medical education, between 1985 and 1996, the infant and under-five mortality rates declined from 51 to 26 deaths, and from 70 to 33 deaths per 1,000 live births, respectively.

Removal of socioeconomic barriers to contraceptive supplies

Eighty percent of family planning services are provided by the government, mostly free of charge. Over 80 percent of the rural population has access to family planning

services through the Rural Health Network. In addition to health houses established in some 18,000 villages, the PHC network includes mobile clinics that take family planning and health services to hard-to-reach populations in isolated rural and tribal communities.

Promotion of permanent methods, including vasectomy

Iran's family planning program is the only one among Muslim countries that actively and successfully promotes sterilization. Both in rural and urban areas, nearly one-third of married women using modern contraceptives rely on female or male sterilization.

Involvement of men

Iran is one of the few countries in the region that requires both men and women to take classes on modern contraceptive methods before receiving a marriage license. In addition, Iran is the only country in the region that has a condom factory. Although their share of modern contraceptive users remains low, Iranian men would seem to take a major responsibility for contraception by using the traditional method of withdrawal.

Involvement of religious leaders

As indicated above, the top religious leadership of Iran has taken remarkable steps to promote contraceptive use both by issuing religiously binding *fatwas*, and by politically and economically supporting the national family planning program. The unanimous and explicit support of the top leadership of the IRI has silenced potential objections by many other *ulama* outside the ruling regime who, while not opposing contraceptive use as an individual right and decision, do not agree that population growth is really a social problem deserving use of public resources. Middle level clergy acting as Friday prayer leaders are appointed by the supreme leader and the contents of their weekly sermons are usually determined by a special directorate in the latter's office. This insures that once a program is endorsed by the supreme leader, it will enjoy the unanimous support of all Friday prayer leaders, and will be regularly discussed and promoted by them.

Synergy among development initiatives

Marked improvements in literacy rates of men and women, health conditions, access to modern amenities like piped water, electricity and gas, and expansion of mass transportation and communication facilities, have contributed significantly to a marked rise in knowledge of, and aspirations for, a variety of modern consumer goods and social service. Between 1976 and 1996, the percentage of literate women

living in rural areas increased from 17 percent to 62 percent, and nationwide three-quarters of women were literate, according to the 1996 census. In 1996, 70 percent of rural households, and 93 percent of urban households had television, which has helped convey the desirability of smaller family size.

Economic pressures

The decline in per capita GDP over the past two decades has meant that many Iranian families have to work harder to make ends meet. This is particularly acute in the case of urban households, where housing and other modern amenities consume a large chunk of household income. At the same time, due to cultural barriers, as well as lack of employment opportunities, the labor force participation rate of Iranian women has remained below its pre-revolutionary level. These economic pressures have no doubt played a major role in raising the age of marriage and reducing nuptiality rates. Married couples are also economically constrained to reduce their fertility in order to maintain an acceptable standard of living, and to ensure that their children will have better schooling and employment opportunities.

11. Discussion and Conclusions

From the evidence presented above, it is clear that the family planning program of Iran has gone a long way in its relatively short life since being revived in 1989. Both in terms of the proportion of married couples using an effective contraceptive and the mix of contraceptives used, the Iranian program would seem to present a singular example, not only among the Muslim nations of the Middle East, but also in the whole developing world. The success of the program would stand out further if one takes into account its short life and the sharp policy reversal that its introduction implied. Moreover, the IRI program is singular in terms of being almost exclusively based on local national resources. Due to its political conflict with the USA, the IRI is almost totally excluded from multi-bilateral assistance programs funded by developed countries. The total contribution of all international agencies to its health program is also known to account for less than one percent of Iran's annual health expenditure.

The evidence presented above also leaves little doubt regarding the drastic fall in the fertility rate of the Iranian population since 1989. The decline would seem to have started in the mid-1980s, but has been definitely more precipitous since 1990, which coincides with the revival of the FPP. Theoretically, any decline in fertility rates can be considered as the result of a decrease in the risk of exposure to sexual intercourse and pregnancy. In societies such as Iran where the overwhelming majority of pregnancies take place among married women, a decline in fertility may also result

from a drop in the rate of marriage. However, in view of the fact that over 90 percent of all Iranian women are married by age 30, a decline in the nuptiality rate is unlikely to have exerted a substantial impact on the fertility level. A decomposition of changes in the total fertility rates of urban and rural women between 1986 and 1996, indicates that about 80 percent of the observed decline could be attributed to a decrease in the exposure to the risk of pregnancy through contraceptive practice (Aghajanian, 1998). This leaves little doubt regarding the fact that the bulk of the observed decline in the fertility of Iranian couples during the past decade was due to wide spread and consistent contraceptive use.

But what was the role of the national FPP in this connection? In other words, would the same decline in fertility level have occurred if the government of Iran had not revived the program in 1989? This is not an easy question to answer. From the evidence reviewed above, there is no doubt that a large proportion of women were planning their fertility long before the program had been officially revived or there were any official statements in favor of birth limitation. There is little doubt that the baby boom period following the revolution was relatively short (1978 to 1984 or 1985) and there was also clear evidence of a decline in the birth rate of Iranian couples several years before the official reintroduction of the program (Mehryar and Gholipour, 1995; Mehryar and Tabibian, 1997). Such a decline is not unexpected in view of the remarkable rise in the literacy and educational attainment of the population in general, and women in particular, as well as the rapid urbanization, modernization and even westernization that have marked this period of Iran's history.

Yet, judging by the available evidence, it is fair to say that the degree of fertility decline noticed before 1989 was relatively small in comparison with what happened after the adoption of a national birth control policy in 1989. Moreover, the decline experienced before 1989 was largely limited to urban areas where there was an active private health care system. It is also important to remember that in the urban areas, private health providers were able to continue their services because the government of the IRI, not only did not interfere with the provision of family planning services, but in fact tacitly encouraged it through the regular importation and distribution of contraceptive devices at generously subsidized prices. Thanks to this policy of covert support, in the mid-1980s, while most imported consumer goods were in short supply, the urban population of Iran was able to buy condoms from street corner supermarkets, as well as at drug stores for relatively low prices. They could also get condoms and other contraceptives from the family health clinics run by the MOHME at even cheaper prices, if not completely free. At the same time, a good proportion of better educated urban couples protected themselves by using

traditional methods, which did not depend on government support. That a large proportion of them still do so, attests to the value of such traditional methods in fertility regulation.

The most important contribution of the official family planning program was that it removed both physical and ideological barriers to contraceptive practice faced by the most deprived segments of the population - that is the rural couples and the lower class urban dwellers, most of whom were likely to be recent migrants from rural areas. On the one hand, the adoption of family limitation as official state policy by the IRI, along with the open endorsement and promotion of contraception and family planning by the politically influential religious leaders of the country, helped remove any doubts regarding the potential conflict between Islam and birth control. In this respect, it may be interesting to note that the lowest rates of contraceptive use in Iran belong to the few provinces with a large proportion of Sunni Muslims who are not bound by the *fatwas* or injunctions of the predominantly Shiite leaders now ruling the IRI.

On the other hand, the adoption of a national family planning policy allowed the largely technocratic government (particularly the personally and professionally committed technical staff of the MOHME and the PBO) to allocate further resources to family planning. Because of the total integration of family planning with other aspects of PHC, it is however, impossible to identify the exact share for reproductive health services in the government's overall health spending. There is no doubt, however, that it forms a large proportion of the public resources allocated to PHC. At the same time, official statements regarding the legality of such drastic methods as sterilization went a long way to ensure their social acceptability and increasing use by both educated urban and less educated rural couples.

It may be worth noting that the close integration of family planning with such other public health services as nutrition, immunization, infant and child care, prenatal and postnatal care of mothers, and environmental hygiene has contributed enormously, both to the acceptability and effectiveness of the program. In fact, the existence of an active, multifunctional PHC system, with extensive coverage of the rural population, plus a well developed public and private health care system in urban areas, provided the main instruments through which the national FPP could so effectively and rapidly reach its target groups and therefore meet its objectives. The impressive rise of contraceptive use among rural couples, along with evidence of a marked decline in their fertility, is probably the most important and unprecedented achievement of the revived family planning program.

The FPP has not operated in social isolation, and many other factors besides government support and availability of supplies and services have no doubt played a major role in the relatively rapid success of the program. Among the demand factors, the most important was the marked rise in the literacy and educational level of the population in general, and women in particular. The indirect effect of women's education on changing their age at marriage, expectations about quality of life in general and marital life in particular, and cost and benefit of bearing and rearing children, was probably even more important than its direct impact in terms of facilitating exposure to new sources of ideas and information on contraceptive methods and practices. Existing family planning methods demand active participation of couples, particularly women. In Iran, as in many other countries, the main burden of contraception, as well as the consequences of not using contraceptives or using them incorrectly, falls on the shoulders of women. Only through careful negotiation with their male partners can women persuade them to take more responsibility for family planning. There is no doubt that better educated women are in a much better position to negotiate for the participation of their partners in consistent and effective use of available contraceptives.

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Table 1: Number of Family Planning Clients Served and Amount of Major Contraceptives Distributed by the MCH Clinics of the MOHME between 1978–1990

Year	Number of FP Clients Served	Boxes of Pill Distributed	Number of Condoms Distributed	Number of IUDs Inserted
1978	5,230,000	4,665,000	418,000	10,000
1979	4,191,000	3,823,000	284,000	9,000
1980	4,250,000	3,212,000	257,000	11,000
1981	5,603,000	5,078,000	472,000	17,000
1982	6,196,000	5,442,000	548,000	25,000
1983	5,943,000	5,096,000	551,000	27,000
1984	6,058,000	5,163,000	620,000	29,000
1985	6,604,000	4,935,000	708,000	33,000
1986	6,701,000	5,134,000	758,000	35,000
1987	7,051,000	5,216,000	1,043,000	46,000
1988	5,354,000	4,738,000	280,000	55,000
1989	9,011,000	7,532,000	1,383,000	97,000
1990	10,412,000	4,564,000	2,712,000	132,000

Source: Mehryar et al, 1995; Ladier-Fouladi, 1996, Table 9, P. 1113.

Table 2: Contraceptive Prevalence Rates Revealed by National KAP Surveys Conducted in Iran between 1976-1997

Year	1976			1989			1992			1997		
Method	Method Type*		All	Method Type*		All	Method Type*		All	Method Type*		All
Area	Mm	Tm	All	Mm	Tm	All	Mm	Tm	All	Mm	Tm	All
Urban	34	21	54	33	31	64	47	27	74	55	23	78
Rural	15	5	20	21	10	31	41	10	51	57	9	66
Total	24	13	37	30	19	49	45	20	65	55	18	73

Notes: *Method Types: Mm= Modern Methods; Tm=Traditional Method (Withdrawal).

Source: Aghajanian, 1992 (for 1977 & 1992 surveys); Ministry of Health & Medical Education(1998) for 1989 and later surveys.

Table 3: Contraceptive Prevalence Rates (%) of Women Aged 15-49 Years by Province, 1997

Provinces	Rural			Urban		
	Modern	Traditional	Total	Modern	Traditional	Total
Iran (Total)	60.5	9.6	70.1	56.5	24.2	80.7
Tehran	58.5	21.3	79.8	53.9	30.0	83.9
Markazi	63.0	15.0	78.0	57.5	28.8	86.3
Gilan	53.1	24.5	77.6	46.5	35.5	82.0
Mazandaran	58.6	16.2	74.8	49.0	31.6	80.6
Azərbayjan, E	71.1	5.4	76.5	54.0	25.7	79.7
Azərbayjan, W	63.8	3.5	67.3	58.8	19.9	78.7
Kermanshah	69.0	0.6	69.6	68.2	9.1	77.3
Khuzistan	53.8	3.9	57.7	59.2	13.8	73.0
Fars	62.3	6.5	68.8	64.5	13.2	77.7
Kerman	56.3	15.0	71.3	48.3	32.4	80.7
Khorasan	60.6	8.3	68.8	53.8	26.4	80.2
Isfahan	65.0	16.8	81.8	53.4	31.1	84.5
Sistan & Balo.	52.9	2.9	55.8	62.2	6.0	68.2
Kurdistan	64.5	2.8	67.3	67.2	10.8	78.1
Hamadan	64.2	6.2	70.3	60.2	20.6	80.8
Chaharmahal	63.3	4.0	67.3	63.5	15.0	78.5
Loristan	57.6	3.4	61.0	62.5	12.4	74.9
Ilam	65.4	0.6	66.0	72.5	2.8	75.3
Kohgiluyeh	53.8	0.5	54.2	64.8	8.8	73.5
Bushehr	53.7	5.4	59.1	57.2	17.5	74.7
Zanjan	67.7	1.6	69.3	67.5	11.1	78.6
Semnan	65.2	19.4	84.6	53.5	31.7	85.2
Yazd	63.9	21.4	85.3	54.4	32.8	87.2
Hormozgan	37.3	5.2	42.5	53.3	21.6	74.9
Ghazvin	63.8	10.0	73.8	46.6	35.5	82.0
Ardabil	65.4	3.3	68.7	66.0	14.6	80.6

Source: MOHME, 1996 (Annual Conference on Population and Family Planning, Tehran)

Table 4: Changes in the Relative Prevalence of Different Modern Contraceptives among Couples Using Modern Methods, 1992, 1994, 1997

Method	1992		1994		1997		% Change			
	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural	Urban	Rural
	100.0	100.0	100.0	100.0	100.0	100.0	92-94	94-97	92-94	94-97
Pill	42.6	63.6	37.7	50.0	33.6	45.0	-11	-11	-21	-10
Condom	17.1	10.2	13.2	9.3	12.0	6.4	-23	-9	-9	-31
IUD	21.3	7.5	17.0	9.3	19.3	8.4	-20	14	23	-9
Vasectomy	2.7	1.0	3.8	1.9	4.3	1.8	40	14	85	-3
Tubectomy	16.3	18.0	26.4	25.9	27.5	29.1	62	4	44	12
Injection	0.0	0.0	1.9	3.7	2.5	10.0	na	33	na	170
Norplant	0.0	0.0	na	na	1.0	1.3	na	na	na	na

Source: MOHME Surveys, 1992, 1994, 1997.

Table 5: Contraceptive use by Background Characteristics in 1977 and 1992

Characteristics	1977	1992	
Place of Residence	Rural	19.9	51.5
	Urban	53.8	74.1
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	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
	Total: 3 or fewer	31.2	56.9
	Total: 4 or more	41.1	72.5

Source: Aghajanian, 1993

Table 6: Percentage of Women Using Different Methods of Contraception by Major Socio-Demographic Characteristics, Shiraz City, 1996

Social Indicators	Any Method	Norplant	Pill	IUD	Injection	Female Sterilization	Male Sterilization	Condom	Coitus Int. & other Methods
Level of Education									
Illiterate	69.3	0.0	20.0	5.7	0.0	44.3	4.3	4.3	20.0
Primary	75.6	0.3	19.5	15.1	3.1	27.1	5.8	9.2	19.9
Secondary, junior	82.8	0.0	22.3	17.3	2.5	16.8	6.4	16.3	19.3
Secondary, senior	85.6	0.3	23.7	17.9	0.3	12.7	4.5	15.1	27.8
Higher Education	84.4	3.7	13.0	18.5	0.0	14.8	3.7	14.8	40.7
Economic Activity									
Active	84.7	0.9	15.5	15.5	1.7	19.0	3.4	15.5	34.5
Inactive	79.5	0.4	21.9	16.0	1.6	21.1	5.5	12.2	21.9
Place of Birth									
Urban	80.1	0.5	21.5	16.0	1.4	18.3	5.4	13.6	25.0
Rural	79.2	0.0	18.8	15.0	3.0	35.3	4.5	7.5	15.8
Age Group									
15-19	62.0	0.0	29.0	25.8	0.0	3.2	0.0	19.4	25.8
20-24	62.2	1.1	30.4	21.7	4.3	2.2	0.0	16.3	28.3
25-29	85.3	1.2	30.2	22.2	3.7	3.7	4.3	11.7	23.5
30-34	89.1	0.0	19.9	21.4	2.0	22.4	4.1	12.8	18.4
35-39	84.4	0.0	20.1	8.9	0.0	30.2	10.1	14.0	17.3
40-44	86.4	0.6	14.5	10.1	0.6	34.6	6.3	10.1	25.8
45-49	68.7	0.0	8.9	7.8	0.0	30.0	5.6	10.0	37.8
Total	80.1	0.4	21.1	16.0	1.7	20.8	5.3	12.7	23.5

Source: Mehryar et al, 1997, Table 24.

Table 7: Percentage of Women Using Different Contraceptives by Source of Supply and Socio-Demographic Characteristics, Shiraz City, 1996

Source Indicators of Socio- Economic Status	Public Sector					Private Sector			
	Hospital	MCH Center	Family Planning Center	Home Visitor	Mobile Health Team	Clinic	Pharmacy	Midwife	Other
Level of Education									
Illiterate	24.8	2.0	51.5	0.0	0.0	8.9	31.7	4.0	3.0
Primary	20.7	1.6	57.0	0.0	0.0	4.9	27.2	6.2	4.9
Secondary, Junior	12.7	1.2	52.9	1.2	0.0	7.4	33.2	5.3	3.7
Secondary, Senior	9.1	1.2	45.0	0.0	0.3	8.2	37.6	12.9	6.2
Higher Education	9.4	0.0	34.4	1.6	0.0	7.8	42.2	15.6	6.3
Economic Activity									
Active	9.5	0.0	30.7	0.7	0.0	6.6	48.9	13.9	7.3
Inactive	16.0	1.5	53.5	0.3	0.1	7.0	30.7	7.6	4.6
Place of Birth									
No Answer	0.0	0.0	66.7	0.0	0.0	0.0	0.0	66.7	0.0
Urban	13.1	1.4	49.1	0.3	0.1	7.1	33.7	8.5	5.4
Rural	0.0	0.0	100.0	0.0	0.0	0.0	0.0	50.0	0.0
Total	15.2	1.3	50.7	0.4	0.1	7.0	32.9	8.4	4.9

Source: Mehryar et al, 1997, Table 22

Table 8: Correct Use of Contraceptive Pill by Source of Supply

Residence	1995	1996
Urban	61.1	67.2
Rural	64.4	71.8
Total	62.8	69.6
Source of Supply		
Public Clinic	u	72.2
Private Clinic	u	49.8

Note: u = unavailable.

Sources: Aghajanian & Mehryar, 1999a, Table 3.

Table 10: Age-specific (per Thousand of Women Aged 15-49) and Total Fertility Rates of Iranian Women, by Place of Residence, 1976-1996

Age	Total				Urban				Rural			
	1976	1986	1991	1996	1976	1986	1991	1996	1976	1986	1991	1996
15-19	150	149	108	64	123	122	103	58	169	157	116	72
20-24	316	303	252	191	258	232	335	176	360	350	300	212
25-29	301	313	249	184	216	231	212	164	359	380	321	226
30-34	242	274	211	125	145	197	169	114	306	340	290	167
35-39	169	211	164	73	91	143	122	63	225	272	237	185
40-44	85	112	88	31	45	72	62	26	111	148	129	45
45-49	24	29	28	18	13	17	20	18	45	40	42	18
TFR	6.3	7.0	5.5	3.4	4.4	5.1	4.6	3.1	7.6	8.4	7.1	4.6

Source: Rates are calculated and adjusted from Statistical Center of Iran Census Data for 1976, 1986, 1991 and 1996 (Aghajanian & Mehryar, 1999b, Table 5).

Table 9: Changes in Crude Birth Rate in the Islamic Republic of Iran, 1966 & 1996

Year	Total		Urban		Rural	
	Crude Birth rate (per 1000)	Decadal Change (percent)	Crude Birth Rate (per 1000)	Decadal Change (percent)	Crude Birth Rate (per 1000)	Decadal Change (percent)
1966	49.0	-	45.0	-	52.0	-
1976	42.7	-12.9	32.7	-27.3	49.1	-5.6
1986	47.6	11.5	37.5	14.7	50.7	3.3
1991	38.2	-19.7	34.8	-7.2	45.2	-11.0
1996	26.0	-31.1	25.1	-28.1	33.1	-27.1

Source: Aghajanian & Mehryar, 199b (2).

Table 11: Official Fertility Estimates for 1976-1996

Date	Area	Crude Birth Rate	General Fertility Rate	Total Fertility Rate	Gross Reproduction Rate
1973-6*	Total	42.90	200.00	6.60	na
	Urban	31.80	140.00	4.50	na
	Rural	50.10	242.00	8.10	na
1986	Total	49.60	204.00	7.10	na
	Urban	38.00	169.00	5.90	na
	Rural	51.20	257.00	9.00	na
1991	Total	30.60	140.00	4.90	2.40
	Urban	27.90	121.70	4.30	2.10
	Rural	34.10	166.90	5.80	2.90
1996	Total	20.50	84.00	2.96	1.44
	Urban	18.70	74.00	2.60	1.27
	Rural	23.40	117.00	4.10	2.00

Source: (SCI, 1998, Table 10.1).

Table 12: Changes in Unadjusted Age Specific Fertility Rates of Iranian Women by Place of Residence, 1976-1996

Date	Area	Age Groups						
		15-19	20-24	25-29	30-34	35-39	40-44	45-49
1973-6	Total	146	327	303	230	186	95	38
	Urban	113	267	217	140	91	56	13
	Rural	171	372	360	289	255	121	56
1986	Total	130	302	322	287	224	126	39
	Urban	121	264	270	234	173	93	26
	Rural	141	359	404	365	298	173	54
1991	Total	47	213	278	219	146	64	14
	Urban	32	168	258	213	125	54	11
	Rural	150	310	276	217	140	52	15
1996	Total	54	135	132	104	89	56	21
	Urban	47	124	113	92	78	48	18
	Rural	65	155	182	156	133	94	34

Source: Statistical Center of Iran, 1998 (Table 10-2).

Table 13: Decomposition of Changes in the Adjusted Total Fertility Rates of Iranian Couples by Urban/Rural Residence, 1986-1996

All Country	All Ages	Age groups						
		15-19	20-24	25-29	30-34	35-39	40-44	45-49
Marital fertility	-3.11	-0.24	-0.40	-0.66	-0.74	-0.63	-0.36	-0.08
Nuptiality	-0.60	-0.25	-0.28	-0.06	0.01	0.00	0.00	0.00
Total	-3.71	-0.49	-0.68	-0.72	-0.75	-0.64	-0.36	-0.08
For the age range 15-49, TFR declined by 3.70 (59.5%), from 6.23 to 2.52								
Rural Areas	All Ages	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Marital fertility	-4.15	-0.29	-0.64	-0.86	-0.95	-0.81	-0.48	-0.11
Nuptiality	-0.72	-0.25	-0.27	-0.13	-0.05	-0.02	-0.01	0.00
Total	-4.87	-0.54	-0.91	-0.99	-0.99	-0.83	-0.49	-0.11
For the age range 15-49, TFR declined by 4.87 (62.7 %), from 7.76 to 2.89								
Urban Areas	All Ages	15-19	20-24	25-29	30-34	35-39	40-44	45-49
Marital fertility	-2.96	-0.21	-0.51	-0.65	-0.68	-0.55	-0.30	-0.06
Nuptiality	-0.44	-0.25	-0.15	-0.03	-0.01	0.00	0.00	0.00
Total	-3.40	-0.46	-0.66	-0.68	-0.69	-0.55	-0.30	-0.06
For the age range 15-49, TFR declined by 3.41 (62.5 %), from 5.44 to 2.04								

Source: Abbasi-Shavazi, 2000 (Table 5).

Table 14: Changes in Adjusted TFR and The Effects of Components Changes for The Periods 1976-86 and 1986-96, Iran by Province

Province	1976-86			1986-96		
	TFR	Attributable to		TFR	Attributable to	
		Marriage	Marital Fertility		Marriage	Marital Fertility
Iran	0.15	-0.20	0.35	-3.70	-0.52	-3.20
Ardabil	na	na	na	-4.7	na	na
Azarbayjan, E	-0.72	-0.34	-0.38	-3.86	-0.57	-3.86
Azarbayjan, W	-0.18	-0.32	0.14	-3.31	-0.44	-2.87
Booshehr	0.52	0.05	0.47	-4.47	-0.90	-3.57
Charmahal	0.24	-0.21	0.45	-5.19	-0.84	-4.35
Fars	0.71	-0.12	0.83	-4.29	-0.67	-3.62
Gilan	-0.79	-0.04	-0.75	-2.84	-0.50	-2.34
Hamadan	0.24	-0.13	0.37	-4.48	-0.73	-3.75
Hormozgan	0.79	0.27	0.52	-4.13	-1.07	-3.06
Ilam	0.46	-0.24	0.70	-5.05	-1.29	-3.76
Isfahan	-0.10	-0.15	0.05	-3.68	-0.55	-3.13
Kerman	0.32	-0.06	0.38	-4.24	-0.85	-3.39
Kermanshah	0.40	-0.23	0.63	-3.88	-0.61	-3.27
Khorasan	0.42	0.01	0.41	-3.89	-0.62	-3.27
Khoozestan	0.90	0.10	0.80	-4.28	-0.74	-3.54
Kohgiluyeh	0.68	-0.12	0.80	-5.54	-1.07	-4.47
Kurdistan	0.50	-0.02	0.52	-4.31	-0.57	-3.74
Lorestan	0.38	-0.38	0.76	-4.61	-0.95	-3.66
Markazi	-0.04	0.05	-0.09	-3.96	-0.54	-3.42
Mazandaran	-0.17	-0.22	0.05	-3.21	-0.49	-2.72
Qom	na	na	na	-3.54	na	na
Semnan	0.58	0.07	0.51	-3.06	-0.50	-2.56
Sistan & B.	1.77	-0.12	1.89	-4.76	-0.65	-4.11
Tehran	0.58	-0.19	0.78	-2.71	-0.38	-2.33
Yazd	0.82	0.27	0.55	-3.54	-0.72	-2.82
Zanjan	0.25	-0.46	0.71	-4.40	-0.75	-3.65

Sources: Abbasi-Shavazi, 2000, Table 6. N.B. Ardabil and Qum were not independent provinces in 1986.

Table 15: Selected Indicators of Social Development for Different Provinces of Iran between 1986 and 1996

Province	Female Literacy %		IMR (Infant Mortality Rate)		% Of Rural Communities with Access to Modern Amenities (1996)			
	1986	1996	1986	1996	Electricity	TV(CI)	Radio	Piped Water
	2	3	4	5	6	7	8	9
IRAN	52.1	74.2	77.7	34.9	57.5	68.5	87.9	87.2
Ardabil	31.4	64.9	-	45.8	51.5	81.4	88.5	71.5
Azarbayjan E	41.7	68.2	96.7	42.8	56.7	73.9	94.4	81.6
Azarbayjan W	34.3	58.7	103.6	48.1	60.9	80.4	96.0	78.1
Booshehr	50.6	75.2	58.0	43.9	69.1	81.3	91.2	84.6
Charmahal	44.3	70.4	67.2	44.9	55.4	56.9	88.3	92.8
Fars	56.3	77.4	56.2	38.5	50.3	67.0	89.0	94.5
Gilan	58.0	74.6	51.1	31.4	77.4	79.1	95.9	52
Hamadan	43.6	71.3	91.1	46.6	88.7	95.6	96.7	82.7
Hormozgan	41.8	66.6	63.9	45.1	44.3	54.4	78.1	78.7
Ilam	40.0	71.2	78.7	54.1	69.9	74.4	79.6	92.1
Isfahan	62.7	80.9	71.3	32.3	77.1	85.2	91.6	96.6
Kerman	51.5	74.8	75.9	47.1	48.4	56.1	77.3	86.8
Kermanshah	42.8	70.1	74.8	49.4	74.4	75.6	94.9	84.8
Khorasan	46.9	76.8	115.2	51.6	47.0	72.6	91.9	86.9
Khoozestan	48.6	70.0	71.3	41.1	54.8	61.3	84.8	89.4
Kohgilooyeh	39.9	68.3	83.2	58.0	36.8	28.8	88.1	73.9
Kurdistan	23.2	57.4	130.7	63.6	70.6	72.0	97.1	81.8
Lorestan	41.2	68.9	76.4	50.6	57.0	57.6	87.1	84.1
Markazi	51.2	73.9	105.8	41.7	81.7	90.3	92.0	91.5
Mazandaran	54.4	74.6	63.1	42.0	81.7	84.4	96.1	82.5
Qom	57.5	77.0	-	37.8	80.5	86.1	89.0	98.3
Semnan	63.2	80.8	63.1	37.5	64.5	88.0	93.7	97.4
Sistan & Balo.	25.3	48.8	83.7	65.4	24.8	37.1	67.8	58.8
Tehran	78.4	85.0	46.3	31.4	79.5	83.7	90.8	97.8
Yazd	61.6	79.8	68.5	37.2	71.2	89.4	96.4	94.6
Zanjan	39.6	67.8	105.9	42.8	75.2	86.3	93.4	86.2

Sources: Adapted from Abbasi-Shavazi, 2000, Table 8.

Table 16: Percent Currently Married and Mean Singulate Age at Marriage (MSAM) of Women Aged 15-49, 1986-1996

Age	All Country		Urban Areas		Rural Areas	
	1986 %	1996 %	1986 %	1996 %	1986 %	1996 %
15-19	33.2	17.5	31.8	16.0	34.0	19.7
20-24	72.6	59.5	73.9	60.1	73.8	58.4
25-29	90.0	83.6	87.1	84.6	89.8	81.8
30-34	92.1	91.1	91.5	91.2	93.5	90.8
35-39	92.2	92.9	92.2	92.6	94.0	93.4
40-44	90.1	92.0	91.2	91.6	92.4	92.6
45-49	83.7	89.2	88.5	88.6	89.3	90.3
15-49	72.4	66.6	72.9	67.7	73.3	64.7
MSAM	19.9	22.4	20.0	22.5	19.6	22.3

Source: Calculated from Iran Statistical Center, 1986, 1996.