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UNIVERSITY OF DURHAM
DEPARTMENT OF SOCIOLOGY AND SOCIAL POLICY

**FAMILY PLANNING PROGRAMMES AND POPULATION GROWTH IN
POST-REVOLUTIONARY IRAN**

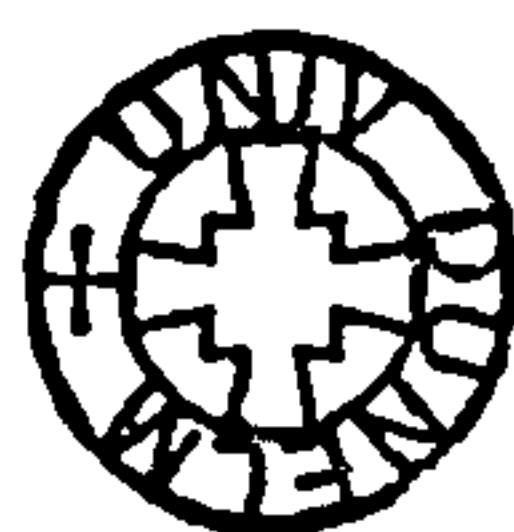
A THESIS SUBMITTED
FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

By

HESHMAT SADAT MOINIFAR

1999

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23 AUG 1999

Abstract

Over the last three decades the fertility rate in Iran has demonstrated a peculiar trend, declining modestly in the 1970s, increasing dramatically in the first decade after the Islamic Revolution, before reverting to a systematic decline in the 1990s. This thesis aims to explore the influences of social, cultural and economic factors on fertility trends in Iran, particularly the decline which occurred around the time of the first Five-Year Development Plan (FFYDP) between 1989 and 1994.

The initial post-Revolutionary period in Iran witnessed an absence of an explicit population policy, and encouragement, both ideological and economic, of early motherhood. However, high fertility rates and population growth in the second half of the 1980s, alarmed the Iranian government who saw this as a serious obstacle to development and embarked on a family planning programme as part of the FFYDP.

The thesis concludes that there is growing support for small families and an emphasis on quality rather than quantity of children. Several factors have contributed to the recent decline in the population growth rate from 3.8 to 1.4 between 1986 and 1996. Total fertility rate (TFR) also declined. Urbanisation, the improving status and education of women, economic hardships following the Iran-Iraq war, a reduction in transfers and subsidies favouring large families and the support of religious leaders for family planning have all been important. However, it is also argued that increased political and financial commitment to a family planning programme have been important. The operation of these programmes, their achievements and limitations are examined in detail. By providing access to reliable, affordable contraceptives and information, as well as media campaigns and legislation, the government has not only facilitated couples to achieve their desired family size, but has put pressure (largely persuasive) on couples to favour small families.

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To my husband Mohammad

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ABBREVIATIONS

AID:	Agency for International Development
AID's	Acquired Immune Deficiency Syndrome
ASFR:	Age-specific Fertility Rate
ESCAP	Economic and Social Committee on Asia and Pacific
FAO	Food and Agriculture Organisation
FBIS-NES	Foreign Broadcast Information Service Daily Report – Near East and South Asia
FFYDP:	First Five-year Development Plan of Iran (1989-94)
GNP:	Gross National Product
IFS:	Iran Fertility Survey
IPPF:	International Planned Parenthood Federation
IUD:	Intrauterine Device
KAP:	Knowledge, Attitudes and Practices
LDC:	Less Developing Country
MOH:	Ministry of Health
PHC:	Primary Health Care
RHC:	Rural Health Centre
SFYDP	Second Five-Year Development Plan of Iran (1995-2000)
TFR:	Total Fertility Rate
UHC:	Urban Health Centre
UN:	United Nations
UNDP:	United Nations Development Plans
UNFPA:	United Nations Fund for Population Activities
UNICEF:	United Nations Children's Fund
WFS:	World Fertility Survey
WHO:	World Health Organisation

GLOSSARY

<i>aghim:</i>	unable to bear children
<i>ayat:</i>	verses
<i>ayeh:</i>	verse
<i>azl:</i>	coitus interruptus
<i>behvarz:</i>	local health worker
<i>dieh:</i>	blood money
<i>dinar:</i>	equal to 4 grams of gold
<i>elm-ol rejal:</i>	science of dignitaries which looks at the life of the chain of <i>hadith</i>
<i>fatwa:</i>	a religious opinion issued by a <i>mojtahed</i>
<i>figh:</i>	science of <i>shari'at</i>
<i>fitrat:</i>	human's natural character
<i>hadith:</i>	the collected record of sayings and actions of the Prophet Mohammed
<i>halal:</i>	permissible
<i>haram:</i>	prohibited
<i>ijtihad:</i>	fresh interpretation of old texts and religious sources by Islamic jurists
<i>jahiliyat:</i>	the age of <i>jahilliyat</i> refers to an age of ignorance existing in the pre-Islamic Arab peninsula
<i>madhahib:</i>	different schools of Islamic law
<i>majlis:</i>	parliament
<i>maktab:</i>	religious schools where the Qur'an was taught
<i>mehr:</i>	a sum of wealth agreed upon by both wife and husband to be paid to the wife on demand
<i>mojtahed:</i>	a cleric who has reached the height of religious knowledge and expertise and is hence able to practise <i>ijtihad</i> . Each <i>mojtahed</i> has his own followers and his opinion or <i>fatwa</i> is religiously binding for his followers
<i>mojtaheds:</i>	<i>mojtahedin</i>
<i>narration:</i>	investigation process of <i>hadith</i>
<i>nehzat-e savadamozi:</i>	government organisation for adult literacy
<i>resaleh:</i>	the book of religious instructions issued by each <i>mojtahed</i> to guide his or her followers on all earthly matters
<i>rials:</i>	Iranian currency
<i>shari'at:</i>	Islamic canonical law

<i>shi'ie:</i>	followers of the <i>shi'ie</i> branch of Islam
<i>shi'ism:</i>	a branch of Islam whose founders are followers of <i>Imam</i> Ali, the Prophet's son-in-law. The <i>shi'ie</i> believe that after the Prophet's death, the leadership of Islam should have gone to <i>Imam</i> Ali. There are several branches of shi'ism, but the largest one is Twelve <i>Imaman</i>
<i>sunnat</i>	sayings, actions and tacit approvals of the Prophet Mohammed
<i>sunni:</i>	followers of the <i>sunni</i> branch of Islam
<i>sunnism</i>	a branch of Islam whose founders believe that after the Prophet's death, the leadership of Islam should have gone to Abubakr, Omar, Osman and Ali respectively
<i>sura:</i>	chapter
<i>tanzim-khanewade:</i>	family planning
<i>usr:</i>	hardship
<i>ulama:</i>	<i>mojtahedin</i>
<i>yusr:</i>	ease

Introduction

Population policies and family planning programmes in Iran constitute the main focus of this thesis. The study concentrates on the post-Revolutionary era and focuses on the family planning programme as part of the First Five-Year Development Plan of Iran (FFYDP) (1989-94). This introduction will give some general information on Iran, outline the main research foci and approaches of this thesis and summarise what is discussed in each chapter.

Iran is a Middle Eastern Country bounded on the north by the former USSR, presently known as the Republics of Azarbaijan and Turkomania, and the Caspian Sea; Pakistan; and on the west by Turkey and Iraq (Family Planning Department, 1994).

The total area of the country is 1,648,000 square kilometres, ranking 16th in size in the world. About one-half of Iran's land consists of mountains and one-quarter desert, leaving only 25 percent as arable land. Two-thirds of the land is situated on a high plateau with an average altitude of 1,150 meters above sea level. There are only three large rivers, Karun, Atrak and Sefeed-rood. The other rivers and streams are essentially seasonal or variable.

According to the latest Census of 1996, Iran's population was 60,055,488 of which 61 percent are settled in urban areas and 39 percent in rural areas. Iran is divided into 28 provinces, which are further broken down into smaller administrative areas. The three largest cities are Tehran, Mashhad and Tabriz respectively.

The average population density is 35 persons per square kilometre (ibid: 2). In some regions, especially along the Caspian Coast and East Azarbaijan, the average density is significantly higher (over 100), while in the more arid regions of the Central Plateau and Sistan-Baluchestan Province, the average population density is less than 10.

Iran has a variable climate ranging from sub-tropical to sub-polar. In winters, a high-pressure belt cuts across from the north-east to the north-west and central parts of the plateau while low pressures develop over the warm waters of the Caspian Sea and the Persian Gulf where the weather is mild and Mediterranean-like. In the summer, one of the lowest pressure centres in the world prevails in the southern part of the country.

Rainfall varies widely, from less than an average of 50 millimetres in the south-east to approximately 1,900 millimetres in the Caspian Region. The average annual rainfall for the whole country is 355 millimetres.

Iran is an Islamic Republic, the national language is *farsi* (Persian), and Islam is acknowledged as the official religion of the state. Based on the 1996-97 Statistical Yearbook of Iran, the religious affiliation of the population is about 99 percent Muslim, 0.35 Christian, 0.04 percent Zoroastrian, 0.01 Jewish and 0.6 percent others, including those who did not report their religion.

Iran's is mainly an oil-based economy. Important sectors are service, industry and agriculture. The per capita GDP is \$1,470 (Economist Intelligence Unit [EIU], 1998: 13). The employment and unemployment rates are 91% and 9% respectively (Iran Statistical Yearbook, 1996-97).

This thesis is going to examine the policies of family planning programmes in Iran during the FFYDP (1989-94). Its purpose is to describe and discuss the development and implementation of national family planning policy and programmes in Iran, and based on the available data and information and research, to investigate the socio-economic and cultural factors which have affected fertility trends.

In this respect, the status of Iranian women and its relationship to fertility will be discussed in detail. Trends in the education, employment and political participation of Iranian women will be discussed.

This thesis also examines the issue of whether reproductive choice and limitation of family size is compatible with Islamic principles. It will explore the extent to which Islam and *fatwas* of *mojtahedin* legitimise family planning programmes and women's reproductive options.

The commitment of the Islamic government to family planning programmes and population policies through describing the family planning networks in the FFYDP (1989-94) will also be investigated in detail.

The material for this thesis is drawn mainly from secondary sources, such as academic literature and government documents. However, in acknowledgement of the importance of policy-makers and service providers and, in the Iranian context, of the ideas and *fatwas* of religious leaders, in shaping government policies on family planning programmes and on people's attitudes, a number of interviews were also conducted. Material is included from interviews with the head of the Family Planning

Department of the Ministry of Health in Iran, with 20 nurses and 2 doctors who provide family planning services and information and with three religious leaders.

Carrying out fieldwork is never an easy task and there are particular difficulties for an Iranian woman. Interviews with the doctors and nurses had to be conducted in my home area and were restricted to those working in a relatively small, urban area (Zanjan) and also in the capital (Tehran). My status as an urban, educated woman will have influenced the nature of my interactions with these staff, and their responses. This status also meant that I was lucky enough to have the personal contacts, which enabled me to interview the head of the family planning programme and the religious leaders.

I interviewed 20 nurses and 2 doctors in January 1997. All these staff were directly involved with the provision of family planning. As my main aim was to explore their views on population, family planning and the services they provided. I used a qualitative approach to gathering and analysing my data, with mainly open-ended questions. In the event, the interview data were disappointing and my interviews with the nurses and doctors ended up as a minor part of my thesis. The provision of family planning services was seen by them as a routine part of their job, not something to which they had a particular commitment or had given much thought. My observations suggested that in addition they paid little attention to user views and perspectives and spent little time with them in discussing the benefits and drawbacks of different contraceptive products or in counselling clinic attendees. Particularly in deprived areas and with respect to low-income families, the nurses tended to hold stereotypical views of their women clients as subordinate wives and ignorant/illiterate women. They seemed, implicitly at least, to be reflecting a particular explanatory schema, whereby family planning is seen as unproblematically a 'good thing', which will be welcomed and accepted by all those who are sufficiently educated. The material collected was thus used primarily as background. An account of the research methods and a summary of the responses from the nurses and doctors are in Appendix II.

My respondents worked in urban areas and it may well be that, in rural areas, the situation is different. A *behvarz* (the local worker) is somebody selected and trained from the same village of people who come to the health house. Those who have face-to-face contact with the clients are thus not considered as a stranger by the people. This could explain the figures which show that correct use of contraceptive

pills among those who receive them from rural settings is slightly higher than those who receive them from urban facilities (Family Planning Department, 1996).

As religious leaders' ideas and *fatwas* have been important in shaping the government's policies on family planning programme, as well as in shaping people's attitudes, I decided to interview a number of eminent *mojtaheds*. I conducted three interviews. The first was with Ayatollah Mousavi Zanjani, who is the speaker of the Friday Sermons and the representative of the leader (Ayatollah Khamene'i) in Zanzan. He is widely considered to be the most influential jurist in the Zanzan Province. I also interviewed Ayatollah Ahmadi and Ayatollah Mousavi Ardebily, both *mojtaheds* in Qum which is the centre of Islamic studies in Iran. Finally, I contacted Ayatollah Sanei who, although I did not interview him, referred me to the subjects of a 1990 Conference on population and family planning (Conference Proceedings, 1990), and said that the points, which emerged from this conference, reflect his main concerns. I have tried to express his views as exemplified through the conference in my thesis.

I chose these four as reflecting a range of views on family planning. For example, Ayatollah Sanei is well-known as one of the most open-minded Ayatollahs in Iran, whereas Ayatollah Ahmadi got more conservative attitudes and views. Examples of this range of views are given in Appendix II. I found my interviews with the jurists more interesting and useful than those with the clinic staff. Also of value was my interview with Dr. Asaee, the head of the government family planning department. Material from these interviews contributes to the discussions in Chapter Four and Six and the questions asked together with a summary of the main points made by the religious leaders, are in Appendix II.

This study attempts to document the success of the family planning programmes in Iran in the FFYDP (1989-94). It examines the evolution of the Iranian family planning policies and programmes and explores how far high fertility was responsive to direct intervention programmes intended to slow population growth. It also analyses the major factors contributing to policy implementation and identifies several problems limiting the current performance of the programme

Chapter One of the thesis discusses a range of theoretical approaches to population growth in developing countries. Population theories will be discussed in detail. Also, the relationship between population growth and socio-economic development will be investigated.

Chapter Two looks at the trends in and composition of the population of Iran. It discusses factors such as urbanisation, age of marriage and family patterns in Iran.

In the available studies about fertility patterns in developing countries, including Iran, the status of women has been referred to as an important influence on levels of fertility and consequently, any improvement in the status of women may reduce the fertility rate. Chapter Three thus discusses the education, labour market and political activities of women in Iran and their relation to fertility decline.

Chapter Four clarifies Islam's stand on family planning through Qur'an, and *hadith*. Importantly, *ulama's* attitudes toward family planning in Iran are considered, as their opinions affect people's attitudes toward family planning will be discussed.

Chapter Five looks at family planning policies in developing countries, with some implications for Iran.

Chapter Six analyses the political conditions under which population policies have been formulated and implemented and examines the Islamic Republic of Iran's policies on family planning in the First Five-Year Socio-Economic Development Plan of Iran (1989-94).

Finally, the conclusion is devoted to outlining the main factors which seem to be responsible for reducing the fertility rate in Iran and discussing the main findings of the study, to suggest some measures that can help to accelerate and improve family planning programmes in Iran and define further investigations in different aspects of family planning in the study area.

Chapter One: Population Growth, a Theoretical Framework

Introduction

It has been widely argued that rapid population growth, arising from high fertility is disadvantageous to socio-economic growth in developing countries. Despite attempts to challenge these arguments, they have led to many attempts by the governments of these countries to reduce fertility rates by implementing population policies. This chapter attempts to assess the theoretical frameworks about population growth that claim to fit developing countries, including Iran.

1.1. Is Population Growth a Real Problem in Developing Countries?

There is a world-wide awareness of the important relationship of population trends to the social and economic development of nations and to the well-being of families and individuals. Also, there is an interrelationship between demographic factors and socio-economic conditions in developing countries, which has occupied a central position in population studies.

The rich countries have more food than they need for themselves and in most of them levels of population growth are low or declining. In much of the remainder of the world, population growth is quite high and the pressure on available resources is huge. An enormous gap exists in consumption rates, in the resources available and in the ways in which those resources are managed between richer and poorer countries and between the wealthy and the destitute within the same country. Giddens (1989: 586) states that thirty-two times as much energy is consumed per person in the United States as in average African country in 1988.

In these circumstances, high population growth in the poorer countries is believed by some to exacerbate the problems of survival and to accelerate the rate of resource degradation.

Reproduction, like any other form of production in society, is affected by the economic system as well as by nutritional and material resources. El-Saa'dawi (1980: 61) argues that if such resources become scarce in comparison with the number of inhabitants, society is impelled by its fear of hunger or death to do something in order to keep the balance between material production and human reproduction. This can be done in one of two ways: either by increasing the level of production of materials and nutritional resources, or by reducing the number of births and so of children.

Throughout most of the two million years of the human species' existence on earth, its numbers have been few. When humans first started to cultivate food through agriculture some 12,000 years ago, the estimated world population was no more than five million, less than the number of people living today in Mexico City, Buenos Aires or Bangkok (Todaro, 1989: 179). By two thousand years ago the world's population had grown to 250 million. The world's population doubled to 500 million around the year 1600, which was an average annual growth rate of 0.04 percent (Pomfret, 1992: 171). By 1750, it had almost trebled, to 728 million people. During the next two hundred years (1750-1950), an additional 1.7 billion people were added to the earth's numbers.

In the 40 years from 1950 to 1990 world population doubled again, bringing the total figure at the end of 1990 to almost 5.4 billion people. If this trend continues to the year 2,000, the world's population would then be almost 6.2 billion people. By 1750 the population growth rate had risen to 0.3 percent per year. By the 1950s, the rate had accelerated, this time by threefold to about 1.0 percent per year (Population Reference Bureau, 1990). Today, only 40 years later, the world's population growth rate has almost doubled to a remarkable 1.8 percent per year.

By 1988, Davidson et al (1988: 131) stated that world population was growing at the rate of approximately a billion people every 12 years. Every minute it grew by 150; every day by 220,000; every year by over 80 million.

Ehrlich calculated in the 1960s that, if the rate of population growth at that period continued, 900 years from now (not a long period in world history as a whole) there would be 60,000,000,000,000,000 people on the face of the earth. There would be a hundred people for every square yard of the earth's surface, including both sea and land.

In 1990, over four-fifths of that population inhabited the developing world, and 90 percent of the increase occurred in developing countries. Every year 90 million people are being added to the world population. About 81 million of these additional people will be born each year in developing countries. These increases are unprecedented in the history of mankind.

Virtually all the industrialised countries today have low birth and death rates, as compared both with their history and with developing countries (Giddens, 1989: 583). In the majority of developing countries, death rates have fallen but birth rates

remain high. There is considerable debate as to the underlying causes of the rapid fall, but several main influences remain.

The reason for the sudden change in overall population trends is that for almost all of recorded human history the rate of population change whether up or down, has been strongly influenced by the combined effects of famine, disease, malnutrition, plague and war, conditions that resulted in high and fluctuating death rates. In the twentieth century, such conditions appear to have come increasingly under human's technological and economic control. As a result, human mortality (the death rate) is lower than at any other point in human existence. It is this decline in mortality resulting from, among other things, improved nutrition, the spread of public health measures and rapid technological advances in modern medicine throughout the world particularly in the last 30 years, that has resulted in the unprecedented increases in population growth, especially in developing countries. Population growth today is primarily the result of a rapid transition from a long historical era characterised by high birth and death rates to one in which death rates have fallen sharply while birth rates, especially in developing countries, have not fallen at the same rate as death rates. Pomfret (1992: 173) argues that:

while it took 170 years for the Swedish death rate to drop from thirty to ten, it only took 40 years for Chile's death rate to make the same drop in this century, and in parts of Asia and most of Africa the drop has been even more compressed.

Nevertheless, the average duration of life remains almost 15 years greater in the developed countries. However, even this gap has been sharply reduced in the last 25 years. Based on the World Development Report (1989: 29) in 1950, life expectancy at birth for people in developing countries averaged 35-40 years compared with 62-65 years in the developed world. By 1990 the differences had fallen to 14 years as life expectancy in the less developed countries (LDCs) increased to 59 years (a gain of 42 percent), while in the industrial nations it had risen to 73 years (an increase of 13 percent).

High population growth rates resulting from low death rates and sustained high birth rates have been blamed for the slow nature of the socio-economic and cultural development in developing countries. It is also acknowledged that very low levels of education and literacy, rural poverty, low per capita incomes, unemployment

and overcrowdedness in urban centres are closely related to rapid population growth rates (Bauer, 1991: 126).

An average of 17 births per woman is possible, but the world's highest average in 1990 was Rwanda and Yemen, at 8 births per woman (World Bank, 1990: 113). The large discrepancy between possible and actual birth underlines how people develop their own means to regulate birth.

Many developing countries have gone through stages of demographic transition and reduced fertility rates. During the 1970s, many developing countries experienced acceleration in their transition to lower fertility (Coale, 1983: 828-832). The pace of fertility decline has been remarkable in some countries, for example in a number of Southeast Asian societies (Hirschman & Guest, 1990: 121-152).

The first stage of the 'demographic transition'¹, which is very important, is marked by a decline in the death rate, particularly a reduction in deaths among infants and young children. This in itself is to be welcomed and no human being or government would wish to reverse the trend. The question of how to reduce the rate of population growth, if this is desired, therefore narrows down to a matter of cutting the birth rate.

Three kinds of demographic change affect the crude birth rate. The first is change in the population shares of different age groups and sexes (Perkins et al, 1992: 169). A rise in the percentage of people of reproductive age (roughly 15 to 45) increases the birth rate. Conversely, if the proportion of older people in the population goes up, as is happening in many industrial countries today, the birth rate drops. Similarly, an imbalance in the sex ratio (for example, through the migration of males) reduces the birth rate, whereas correcting a previously unbalanced ratio increases it.

The second demographic mechanism that influences the birth rate is change in the percentage of people of reproductive age who are married (ibid.). This is affected by the proportion that marry at some time in their lives, by the average age of first marriage, and by the divorce rate.

The third factor is marital fertility, the rate at which married couples reproduce (ibid.). Historical birth rate declines have come about mainly because of declines in marital fertility.

¹ Demographers often refer to the changes in the ratio of births to deaths in the industrialised countries from the nineteenth century onwards as the 'demographic transition'. However, this is a contentious term, as it implies a common pattern of change for which the evidence is mixed.

The major source of difference in population growth rates between the less developed and the more developed countries is the sizeable difference in fertility rates between the former and the latter. Perkins et al (1992: 163) argue that:

the developed countries of Europe and North America have rates of natural increase well under 1 percent and in some developed countries current fertility is no longer sufficient to replace the existing population.

On the other hand, there has been a narrowing of the gap in mortality rates between developed and less developed countries, though differences in life expectancy are still large. Of course, there are a few countries where improvement has not occurred.

Pomfret (1992: 174) points out that many seventeenth and eighteenth century writers saw the number of people as the main source of national wealth, a view closely tied to the labour theory of value. This view still has some adherents among nationalist politicians who identify national power with population, even though there are clearly many other determinants of power. This was the case in the early years of the Iranian Revolution in which the Iranian leaders perceived a high rate of population growth as desirable to increase the strength the Muslim nation (Mossavar-Rahmani, 1983; Obermeyer, 1994).

However, it has been widely argued as a contrary view that population growth is a major, perhaps decisive obstacle to the economic progress and social betterment of developing countries. It is believed that a large population will face stiff economic competition, lower incomes, congestion, and crowding if other means of production as well as the social infrastructure do not expand along with population (Easterlin, 1973; Becker, 1981; and also Barro and Becker, 1988).

Robert S. McNamara, a former president of the World Bank, considered the threat of unmanageable population pressures to be very much like the threat of nuclear war. He states that:

governments must divert an inordinately high proportion of their limited national savings away from productive effort simply in order to maintain the current low level of existence for the expanding population.....Capital that ought to have been invested was not available. It had been dissipated by the ever-rising tide of children. (1973: 31)

Giddens (1989: 578) states that:

with the exception of the spread of nuclear weaponry and threats to global ecological systems, population growth is the most pressing and urgent issue currently faced by humanity.

The assertion is that most of the developing countries are not capable of improving levels of living for their people with the current and anticipated levels of population growth. Rapid population increase makes it more difficult to provide essential social services like housing, transport, sanitation and social security for the whole population.

The extreme version of the population as a serious problem attempts to attribute almost all the world's economic and social evils to excessive population growth. Some neo-Malthusians believed that rapid population growth dooms any attempts at development to failure; in this view, population growth is the cause of underdevelopment (e.g., Ehrlich, 1968). They argue that rapid population growth should be a real concern of developing countries. Their basic proposition is that population growth intensifies and exacerbates the economic, social and psychological problems associated with the condition of 'underdevelopment', especially since it retards the prospects for a better life for those already born.

Some Marxists completely reverse this causality, maintaining that poverty and underdevelopment cause rapid population growth (e.g., Mamdani, 1972). They may, however, agree that rapid population growth may be undesirable. Todaro (1989: 192) states that:

a much less extreme and draconian anti-population growth argument asserts that there are many families in developing countries who would like to limit their size, if only they had the means to do so.

Hence, the main problem here is to provide modern birth control devices. The belief is that family planning programmes with clinics throughout the country need to be established both to educate people about modern methods of fertility control and to provide them with cheap and safe means to practise it.

Finally, some like Simon (1981, 1996) states that population growth is an unalloyed blessing, arguing that "the mind is greater than the stomach". He argues that the more talented, energetic people there are, the better off the human race will be. For him, economies of scale, accelerating human-capital formation, and rapid technological and institutional innovation put humanity on a continual upward path of

progress as its numbers steadily expand. He argues, for example, the standard of living and life prospects of more than 50 million Egyptians alive today far exceed those of their 10 million grandparents in 1900. He also notes that some of the development problems of countries like Sudan are the result of a highly dispersed population.

Hodgson and Watkins (1997) have argued that the post-World War II debate on the consequences of population growth may be divided into four distinct periods (quoted in Ahlburg, 1997: 317). They claim that, in the first period, 1945-65, the neo-Malthusian views gained dominance, and the cause of concern shifted from population size to population growth rates. Coale and Hoover (1958) published their influential book providing the intellectual justification for policies and programmes seeking to slow rapid population growth. In the second period, 1965-74, opponents of population growth became more outspoken, with many demographers and others calling for solutions 'beyond family planning'. They suggested such measures as government-imposed disincentives on childbearing, paying people to be sterilised, and even making bearing a third child illegal and requiring an abortion to terminate all such pregnancies (Hodgson and Watkins, 1997: 484). Julian Simon entered the field during the third period, that between 1974-85. He called for 'significant demotion for fertility control on the international agenda of needed policy interventions' (ibid: 489); and as Ahlburg (1998: 320) argues:

Simon battled on during the fourth period, from 1985 until today, when the neo-Malthusians increased their strength internationally but saw it wane domestically, in part because of the impact of work of Simon and other 'revisionist' economists.

During the fourth period, Simon carefully outlined between the short-time economic consequences of population growth, which, he agreed, was largely negative, and the long-term effects, which, he argued were largely positive.

1.2. Population Theories

There are three major approaches to the economics of population analysis: the theory of 'demographic transition', the Malthusian 'population trap', and the new 'micro-economics' of fertility.

1.2.1. The theory of demographic transition

The theory of demographic transition attempts to explain why all contemporary developed nations have more or less passed through the same three 'stages' of modern population history. For centuries before their economic modernisation, these countries had stable or very slow growing populations as a result of a combination of high birth rates and almost equally high death rates (Todaro, 1989: 198). This was Stage I. Stage II began to occur when modernisation associated with improved nutrition, public health, medicine, better diets, higher incomes, etc., led to a marked reduction in mortality that gradually raised life expectancy from under 40 years to over 60 years (ibid: 199). However, the decline in death rates was not immediately accompanied by a decline in fertility. As a result, the growing divergence between high birth rates and falling death rates led to a sharp increase in population growth compared to past centuries. Stage II thus marks the beginning of the demographic transition (i.e., the transition from stable or slow-growing populations first to rapidly increasing numbers and then to declining rates of growth). Finally, Stage III was entered when the forces and influences of modernisation and development leading to the lower rates of fertility combined with lower death rates, leaving little or no population growth (ibid: 200).

The important question, therefore, is: when and under what conditions are developing countries likely to experience falling birth rates and a slower expansion of population? To address this issue many traditional and modern economic theories of population and development have been addressed. The mainstream arguments of the theory are that:

fertility is high in poor, traditional societies because of high mortality, the lack of opportunities for individual advancement, and the economic value of children. All these things change with modernisation or urban industrialisation.
(Caldwell, 1982: 117)

The main critique is whether the theory actually deals with reactions and accommodations to material circumstances. There is a persistent strain in demographic transition theory writings that claims rationality comes only with industrial, urban society, and a related strain that regards traditional agrarian societies as essentially brutish and superstitious (ibid: 129).

1.2.2. The Malthusian population trap

Almost 200 years ago, the Reverend Thomas Malthus put forward a theory of the relationship between population growth and economic development that still survives today. The old debates on the political economy of population were first incarnated as 'Malthus versus Marx' (Richards & Waterbury, 1990: 82).

Writing in 1798 in his *Essay on the Principle of Population*, and drawing on the concept of diminishing returns, Malthus postulated a universal tendency for the population of a country, unless checked by dwindling food supplies, to grow at a geometric rate, doubling every 30 to 40 years². At the same time, because of diminishing returns to the fixed factor, land, food supplies could only expand roughly at an arithmetical rate. In fact, with each member of the population having less land to work with, his marginal contribution to food production would actually start to decline.

Growth in population is exponential, that is it occurs in an accelerating way. There is an ancient Persian myth, which helps to illustrate this. A courtier asked a king to reward him for his services by giving him twice as many grains of rice as before, for each service. Starting with a single grain on the first square of a chessboard, and believing himself to be on to a good thing, the king commanded grain to be brought up from his storehouse. By the twenty-first square, the storehouse was empty; the fortieth square required ten billion rice grains.

Malthus argues that the growth in food supplies could not keep pace with the burgeoning population, so that per capita incomes would have a tendency to fall so low as to lead to a stable population barely existing at or slightly above the subsistence level. He claims that the principal cause of poverty, low levels of living, malnutrition and ill health, environmental degradation, and a wide array of other social problems are rapid population growth. In the twentieth century, incautious words such as the 'population bomb' or 'population explosion' are tossed around at will. Indeed, dire predictions of world food catastrophes and ecological disaster are attributed almost entirely to the growth in numbers. Such an extreme position leads some of its advocates to assert that world (i.e. LDCs) population stabilisation or even

² A geometric progression is simply a doubling or some other multiple of each previous number, like 1, 2, 4, 8, 16, 32, 64, 128, 256, 512, 1,024....., etc. Like compound interest, geometric progressions have a way of attaining large numbers very rapidly.

decline is the most urgent contemporary task even if it requires severe and coercive measure to control family size in developing countries.

Blanchet (1991: 105-114) argues that this position emphasises the obstacles to growth caused by diminishing returns as well as the deleterious effect of high rates of population growth on saving and investment and, therefore, future growth. Concern regarding resource depletion is an additional argument supporting the pessimistic position.

Malthus, therefore contended that the only way to avoid this condition of chronic low levels of living or 'absolute poverty' was for people to engage in 'moral restraint' and limit the numbers of their progeny. Giddens (1989: 583) argues that "what Malthus called 'moral restraint', meant accepting strict limitations on the frequency of sexual intercourse". Thus, one might regard Malthus as the 'father' of the modern birth control movement.

According to Malthus and the neo-Malthusians, poor nations will never be able to rise much above their subsistence levels of per capita income unless they initiate preventive checks (birth control) on their population growth. They believe that in the absence of such preventive checks, positive checks (starvation, disease, wars) on population growth will inevitably provide the restraining force.

The Malthusian population trap provides a simple and in many ways appealing theory of the relationship between population growth and economic development. Unfortunately, it is based on a number of simplistic assumptions and hypotheses that do not stand the test of empirical verification. The 'population trap' can be criticised on two major grounds. Todaro (1989: 220) argues that "the model (and, indeed, Malthus) assumes away or does not take into account the enormous impact of technological progress in offsetting the growth inhibiting forces of rapid population increases".

The history of modern economic growth has been most closely associated with rapid technological progress in the form of a continuous series of scientific, technological, and social inventions and innovations. Increasing rather than decreasing returns to scale have been a distinguishing feature of the modern growth epoch. Malthus was basically correct in assuming a limited supply of land. However, he did not, and in fairness could not at that time, anticipate the manner in which technological progress could augment the availability of land by raising its quality (i.e., productivity) even though its quantity might remain roughly the same.

In fact, over the past two centuries the extreme Malthusian position has been contradicted by events, as increases in agricultural productivity have allowed a vastly larger global population to live at much higher income levels than in the eighteenth century.

Todaro (1989: 221) argues that the second basic criticism of the 'trap' model is that:

national rates of population increase are directly (positively) related to low levels of national per capita income. Therefore, we should expect population growth rates to increase with increasing per capita income. There appears to be no clear correlation, however, between population growth rates and levels of per capita income among developing countries.

In his argument, the rate of income growth is assumed at first to be positively related to levels of per capita income. The economic reason for this positive relationship is the assumption that savings vary positively with per capita income. Countries with higher per capita incomes are assumed to be capable of generating higher saving rates and thus more investment.

We can largely reject the Malthusian and neo-Malthusian theories as applied to contemporary developing countries on the grounds that they do not take adequate account of the role and impact of technological progress; they are based on a hypothesis about a macro relationship between population growth and levels of per capita income which does not stand up to empirical testing; and they focus on the wrong variable, per capita income, as the principal determinant of population growth rates.

1.2.3. The micro-economic theory of fertility

In recent years economists have begun to look more closely at the micro-economic determinants of family fertility in an attempt to provide a better theoretical and empirical explanation for the observed falling birth rates associated with the 'demographic transition'. In doing this, they have drawn on traditional neo-Classical theories of household and consumer behaviour for their basic analytical model, and have utilised the principles of economy and optimisation to explain family size decisions.

Demand theory proposes that actual fertility is influenced by the demand for children, the supply of children, and the cost of regulation. The theory dates from the

effort in 1957 by Harvey Leibenstein to formalise the turning point, the process by which fertility declines, in the demographic transition. He explains that:

the essence of the model is the presumption that families would balance utilities against disutilities ascribed to an n th child to determine whether a family wanted an n th child.
(Leibenstein, 1957: 460)

Later, Becker (1991) reformulated this approach into a more general model of completed fertility, based on the familiar concept of maximising behaviour and the existence of equilibrium solutions for all decision situations. The notion of the 'household production function' is basic to contemporary micro-economic theory: the household itself is the unit which produces its own ultimate utility using internal and purchased external resources and employing a particular 'household technology' (Lancaster, 1996).

This implies that the 'demand' for children is actually a demand by parents for the flow of services which children produce for them over time.

The conventional theory of consumer behaviour assumes that an individual with a given set of tastes or preferences for a range of goods (i.e., 'utility function') tries to maximise the satisfaction derived from consuming these goods subject to his or her own income constraint and the relative prices of all goods. In the application of this theory to fertility analysis, children are considered as a special kind of consumption (and particularly in LDCs, investment) good so that fertility becomes a rational economic response to the consumer's (family's) demand for children relative to other goods.
(Todaro, 1989: 225)

Consumption of these child-services generates pleasure or 'utility' for the parents (the household). These child-services (and other services) are produced within the household using the time and labour of the household members and inputs purchased from outside the household, and employ the 'technology' possessed by the household for such production (Robinson, 1997: 63-74).

Demand theory says that fertility decisions are determined by the costs and benefits faced by couples at the time when the decisions are made.
(Aghajanian et al, 1995: 161)

At first glance, quality and quantity would appear to be substitutes, but in Becker's formulation their relationship is multiplicative and interactive. They do not trade-off against one another, but each is partly determined by the other. Razin and

Sadka (1995: 6, 13) argues child quality is a multi-dimensional construct consisting of nutrition, education, skill development, health care and so forth and the improvement in the quality of a child can be achieved in a variety of ways: spending on the current consumption of a child, investing in the child's health or education (investing in human capital) and providing for the child's future consumption.

Cigno has proposed an even more sweeping definition of quality.

The maximum amount of goods which a person can gain access over by his or her best endeavours over a lifetime given the level of parental benefactions.

(1994: 113)

As we have seen, the economic theory of fertility assumes that the household demand for children is determined by family preferences for a certain number of surviving (often male) children (i.e., in regions of high mortality, parents may produce more children than they actually desire in the expectation that some will not survive), by the price or 'opportunity cost' of rearing these children, and by levels of family income. Children in poor societies are seen partially as economic investment goods in that there is an 'expected return' in the form of both child labour and the provision of financial support for parents in old age.

As Kuznets has noted:

they [the LDCs] are prolific because under their economic and social conditions large proportions of the population see their economic and social interests in more children as a supply of family labour, as a pool for a genetic lottery, and as a matter of economic and social security and as the only protection at times of sickness and old age.

(1974: 87-88)

Economic analysis provides a useful perspective on fertility. Although, of course, any couple's decision to have a child is a complex outcome of social norms and personal psychology, some insights can be gained if one treats the decision in the same light as any other economic decision, as a balancing of 'costs' and 'benefits,' recognising from the outset that neither of these will be exclusively monetary. However, this view suggests that since most people like children, they will tend to have more of them as they become richer, just as they buy more clothes, food, radios, or entertainment. How, then, can we explain the observed correlation between higher incomes and lower fertility? Some economic analysts of demography argue that the

key is:

the rising opportunity cost of having children as family incomes rise. In turn, these rising costs have two major components: (i) the increased amount of money that parents wish to spend on each child; and (ii) the higher opportunity cost of parents' time. (Richards & Waterbury, 1990: 87)

When the price or cost of children rises as a result of increased educational and employment opportunities for women, compulsory schooling or a rise in school fees, or the establishment of minimum-age child labour laws, or the provision of publicly financed old-age social security schemes which reduces the benefits rather than raising the cost and so on, parents will demand fewer 'additional' children. They will substitute perhaps, quality for quantity, or a mother's employment income for her child rearing activities. It follows that one way to induce families to desire fewer children is to raise the 'price' of child rearing by, say, providing greater educational opportunities and a wider range of higher-paying jobs for young women. The relationship between opportunities for women and fertility will be explored further in chapter four.

An important component of the opportunity cost of having children is the economic activity of children. The earlier a child can perform productive labour, the sooner his or her net contribution to the family budget will be positive. In most peasant societies, children can and perform numerous tasks, ranging from caring for younger children to weaving carpets. In general, the more child labour performed in agriculture, the lower the opportunity cost of having many children, and therefore, the higher the fertility rate.

Clearly, a critical component of the economic analysis of fertility is the opportunity cost of women's time. Since it is still the case throughout the developing countries that many women are excluded from waged employment (Moghadam, 1995; Afshar, 1997), the opportunity cost of their time will be low. When such considerations are combined with and reinforced by social pressures on women to have many children, the result is likely to be a high fertility rate.

One of the critiques of demand theory is highlighted by Robinson (1997: 66):

it is possible to imagine that a couple might value the consumption-services provided by children very highly and yet expect no labour-services or future economic support.

The evaluation of child labour and future old-age security services could well be negative if the couple did not expect to receive any economic transfers from their children, but rather anticipated continuing to support them well into their adult lives. Yet, such couples may still have children because of the perceived emotional returns.

Modernisation may reduce fertility even if the mechanisms postulated by demand theory do not necessary work. Cleland and Rodriguez (1988: 419-442) argue that “more educated women tend to have fewer children, as do more urban women”. Modernisation tends to increase the proportion of better-educated women and of urban women in the population, and thus to reduce fertility.

Doubt was cast on demand theory by the European Fertility Project (Coale and Watkins, 1986), which showed that the fertility decline in most European countries started at about the same time but under different economic and social conditions, that there were sharp differences across ethnic and linguistic barriers within the same country, and that most English-speaking countries followed similar patterns of fertility decline. These findings led several authors to postulate that fertility decline is produced by the diffusion of new ideas and knowledge about fertility regulation rather than by changes in socio-economic factors, a hypothesis that Freedman, (1979); Knodel and van de Walle, (1979); and Cleland and Wilson, (1987) call ideation theory. Writers who advocate ideation theory have made two clear predictions about its implications for modern fertility declines in developing countries. First, official family planning programmes are likely to accelerate fertility decline, except in societies that are highly resistant to fertility decline (e.g., Cleland and Wilson 1987: 29). Second, improvements in the status of women also tend to accelerate this decline (e.g., Knodel and van de Walle 1979: 238).

According to both demand and ideation theories, a higher status of women leads to reduced fertility. Demand theory is formulated in terms of a household that balances costs and benefits, but the husband and the wife may well perceive these costs and benefits differently, so that their relative weight in making decisions is important. The higher the woman's status, the greater her weight in decision making. Because women bear most of the physical burden and risk of childbearing, it has been commonly assumed that women seek to reduce the number of pregnancies. Mason (1984) discussed some of the ways in which women's higher status could depress fertility, including giving women more power to achieve their (allegedly) lower fertility goals.

Birth rates among the poor are especially likely to fall where there is an increase in the education of women and, as a consequence, a change in their roles and status. Moghadam, 1995; Afshar, 1998 argue that an increase in female non-agricultural wage employment opportunities, which raise the price or 'cost' of their traditional child rearing activities can help in this respect.

Most studies of the conditions of fertility decline indicate that the emancipation of women is closely associated with reductions in fertility. In micro studies we find that female education and literacy, and female readership of newspapers and other literature, or husband-wife discussions of fertility are strongly and negatively related to fertility (Pernia et al, 1993).

The relationship between education of Iranian women and fertility has been considered as an influential factor in reducing fertility rate in Iran in recent decade (Hoodfar, 1995; Aghajanian et al, 1996; Tabibian et al, 1998). This will be further discussed in chapter 3.

Caldwell argued that systematic restriction of family size in developing countries is practised primarily by women who have adopted Western attitudes toward child bearing and child rearing, as a result of exposure to Western education, media, and contacts. Their attitude to fertility control does not depend on income, status, or urbanisation, but on Westernisation (quoted in Bauer, 1991: 35). In this context, Westernisation means the readiness of parents to forgo additions to family income from the work of young children and also to incur increased expenditure on education, reflecting greater concern with the material welfare of their children (ibid: 37).

Similarly, there have been some discussions on the linkage between modernisation and fertility (Cutright & Kelly, 1981; Easterlin, 1983; Entwisle & Mason, 1985; Hirschmann & Guest, 1990; Paydarfar & Moini, 1995). The modernisation theory predicts that human societies are very likely to reduce their marital fertility when they transform from illiterate, rural, and agricultural types to literate, urban, and industrial types.

Paydarfar et al (1995: 71) believes that:

there is a relationship between modernisation forces and marital fertility patterns. The modernisation process, as generally expressed and measured by industrialisation, urbanisation, and universal education, has been a dynamic social force transforming and reshaping the structures and functions of human society.

Pomfret (1992: 176) argues that

in cities children cost more and can often contribute less to family income, and with increased labour mobility children often become less willing to look after aged parents.

However, Sheykhi (1995) believes that sometimes cultural values do not encourage a declining population growth rate in parallel with the modernisation process. He believes that cultural factors play important roles in maintaining high or reducing fertility levels in any society, and in order to attain the optimum family size, the appropriate cultural basis and conditions should be created through increasing and dissemination of information on family planning.

1.3. The Causes of Population Growth

Rapid population growth in developing countries is closely associated with very youthful population structure and high age-dependency ratios, which contrasts markedly with those of the developed countries.

The rapid drop in mortality, when accompanied by little or no decline in fertility, has produced a completely different age structure in developing countries, compared to the industrialised ones. The 'elongated pyramid' age-distribution in the non-industrialised countries has been argued to add to their social and economic difficulties (Giddens, 1989: 582).

Table 1.1: Demographic and Population Characteristics of Countries by Level of GNP per Capita, 1988**A. Demographic Characteristics**

Income group	Crude birth rate per 1,000	Rate of natural increase	Infant death rate per 1,000
Below \$250	44	2.8	120
\$250-500	29 (38)	2.0 (2.5)	65 (84)
\$500-2,200	30	2.2	55
\$2,200-6,000	22	1.2	34
Above \$6,000	14	0.5	10

B. Population Characteristics

Income group	Population below 15 years (% of total)	Growth rate of urban population 1980-88(%)	Urban population (% of total)
Below \$250	45	6.3	18
\$250-\$500	34 (42)	na (4.9)	36 (25)
\$500-\$2,200	36	3.6	55
\$2,200-\$6000	29	1.9	64
Above \$6,000	20	0.8	77

Figures in parentheses exclude India and China.

Sources: World Bank, World Development Report 1990, and United Nations, Department of International Economic and Social Affairs, Demographic Yearbook 1987 (New York).

Table 1.1 shows some demographic and population structure characteristics of countries at different levels of GNP per capita. Part A of this table reflects of the demographic transition pattern. With only a few exceptions, such as those caused by the atypically low birth rates of India and China, birth rates decline steadily as one moves up the income scale from countries with per capita incomes below \$250 to countries with annual incomes of \$6,000 or more. The highest rates of natural increase are now in the low-income countries. The infant death rate is a particularly sensitive measure of death rate decline. It falls by 92 percent from the poorest group of countries in Table 1.1 to the richest group.

Because of their high birth rates, developing countries have populations in which children make up a large percentage of the total (45 or 50 percent on average in the poor countries, versus only 20 percent in high-income countries) (World Bank, 1990). (see Table 1.1)

A country with a young population has a high dependency ratio, or ratio of non working-age population (conventionally defined as 0 to 14, and 65 and over) to working-age population. In countries with such an age structure, the youth dependency ratio - that is the proportion of youths (below 15 years) to economically active adults (ages 15-64) is very high. Thus the workforce in developing countries must support almost twice as many children as they do in the wealthier countries.

Some believe that a high dependency ratio is assumed to depress per-capita income by requiring that the output of a given number of 'producers' be shared among a larger number of 'consumers'.

Population trends have brought about a very large increase in the proportion of older people in the industrialised countries (Jorgensen, 1986: 14). A country with an old population also has a high dependency ratio. Developed countries are concerned about the implications of the 'burden' of an ageing population with an increase in the dependency ratio associated with longer life expectancy and earlier retirement.

With high proportions of children, developing countries inevitably experience high dependency ratios, adults, and a large part of the available supplies of labour and capital must be devoted to feeding, clothing and educating the youth. This is argued to be a great drain on resources. The provision of school facilities for all these children is extremely costly. But with low proportions of children (and thus high proportions of older people) the costs are also very high.

Nathan Keyfitz (1977: 65) looks in great detail at the cost argument in his focus on the age structure. This is an area in which it is widely asserted that population growth constitutes a brake on the development process. Rapid population growth that is brought about by a decline in mortality (rather than by migration) produces an almost immediate lowering of the average age of the population, or an increase in the proportion of infants and young people.

The normal life cycle of an individual begins with almost pure consumption through a rather long period of infancy. Only gradually does the productive capacity of the individual increase, with adulthood marked in some sense by a predominance of productive capacity over consumption (Pillai & Omari, 1992). This is then followed in old age by a decline in productive capacity and an increase in consumption. In this general sense a younger population experiences greater pressures on consumption and less productive capacity than an older population.

It is possible to identify in greater detail the specific pressures on consumption, in the demands for infant care, followed by the demands currently widespread for schools and public education, all of which come before the individuals are ready to begin a productive life in society.

Of course, it is important to emphasise that the 'dependency ratio' is a social construct, so there is a need to ask how far its assumptions accord with reality in developing countries.

It can be argued that the economic significance of the ratio of people aged 15-64 to the total population is affected by the correlation between age and labour force participation and by that found between age and productivity among persons participating in the labour force. While this correlation depends largely upon a country's technology, educational composition, industrial structure, degree of urbanisation, income levels, and social security conventions, they are affected also by factors responsible for increase in life expectancy. These factors make for decline in mortality, for increases in a population's general health, and, hence, for increase in its capacity to work hard and regularly. Increases in life expectancy, unlike increases in fertility, are thus accompanied, within limits, by a compensatory change (the demands produced by increased fertility) in the working capacity of labour force participants.

The youthfulness of the population, with its improving health and education, represents a considerable economic potential for the future. However, a young population means that a large proportion of the people is not economically active to any extent, even if child labour is still common, and, in a climate of modernisation, requires considerable investment for its education.

The large proportion of young people and the prevailing reproductive rates will ensure significant increases in population in the principal regions of developing countries over the next few decades. However, high birth rates in contemporary developing countries obviously cannot be substantially altered overnight.

Perhaps the least understood aspect of population growth is its tendency to persist even after birth rates may have declined substantially (the 'hidden momentum' of population growth).

The hidden momentum of population growth has to do with the age structure of developing nations. Consequently, even if developing countries decide to give top priority to limitation of population growth, it will still take many years to lower national fertility to desired levels. Developing countries with high birth rates have

large proportions of children and adolescents in their population (sometimes as high as 50 percent). In such a population, young people greatly outnumber their parents and when their generation reaches adulthood the number of potential parents will inevitably be much larger than at present. It follows that even if these new parents have only enough children to replace themselves (say two per couple as compared with their parents who may have had four children) the total population will still increase substantially before levelling off. This is because the total number of couples having two children is much greater than the number of couples who previously had four children. A population which has a very large proportion of young people will continue to grow even if the birth rate suddenly should fall. If fertility declined to 'replacement level' – one birth for every living person in a population, it would take seventy-five years before that population stopped increasing (Duncan quoted in Giddens, 1989: 584).

Too often, however, politicians, planners, and even economists, are unaware of this basic arithmetic of population momentum. They assume incorrectly that population growth rates can be manipulated in the short run with the same ease as the manipulation of, say, saving and investment rates or the levels and rates of taxation. (Frejka, 1988: 64)

The impact on the job market is also argued to be profound. A rapidly expanding labour force compels the diversion of investment to providing jobs with a given amount of capital per worker. Kapuria-Foreman (1995: 532) argues that this, in turn, may result in a slower absorption of labour in the modern sector and, thus, in the growth of unemployment. Since increasing the amount of capital per worker is typically necessary to raise worker productivity and therefore incomes, rapid population increase slows the growth of per capita incomes. Rapid population growth means that money must be spent just to create jobs, rather than to improve those that already exist or to create more productive ones.

Another issue is that the economic structure of a country and its development are closely affected by the way the population is distributed through towns and villages. The pattern of consumption of villagers is, with numerous variations, quite distinct from that of city dwellers.

Urbanisation is promoted in developing countries, as in the West, by the advantages a large market offers to industrialisation. Large towns offer a varied supply of workers, skilled and semi-skilled, they possess research and management

facilities and transport arrangements, which in the course of time become more and more vital for industrial progress. Contemporary economic history has shown that the process of urbanisation is practically bound up with the process of economic development throughout the world. In particular urbanisation is inseparable from industrialisation. It results from a combination of (a) rapid natural increase, caused by declining mortality and (b) powerful rural-urban migration (Pernia et al, 1992: 164-166).

Some believe that rapid population growth produces congestion in cities. However, Bauer (1991: 33) argues that “the rapid growth of cities in LDCs is not generally the result of high population growth. Rather, it is derived from the pull of large cities, especially the capitals”. This attraction results from the limitations of rural life for many people and from the higher incomes and other benefits available or expected in the cities. The differences in income are increased when rural earnings are depressed as a result of policies benefiting the urban population. In any case, some like Bauer argue that undesirable crowding in the large cities is not a function of their size or growth, much less of the growth of the national population. They claim that it is the inevitable consequence of the pricing of housing and transport which causes poorer families to crowd into inadequate accommodation close to work.

Another issue is related to the quality of the natural environment, including air and water, climate conditions, and the number and abundance of species of plants and animals, which has direct significance for the health, economic production, and aesthetics of human populations. Production and consumption of industrial goods provide the primary link between population and environmental degradation, so the strength of the linkage may depend importantly on income levels. However, there are many processes of environmental degradation that depend more directly on population. For example, while most of the build-up of atmospheric carbon dioxide responsible for the emerging ‘greenhouse’ effect is due to fossil fuel combustion, predominantly in the developed countries, some 23 to 43 percent is due to the burning of forest, primarily for land clearance in developing countries (Woodwell, 1983), which may well be linked to population increase. Similar considerations apply to other supposed adverse external effects of population growth on the environment, including deforestation, soil erosion, and depletion of fish stocks. A joint statement by 58 of the World’s Scientific Academies (1994: 235-237) report that indicators of severe environmental stress include the growing loss of biodiversity, increasing

greenhouse gas emissions, increasing deforestation world-wide, stratospheric ozone depletion, acid rain, loss of topsoil, shortages of water and fuel-wood resulting of population growth in many parts of the world. However, Sarre (1991: 3) argues that:

in this respect, the 80 million extra people added to the populations of the less developed countries result in a much smaller net impact on their environments than the 20 million extra people living in the wealthier nations.

A 1990 FAO study concluded that with more irrigation and the wise application of other known technologies, the earth could produce enough food for everyone (FAO, 1990: 5). And, if the rich consumed less, environmental degradation would be reduced. The main arguments focus on the problems of generating productive employment, maintaining food supplies and providing public services when population growth is rapid.

Pamfret (1992: 175) agrees that provision of public services becomes even more difficult if the population growth is accompanied by rapid urbanisation and increased use of basic services like the sewage system.

1.4. 'Development' and Population Growth

Rapid population growth, it is argued by some, has serious potential consequences for the well-being of mankind throughout the world. They say if 'development' entails an improvement in people's levels of living, their incomes, health, education and general well-being and if it also encompasses their self-esteem, respect, dignity and freedom to choose, then the really important question about population growth is: how does the contemporary population situation in many developing countries contribute to or detract from their chances of realising the goals of development, not only for the current generations, but also for the future generations? Conversely, how does 'development' affect population growth? Population growth and socio-economic development is a centuries-old theme that regained prominence in the 1960s. At that time, several developing countries experienced sharp accelerations in their population growth rates, just as they were formulating or revising their development plans and strategies.

Increasing human beings' standard of living is a factor of social development in any society. It is important to recognise that no policy implications necessarily follow from a demonstration of a negative cross-sectional relationship between family

size and child 'quality'. Some believe that households very often make child bearing decisions with an awareness that having an additional child will entail a sacrifice of some other household objectives: leisure, consumption of goods and services, schooling for children already born, health of parents, investment in other household enterprises, and so on. The birth of a child immediately reduces income per head for the family and also for the country as a whole. The death of the same child has the opposite effect. Yet as Bauer (1991: 22) argues:

for most people, the first event is a blessing, and the second a tragedy. Ironically, the birth of a child is registered as a reduction in national income per head, while the birth of a farm animal shows up as an improvement.

Considering social development as much as economic development is also important. Among social development indicators, education has long been recognised as vital to Western-style development, not only in fostering attitudes and aptitudes conducive to economic and social change, but also in meeting a basic need for all individuals. Alfred Marshall in his famous treatise 'Principles of Economics' considered that "the most valuable of all capital is that invested in human beings"(quoted in Wilson et al, 1982: 36). Family-level relationships between family size and mean education and health of children have been widely reviewed (e.g., Wray, 1971; Terhune, 1974; Birdsall, 1977; Ernst and Angst, 1983; Rodgers, 1984; King, 1985 quoted in Pernia et al, 1993: 26). Beyond a certain family size, additional children are usually associated with lower average educational attainment and reduced levels of child health, as measured by nutritional status, morbidity, and mortality.

Most work on the subject of the effects of fertility on educational systems is focused on the proposition that more children means that more places must be provided in school systems to maintain the population enrolment ratios. The 'costs' of additional children can be readily calculated under reasonable assumptions about per pupil costs (Cochrane, 1983). These arguments are often among the most convincing to government planning officials about the advantages of reduced fertility. However, the fact that enrolment ratios or per pupil expenditures may decline as the population grows does not mean that they necessarily will or need to. Governments can respond to larger school-age populations in many ways: by raising taxes, shifting expenditure from other areas, restructuring educational systems, and so on. At the aggregate level, using data on a cross section of countries, Schultz (1986: 78) finds that:

an increase in the ratio of the school-age population to the total population is associated with a large (11-17 percent) decline in government expenditure per school-age child but is not associated with a decline in enrolment rate.

The principal economic effects seem to be the implications for the quality of education. First, there is something approaching consensus among demographers that the amount of money spent per pupil is reduced by rapid population growth rate (Richards & Waterbury, 1990: 91). In other words, larger school-age cohorts (resulting from rapid population growth) are typically accommodated in the public school system by increasing the number of enrolled children per teacher and decreasing average teacher salaries. In this sense, even if enrolments do not suffer, the quality of schooling deteriorates, and this is likely to have an adverse impact on student learning and performance in school.

It is sometimes argued that more rapid population growth and a younger age structure reduce investment in physical capital by diverting scarce funds to human capital expenditures, such as health and education expenditures, which are argued to have a more delayed effect and a lower rate of return. As the 1990 World Development Report shows, however, it is not clear that governments actually do devote a greater share of their gross national products (GNP) to such expenditure in countries whose populations have younger age distribution or more rapid growth rates.

There are a number of reasons to expect a negative association between the number of children in a household and the average schooling and health of children.

At a very rudimentary level, there is the factor of resource availability. In larger households, available resources have to be spread across more children, so that each child receives fewer resources - food, schooling, medical care, and parental attention.
(Pernia et al, 1993: 26)

Studies have found high parity and/or close birth-spacing to be associated with lower average levels of child nutrient (viz., calorie, protein and calcium) intake (Deolalikar & Behrman, 1988). Also lower nutritional quality of food intake (Mahmud & McIntosh, 1980), poorer nutritional status of children (i.e., height and weight) (Deolalikar et al, 1988; Mattew, 1983), higher levels of infant and child mortality (Frenzen & Higan, 1982), smaller per capita health and food expenditures per child (Wray & Rodgers, 1984), poorer access to preventive and curative medical

care (Deolalikar, 1990), lower schooling expenditure per child (Miyashita et al., 1982), and lower grades for children enrolled in school (Ernest, & Angst, 1983) have been identified (quoted in Pernia et al, 1993: 29).

Some of these resources may not have to come from the family, e.g., public health services. However, in general, the negative relationship between family size and indicators of child health, education, and development is more pronounced in poor than in non-poor families, indicating that poverty exacerbates the adverse effects of large family size. Since health and schooling outcomes depend critically on all of these inputs, children from larger families can be expected to have lower schooling and health attainment than children from smaller families.

Pernia et al (1993: 15) argue that much of the micro-economic literature on fertility that has accumulated over the last two decades suggests that the widely observed inverse relationship between the number of children in a household and average schooling and health attainment per child can be attributed to conscious parental behaviour.

The decisions parents make are influenced by a set of variables; the educational attainment and opportunity cost of time of parents (especially mothers), parental 'tastes' for the number and average quality of children, child survival probabilities, and the availability of social security in old age. Thus, parents may prefer to have fewer children but to invest more heavily in each child. However, when child survival rates are low, parents need to have more children to ensure that a certain number will survive into adulthood. At the same time, investing in children's schooling when child mortality is high is a risky proposition for parents, which induces parents to allocate fewer resources to the schooling of their children. As a result, parents have more children and invest less in the human capital of each child in high-mortality environments. Conversely, as child survival rates improve, the rate of return to investing in children's schooling increases, inducing parents to substitute child 'quality' for child 'quantity'.

In the case of health, both maternal and child welfare may be lower in larger families for biological reasons. Perkins et al (1992: 173) argue that several studies show that rates of sickness and death are higher among children in large families, especially those born later in the family.

Women subject to high fertility are at greater risk during delivery than women who have had fewer children. Thus, for biological rather than economic reasons, one

can expect high rates of fertility to be associated positively with high rates of maternal and infant mortality.

Pregnancy and child bearing under conditions of minimal health care and malnutrition represent a risk to women's lives (Jacobson, 1987: 31). Fertility reductions plus prenatal care are linked to lower rates of maternal mortality. Each year, at least a half million women world-wide die from pregnancy-related causes. Fully 99% of these are in developing countries, where complications arising from pregnancy and illegal abortions are the leading killers of women in their twenties and thirties, "WHO cautions that maternal deaths are likely to be twice these estimated figures" (quoted in Staudt, K, 1991: 249). Fertility reductions plus prenatal care are linked to lower rates of maternal mortality.

Higher rates of child survival reduce the need for parents to replace children who have died, or to have extra children, or insure against the possibility of future deaths. Evidence from a study of twenty-five developing countries in all regions suggests that a fall in mortality of one child per family results in a fertility decline of almost 0.5 births after mother's age, education, and rural or urban residence are taken into account (World Bank, 1986: 37). Higher child survival rates help to create the conditions under which people decide differently about family size. With improved programmes in Bangladesh, contraceptive use doubled (Jacobson, 1987: 22).

Economic development as much as social development plays an important role on the issue of population growth. Population growth and economic development are complex, inter-linked processes. Each affects the other in many ways, and both are interrelated to the broad array of social and political changes that constitute modernisation.

It is often argued that population growth reduces capital formation, and thus the growth of per capita income. This is so because resources have to be diverted to the maintenance of more children. Since we measure economic development by output per capita, any increase in population will, *ceteris paribus*, reduce the rate of economic development. In these terms, population growth is an obstacle to economic development by definition.

However, some argue that high population growth rates can induce changes in economic behaviour favourable to capital formation. Bauer (1991: 37) argues that:

the parents of enlarged families may well work harder and save more in order to provide for the future of their families. They can

save and invest by sacrificing leisure for work and by transferring their labour and land to more productive use, perhaps by replacing subsistence production with cash crops. The poor and illiterate have often accumulated by working harder and opening up local markets.

The discovery that more can be produced can have a stimulating effect on output beyond the immediate needs of consumption to care for more people. That is, the pressures to provide more for the increased number of family consumers spills over into a more generalised increase in output. In this sense population growth can act as a stimulant to economic growth.³

Some argue that population growth can have favourable external effects. It can facilitate the more effective division of labour and thereby increase real incomes. In fact, in much of Africa, it is sparseness of population that inhibits economic advances. It retards the development of transport facilities and communications, and thus inhibits the movement of people and goods and the spread of new ideas and methods. Adam Smith emphasises the greater possibilities for specialisation and division of labour that result from expansion of the market as well as the labour force (quoted in Kapuria-Foreman, 1995: 532).

The human factor is important in economic development. People play a dual role in the development process: on the one hand they are its ultimate beneficiaries; on the other hand they provide the most important input into the process of production growth and transformation that is called economic development. Each individual can also bring additional labour power, and even more important, additional human creativity to help solve the many problems that society faces. The argument for some form of population limitation is strong, but agreement is not universal, and there are important social, political, and moral issues to be weighed.

Among economists, for the last 20 years Julian Simon has been among the most prominent analysts of the relationship between population and development as well as discussion on issues of public policy concerning population growth. In these roles he argued that the dominant conventional argument that held demographic expansion a threat to human welfare was wrong and sought to convince us that policies deliberately seeking to slow population growth were mistaken. In his book,

³ Easter Boserup (1981) had presented a similar argument, though for populations with very low levels of agricultural technology.

‘The Economics of Population Growth’ (1977), he attempted to bring balance to the debate by also discussing the benefits of population growth, which, he justifiably felt, had been almost ignored thus far in that debate.

Simon also claims that we can trace the many ways in which an increasing population leads to improved performance of the administrative, political and cultural processes. Simon (ibid: 305) argues that positive population growth produces considerably better economic performance in the long run (120 to 180) years than does a stationary population, though in the short run (60 years), the stationary population performs slightly better. He argues that a declining population does very badly in the long run. However, Simon thought that the experience of developing countries was likely to vary. In countries such as India, the short-term negative effects of population growth were more severe and the long-term benefits would be slower in appearing. Thus, the argument for reducing population growth in these countries held more force. Simon (1977: 478) concludes that:

within the ranges of common values and economic judgements, it is not possible to draw any conclusions about whether an increase of population is good or bad from an economic point of view.

Julian Simon’s fundamental and unchanged message is that people are the ultimate resource: “skilled, spirited, and hopeful people” (1996: 408). A larger population as he argues influences the production of knowledge by creating more minds to generate new ideas (supply) and more consumers to drive up prices and create the financial incentives for the creation of new knowledge (demand). This creation of knowledge ultimately makes us wealthier and solves the problems that population growth and rising income may cause.

The World Bank’s World Development Report (1984), found that moderate population growth could stimulate demand, encourage technological innovation, reduce investment risks, and, in sparsely populated countries, shorten the time needed to reap the benefits of economies of scale in transport, communications, social services, and production. It nonetheless concluded that, on balance, rapid population growth hampered economic development. Like Simon, the Report’s authors did not consider population pressures on natural resources and food a significant problem. Unlike Simon, however, they concluded that population growth adversely affects the formation of human capital.

Ahlburg (1987: 87) note a number of questionable features that are critical to the support of Simon's optimistic findings. For example, they argue that social overhead capital (better roads and communications, improved government organisations, and health benefits) is assumed to follow directly and without cost from population growth. Social overhead capital then increases output. A doubling of the population would not just double production but increase output by an additional 20 percent. They argue that in a situation with no increase in social overhead capital as a result of population growth, the model produces an inverse relationship between the birth rate and economic performance.

Many studies find a negative association between population growth and per capita income growth. Work by Kelly and Schmidt (1996) shows persuasively that the positive and negative effects of population growth probably offset each other in the 1960s and 1970s. However, for the 1980s they found a net negative association between population growth and economic growth. They offer several explanations: saving rates may have been more adversely affected by population growth in the 1980s than in earlier decades; returns to existing technologies in agriculture may have diminished; and environmental degradation undoubtedly caused a decline in the quality of some agricultural land.

A new literature on the effects of population growth on savings is also emerging, much of it focusing on East Asia. Williamson and Higgins (1997) found that early and rapid demographic transition accounted for much of the higher savings rate that played a critical role in the economic growth of East Asia. They suggest that other developing countries are likely to experience the same beneficial effect of fertility decline.

Research done by Bairoch (1983: 141-163) based on data for 1950 to 1960 and 1960 to 1970 and by Rodgers (1984: 433-455) using data for the period 1970 to 1977 failed to reveal any significant relationship between population growth and per capita GNP. However, McNicoll (1984: 211-212) considered growth rates for the 1960-80 period for countries with a 1980 population of 5 million and above and concluded that rapid population growth has a significant negative impact on efforts to increase per capita income.

Chesnais (1987: 20) calculated the correlation between rates of population growth and of per capita product for 77 developing countries for 1960 to 1970 and 1970 to 1980 and found a positive correlation in the first decade but a significant

negative coefficient for the latter decade. He noted, however, that:

if those four countries [Hong Kong, Republic of Korea, Singapore, and Taiwan], which are in the Japanese sphere of influence, are omitted, the contrast between the two periods disappears almost completely, and the rate of population increase does not seem to have any particular effect, one way or another, on the rise in living standards.

Robinson (1996: 360) argues that:

sometimes a rapid rate of growth of population has been associated with a rapid rise in real income per head, as in England in the late nineteenth century, Japan in the early twentieth century or the U.S.A at the present day.

Sometimes it is associated with a falling level of income per head, as was probably the case in India before the last war. Sometimes a stationary population is associated with a rapid rise of income per head, as in Sweden in recent times (*ibid.*).

Pomfret (1992: 174) argues that comparing pressure of population growth on natural resources in developing countries with the ones in Europe is wrong. First, the rate of population growth seldom exceeded 1 per cent a year in Europe or in Japan. Second, the European countries had a relatively large stock of human and physical capital and institutions. Third, complementary factors of production were available as the labour force increased in the eighteenth and nineteenth century.

Conclusion

Population growth is not the primary cause of low levels of living, gross inequalities or the limited freedom of choice, which characterises many developing nations including Iran. The fundamental causes of these problems should be sought rather in the dualistic nature of the domestic and international economic and social order.

To conclude, it is impossible to say, as a general rule, that growth of wealth stimulates growth of population, for in many cases this clearly does not happen. Nor can we say that growth of population stimulates growth of wealth, for in many cases, such as India, it has rather increased poverty. The reason, of course, is that the growth of wealth depends mainly upon the means of production at the disposal of workers, and the structure of the economy. However, nor can we say that growth of population is associated with increased poverty.

Ahlburg et al (1996: 10) point to the conclusion reached in a recent study prepared for the Australian government:

a slowing of rapid population growth is likely to be advantageous for economic development, health, food availability, housing, poverty, the environment, and possibly education.

Considering some social development indicators, there are aggregate responses at the level of the community that may affect the schooling and health of children. If governments cannot expand the stock of hospitals, primary health centres, and schools at the same rate as the population is growing because of budgetary constraints, rapid population growth (and the consequent increase in the dependency burden) may strain the public health and the public school systems.

Chapter Two: Population of Iran

Introduction

This chapter provides an overview of Iran's population, general information about Iran, population composition and some socio-demographic characteristics of the Iranian population. The purpose of this chapter is to study population trends in Iran based on statistics and information obtaining from Iranian National Censuses which help us to understand fertility trends in Iran.

2.1. Population of Iran

2.1.1. Population background

Iran was considered to be a highly populated country in the past. The historical documents indicate that some 500 years BC, at least ten percent of the total world population was residing in this territory (Family Planning Department, 1994). The historical documents however, do not provide a precise estimation of the number of inhabitants and demographic developments, but according to some historians the population of ancient Iran, has been between 40 to 50 million. Despite the possibility of exaggeration with the figures, many travellers and historians have referred to the highly populated cities of Iran, providing evidence of a large population in Iran over different historical periods. Changes in the geographical borders of the country entailed decrease of population. Other reasons such as spread of diseases and natural disasters were also effective in further reduction.

In more recent history, the population of Iran grew slowly until the end of the first quarter of the 20th century. According to one estimate, the annual rate of population growth from 1900 to 1926 averaged less than 1% (Bharier, 1968: 273-279). The growth rate doubled during the second quarter of the century, reflecting improvements in the standard of living which were a result of political centralisation and successful efforts at economic modernisation that led to declines in mortality (Aghajanian, 1994: 66).

The first general Census of Iran was conducted in 1939-1940 by the Iranian Ministry of Interior. According to this Census, the total population was 15,055,000 (Hass, 1944: 3). Not much other information is available from this Census, such as details on birth rate, death rate, and other vital statistics.

After World War II, the rate of population growth accelerated further, due primarily to improvements in public health and notably to the eradication of malaria (Banani, 1961: 12). Between 1941 and 1956, the annual rate of population growth averaged 2.2 percent. As the central government became stronger and more stable, improvements in the standard of living and in health conditions resulted in further reductions of mortality (Majdabadi, 1978: 215-226).

In 1956, the need for more reliable statistical data was keenly felt and eventually a second National Census was undertaken. The total population was 18,954,704 and the birth rate was very high (about 45 per thousand), while the mortality rate was about 20 per thousand (National Census of Iran, 1956).

In November 1966, a third National Census was conducted. According to the 1966 Census, Iran had a population of 25,323,064, which was growing at the rate of 3 percent per annum (National Census of Iran, 1966). While estimates of the birth rate in Iran in 1966 ranged from 40 to 50 per thousand, the death rate estimates ranged from 21 to 24 persons per thousand. Of the total 25,078,923 settled population, 12,981,665 were male and 12,097,258 were female.

By 1971, the Iranian population had reached about 32 million. The 1971 birth rate was estimated at 48 per thousand population, with a death rate of 16 per thousand. Iranian women averaged about seven live births during their lives (Iran Profile, 1972: 2; Iran Almanac, 1972: 508). This indicated a population increase of perhaps 3.2 percent per annum, which, in the absence of significant migration, was one of the world's highest. Since this rate of growth was judged to be excessive, in 1971 the Iranian government embarked on an aggressive population control policy aimed at reducing growth to 2 percent initially and to 1 percent within twenty years (Moore et al, 1972: 6).

Between 1966 and 1976, the population of Iran increased by an average annual rate of 2.7 percent, a decline from the rate recorded in the preceding decade of 3 percent. Due to this increase the population of Iran reached 33.7 million in 1976 (Iran Statistical Centre, 1986). This growth rate was determined by a declining mortality, especially infant mortality, and persistently high fertility (particularly in rural areas). In 1976, life expectancy at birth was 55.1 and 56.3 for males and females, respectively (Statistical Yearbook, 1982: 36). The infant mortality rate which was estimated at about 184 per 1,000 live births during the 1956-1966 period, fell to 112 per 1,000 live births in 1976. Aghajanian, A (1988: 160) argues that a greater

reduction in the mortality level was to be expected in the years before the Revolution, especially at ages below one year, due to the increasing oil revenues and the significant growth in the economy.

On average, Iranian women had 4.6 live births in 1976 (Aghajanian et al, 1996: 63). There were rural-urban differences in fertility as well as socio-economic differences⁴. A comparison of the average number of live births for women in rural areas and women in urban areas shows notable fertility differences between rural and urban women. A detailed comparison of the mean live births by age group suggests much stronger differences between rural and urban areas at the older ages. After age 30, the mean number of children ever born to rural women is almost one child more than for urban women (ibid: 64). Based on the studies, fertility was significantly higher in rural areas, where subsistence agriculture was dominant and most farmers had access to less than 5 hectares of land. The sex ratio was 108 men to 100 women in 1966. In 1976, it was 106 to 100 respectively.

In the ten years up to the 1986 Census, the annual average growth rate was 3.8 percent. According to the Census, the population of Iran was 49.4 million in November 1986 (This figure was adjusted upward to 50.6 million in 1989). The sex ratio was 105 men to 100 women for both years 1986 and 1996 (Statistical Yearbook of Iran, 1996-97). Thus, Iran was one of the few places in the world where there were more men than women. An adverse sex ratio could indicate the low status of women, which within the overall cultural matrix and resource constraints would mean more nutritional deficiencies by females than males (Harriss, 1986; Dreze & Sen, 1989). Although the exact cause can not be determined, the high maternal death rate and the possibility that women were not enumerated thoroughly may also have contributed to this sex ratio.

Moghadam (1991: 1339) argues that the sex ratio in Iran is surprising because the Census shows more male deaths than female for 1982-86, and slightly more female live births than male. But in all age groups, there are more males than females. It will be recalled that in the years 1980-88, Iran was involved in a major war, which reportedly took thousand lives on the Iranian side, the vast majority of whom were male. Moghadam asks, as Sen et al (1989) asked regarding India: Where are the

⁴ Several studies have correlated fertility levels by socio-economic status in the 1970s. See, for example, A. Paydarfar, 1970; A. Aghajanian, 1979 and 1981.

missing women?

2.1.2. Current population growth rate

The Iranian Centre for Statistics has estimated the country's population in 1996 at 60 million, 1.78 and 1.22 times the population enumerated in 1976 and 1986. (Table 2.1)

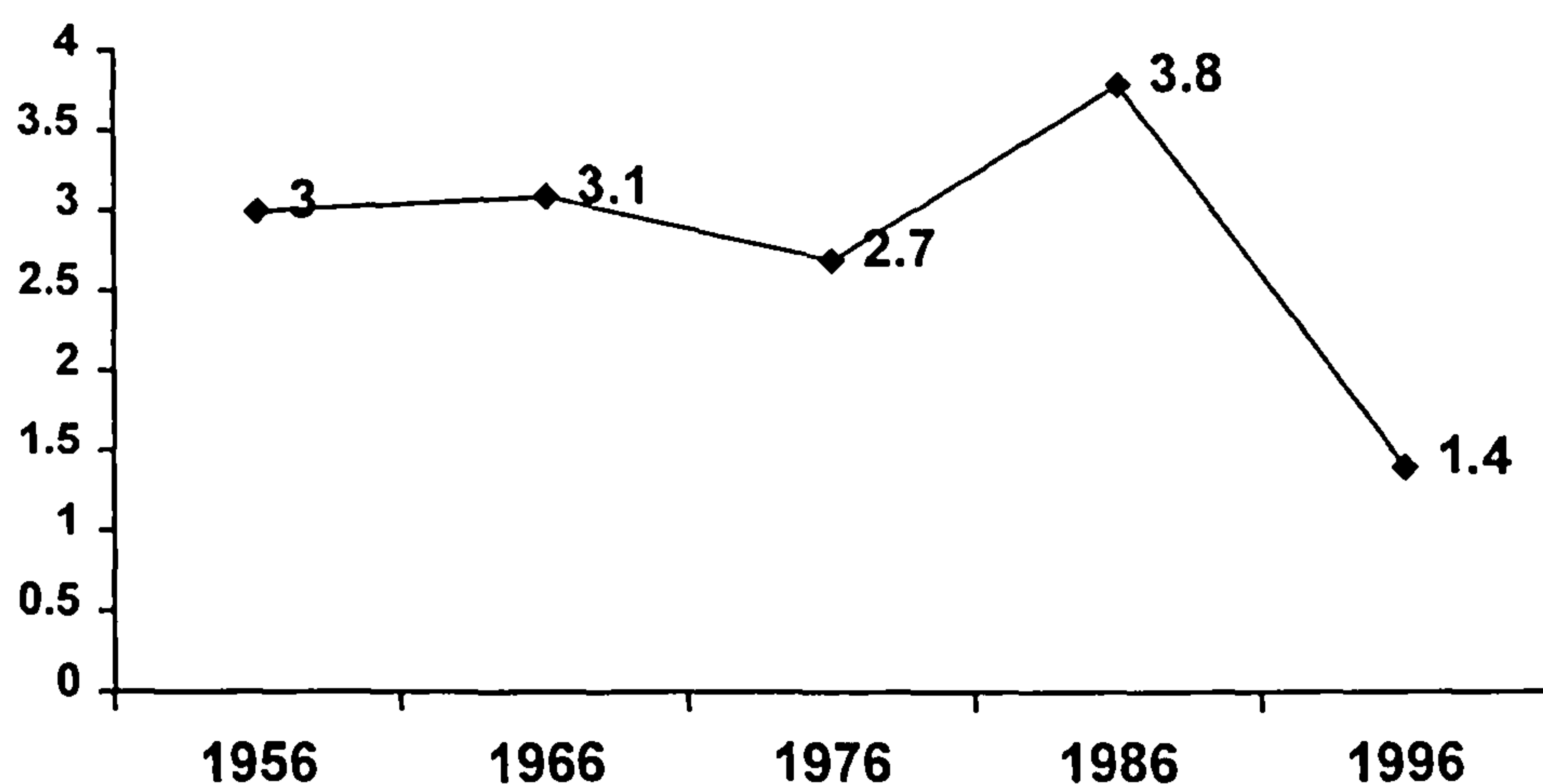
Table 2.1: Iran's Population, Various Years

Year	Total	Male	Female	Ratio
1956	18,954,704	9,644,944	9,309,760	104
1966	25,788,722	13,355,801	12,422,921	108
1976	33,708,704	17,356,347	16,352,397	106
1986	49,857,384	25,491,645	24,365,739	105
1996	60,055,488	30,515,159	29,540,329	105

Sources: National Census of Population and Housing 1365 (1988) Table A, p. 1; Table B, P. 2; and Statistical Yearbook 1375 (1997), Table 2, p. 26.

In a period of roughly 100 years, the population of Iran underwent a six-fold increase from approximately 10 million in 1900 to 60 million in 1996. However, the average annual population growth rate, which was 3.8 percent in 1986 and around 2.46 between 1986 and 1991, has dropped by over 50 percent for the period 1986-1996. It is estimated to have been 1.7 percent between 1986-1996 and 1.4 percent in 1996 (Statistical Centre of Iran, 1997).

**Diagram 2.1: Population Growth Rate of Iran
(1956-1996)**



Source: Family Planning Department of Iran, 1997

According to the UN statistical yearbook, life expectancy for males has been raised from 58.2 in 1980 to 65 years in 1990 and from 59 to 65.5 for females during the same period. It increased to 68.6 years in 1994, according to the UN Development Programme (UNDP) (The Economist Intelligence Unit, 1998: 13).

2.1.3. Population composition of Iran

2.1.3.1. Age-structure

In Iran the continuing high birth rate has maintained a large inflow of children into the population and hence a youthful composition overall. A most important factor affecting the 'below 20' group is the rate of reproduction, which depends on the fertility rate.

A decline in the death rate in Iran tends to accentuate the youthful structure even further as the major beneficiaries of many death control measures are the young rather than the elderly. Although the percentage of the population in the young age group should be the same for the whole country, it is seen to be substantially higher for the urban than for the rural areas (Statistical Centre of Iran, 1997). This shows the extent of migration from the latter to the former, especially in the case of males.

When fertility declines, the age balance shifts away from the younger groups and the average age of the population begins to rise. Contrary to the popular view, a decline in mortality makes a smaller impact on the age structure than a decline in fertility. This is because the benefits from improved health conditions tend to be spread over several age groups whereas fertility changes obviously alter the age balance at the very base of the pyramid.

According to the 1956 Census, Iran had a youthful population, and the first Census showed that 49 percent of inhabitants were under 20 years of age, with only 4 percent aged 60 and over. In 1966, 54 percent of the population was under the age of 20. In 1971, it increased to 55 percent of the total under 20 years of age, and the extreme youthfulness of the population had resulted in a high dependency ratio (Census of Population of Iran, 1976: 1-100). In 1976 this rate was the same. However in 1986, this rate increased to 56 percent (National Census of Iran, 1986: 3).

These figures may give some idea of the country's heavy financial liabilities for education and the extent of necessary social expenditure. As noted by Aghajanian (1988), the social and economic consequences of such population dynamics were not

considered to be consistent with the goals of improving the welfare and well being of the population.

2.1.4. Urbanisation

The spatial distribution of the population is another concern. Urbanisation is an inevitable concomitant of development (Perkins et al, 1992: 164). (see Table 1.1)

Another demographic and social problem in Iran is the high rural exodus and the rapid increase in the population of certain cities. Urbanisation has been accelerating in Iran over the past three decades. Many have feared that the growth of urban areas⁵ through migration from the countryside is proceeding too fast and causing serious social problems.

The urban sector of the population consists of people living in communities ranging from a multi-million mega-city like Tehran to tiny towns with about 5,000 inhabitants and a mayor appointed by the Ministry of Interior. There are two major reasons for the relative increase in urbanisation. The first is the rapid economic growth with heavy emphasis on industrial development since the 1960s, including better employment opportunities in urban areas. The second is the relative development in communications and transportation facilities which has made many young and ambitious farmers aware of some of the advantages of the urban life and prompted them to move into the unskilled or semi-skilled jobs of the cities. The main reason for people migrating is that they find themselves better off in several ways by moving to the cities. Not only do they earn or think that they will earn higher incomes than they could have obtained in the rural areas, but they gain better access to schooling for their children and social services of other kinds. This is what people seek in rural-urban migration, and studies have shown that by and large they find it. Graham (1979) argues that:

this is a normal trend in a rapidly growing and industrialising country like Iran. However, it is perhaps more rapid than was economically and socially desirable.
(quoted in Firouzbakhch, 1994: 16)

As urbanisation has been increasing in Iran in recent decades, this change may reflect the change in social and cultural atmosphere of child bearing and rearing.

⁵Urban areas are defined as towns and cities having a population of 5,000 and over (Tabibian et al, 1998; 13).

Tabibian et al (1998: 14) argue that:

in a society like Iran, the high urbanisation rate means shifting from an extended family in a rural or tribal social setting, in which costs of child bearing are relatively low, to an urban setting that exerts more economic and social pressure on bigger families.

In general, the rural population of Iran has grown more slowly while the towns have experienced a rapid increase, of more than 4 percent a year, through a high rate of internal growth and the entry of rural migrants on a large scale. During this period, people migrated from rural and tribal areas to urban areas; in addition some villages grew into towns. At the same time migration from smaller cities to larger ones took place.

The establishment of heavy industry and many light industries near large cities has created a more rapid rate of development for these larger cities than for their neighbouring rural areas. Thus, large urban centres are generally surrounded by thinly populated rural areas. This unusual concentration of population in several large cities is a typical phenomenon of most developing countries. Since industrial development and the exodus do not proceed in step, and since the capacity of industry to provide employment is low, it often happens that unemployment or underemployment is simply transferred from the country to the town. Thus in the suburbs of the great cities, in industrial localities, and even in districts that are connected with the industrial centres by good transport facilities, a temporary population settles itself which is mostly male, and which often supports itself by menial insecure work.

The process of rural-urban migration is not a recent phenomenon in Iran. In fact, migration to the city dates back to the 1950s, with a major influx during the 1960s and 1970s. During the 1956-1966 period, the urban population of Iran increased at an average annual rate of 5.1 percent, compared to 2.1 percent for rural areas (Aghajanian, 1988: 163). In the pre-Revolutionary decade, the annual rate of rural-urban migration was about 4.6 percent per year, and males from 15 to 24 years of age have been moving out of villages at a rate between 15 and 18 percent per year (Plan and Budget Organisation of Iran, 1977). National and provincial capitals were growing at an annual rate of 5 to 6 per cent in the 1970s, and villages were depopulated as poverty and underdevelopment expanded in rural areas (Aghajanian, 1988: 155).

In terms of numbers, in the 1966-1976 decade, about 2,111,000 villagers left their homes to go to cities, particularly to Tehran and other provincial capitals (Plan and Budget Organisation of Iran, 1982). Kazemi (1983: 31) argues that:

during the period 1966-76, high fertility, limited access to land, and lack of development of non-agricultural activities in rural areas pushed a large number of young males to the cities, where they joined the growing poor migrant population.

This high ratio of rural-urban migration changed the population composition in Iran. The urban population increased from 31 percent of the total in 1956 to 39 percent in 1966. By 1972 the urban percentage was as high as 44 percent (Moore et al, 1974: 396). This rapid and seemingly implacable urbanisation demanded heavy investments in order to provide jobs, housing, transport, food and public services such as health, education and sanitation.

The rate of urbanisation increased from about 47 percent in 1976 to 54 percent of the population in 1986. Aghajanian (1988: 164) argues that:

the Iran-Iraq war forced a large number of rural families from the southern and south-western villages to such cities like Shiraz, Isfahan and Tehran.

These families were first taken to camps, but the refugees soon moved out in pursuit of better housing. With the continuation of the war and the emergence of a black market economy in the cities, street sellers have had the opportunity to earn a reasonable living. This opportunity has been an incentive for pulling migrants from the villages. The migrants can easily earn much through sales of black market items such as corn oil or cosmetic items than through hard work in the villages.

Aghajanian (1988: 165) argues that "there is no doubt that migration has intensified during the post-Revolutionary era". For example, Shiraz had a population of 425,000 in 1976. By 1982, this figure had increased to about 800,000 reflecting an annual growth rate of 10 percent. Other cities, such as Tehran and Isfahan, had also grown at a significantly high rate.

Despite considerable efforts made by the government to rebuild the cities damaged during the war, some people did not return to their cities, even after the Iran-Iraq war ended. Urbanisation increased to from 54 per cent in 1986 to 62 percent in 1996 (Statistical Yearbook of Iran, 1996-97). (Table 2.2) The urban population of 1996 lived in 612 urban centres while those of 1976 and 1986 had occupied 373 and 496 urban centres, respectively (Mehryar et al, 1997: 7).

Some demographic projection indicates that the proportion of population in urban areas will amount to 74 percent and in rural areas, 26 percent by 2021 (Family Planning Department, 1995: 3). It indicates that in the course of 30 years the size of the urban population of the country will be tripled. In analysing the determinants of this heavy rural-urban migration in Iran, Kazemi (1983: 134) uses the push-pull model of migration. He argues that due to the failure of land reform and the deterioration of agriculture as the 'push' factors and the higher income in the cities as the 'pull' factor, migration takes place. Although agricultural deterioration has undoubtedly been a factor in the high rate of rural-urban migration, there is a need for further research on the question of rural poverty and rural/urban uneven development. In fact, rural-urban migration can be explained as a function of rural periphery and urban centralisation in the history of economic development in Iran (ibid: 135).

To prevent problems resulting from the rapid growth of urbanisation, such as pollution of the environment, and social disorders due to over concentration of population in a number of areas, and in order to find ways to promote maximal utilisation of the land and regional planning to reduce the pressure of rural-urban migration, it is necessary for the related governmental organisations to adopt appropriate policies.

Table 2.2: Rural, Urban Distribution of Iran

	<u>1976/77a</u>		<u>1986/87</u>		<u>1996/97ab</u>	
	'000	%of total	'000	%of total	'000	%of total
Urban	15,854	47.0	26,845	54.3	36,838	61.0
Rural	17,854	53.0	22,600	45.7	23,027	39.0
Total Population	33,708	100.0	49,445	100.0	60,055	100.0

a: Census Year

b: Preliminary Official Estimates

Sources: Iran Press Bulletin; Bank Markazi Iran, Annual Review, 1991/92.

2.1.5. Population growth rate in Tehran Province⁶

One of the striking figures in the rate of population growth is related to Tehran Province. The studies show that nearly 8 million villagers have migrated to the cities during the past two decades. More than 40 percent of them have settled in Tehran,

⁶ Tehran Province includes the city of Tehran and some tiny cities around it.

while the rest are mainly settled in populous cities, the provincial capital cities in particular or big cities (Family Planning Department, 1994: 9).

Better transportation facilities, a larger market, and closer proximity to the bureaucracy of the central government make Tehran Province highly desirable and beneficial. Also many educational facilities, cultural activities and amenities of modern life such as movies, theatres and goods and services are more available for persons of average income in this province. The Tehran Province, therefore, attracted people who come to benefit from such facilities and to be free from the conservative life of other provinces.

Population expansion has been greatest in Tehran with a high annual growth rate of 8.7 percent. The estimate by the Iranian authorities for 1988 put the population of the greater Tehran urban area at 8 million, approaching about one third of the total urban population of Iran.

Tabibian et al (1998: 7) states that while between 1986 and 1996, the rate of overall urbanisation increased by 30 percent in Iran, the population of the capital, Tehran, increased by more than one hundred percent during the same period.

This was more or less the case for other major cities. Massive migration not only affects those families who are directly involved in migration, but also those who stayed back in the rural areas and those who were already settled in the destination of those migrations. Such massive social change can be expected to influence families' fertility behaviour (ibid: 9).

2.2. Socio-demographic Characteristics

2.2.1. Age at marriage

A major aspect of marriage in Iran is that it is universal, that is, virtually all people marry and they marry young. Iranian women spend a large part of their reproductive life in marriage, which is the result of a number of influences. Aghajanian (1988: 156) argues that the value system influenced by the social philosophy of *shi'ie* Islam has always encouraged marriage in Iran. In accordance with Muslim doctrine, marriage of women is well-nigh universal.

The 1966 census indicated that of the total male population of 10 years and over, about 56.6 percent were married, 1.7 percent were widowed, 0.5 percent were divorced, 40.3 percent were single and one percent was not reported. The

corresponding percentages for the female population of 10 years and over were 61, 10.9, 1, 26.6 and 9.5 percent.

The 1986 Census indicated that of total male population of 10 years and over, about 54.5 percent were married, 1.29 percent were widowed, 0.36 percent were divorced, 41.3 percent were single. The corresponding percentages for the female population of 10 years and over were 58.43, 7, 0.64 and 31.98. The main difference is the higher percentage of women never married (31.9 percent in 1986 compared to 26.6 percent in 1966). This probably indicates a decline in the numbers of women marrying at very young ages.

In the mid-1980s, age at marriage was low for women: 20 in urban and 19.6 in rural areas in the mid-1980s (National Census of Iran, 1986: 60). However, there is evidence that the age at marriage has been rising in recent years. Marriage age had risen to 24.3 in urban and 23.4 in rural areas by 1996 (National Census of Iran, 1996-97: 62).

Although widowhood and divorce are more common nowadays, the effects of widowhood and divorce on fertility are tempered in Iran by institutions favouring the early remarriage of widows and divorcees.

In 1996, of the total male population of 10 years and over, about 50.5 percent were married, 0.01 percent were widowed, 2.43 percent were divorced, 47 percent were single. The corresponding percentage for the female population of 10 years and over were 53, 0.06, 4.9 and 39. (see Table 2.3)

In 1996, the Statistical Centre of Iran indicated that 96 percent of women of childbearing age were married and only 4 percent had never married (Statistical Yearbook, 1996-97: 61).

Table 2.3. Marital Status of the Population 10 Years of Age and Over of Iran by Sex: 1966, 1986 and 1996

	Married		Widowed		Divorced		Never Married	
	Male	Female	Male	Female	Male	Female	Male	Female
	%	%	%	%	%	%	%	%
1966	56.6	61	1.7	10.9	0.5	1	40.3	26.6
1986	54.5	58.43	1.29	7	0.36	0.64	41.63	31.98
1996	50.5	53	0.01	0.06	2.43	4.9	47	39

Sources: National Census of Population and Housing, 1986, 1996.

Sheykhi (1995: 77) argues that:

the primary motivation to marry in Iran as well as in many parts of the Middle East is to build a large family since the foremost expectation of marriage is the founding of a family.

Of course, in the traditional tribal and rural areas, this attitude to marriage originates from the way of life and is determined by its need for human labour. In addition to the legal ease and social promotion of marriage, the early post-Revolutionary atmosphere and economic optimism about future prospects of affluence have had important positive effects on attitudes toward marriage and early marriage. Historically, temporal factors, such as war or economic cycles (expansions and depression), have influenced and tempered marriage. Aghajanian (1988: 159) believes that the simultaneous promotion of marriage and fighting for Islam was an important factor in contributing to the increased marriage rate in the later years of the Iran-Iraq war.

However, in recent years, urban conditions, with the attendant changes in the country's mode of living, have increased the difficulties and the responsibilities of the man in marriage. Even so, in rural communities and among nomads the marriage rite is still dominant and is a certainty and practically all men and women marry sooner or later. However, this is also still true of urban men and women.

The proportion of married males in the age group of 20-24 in urban areas was 14.34 in the 1986 Census, while this proportion in rural areas was 20.2 (National Census of Iran, 1986: 43). Also there is a distinct discrepancy between the proportion of married males and females in the age group 20-24. For the males it was 16.7 percent in 1986, while for the females it was 66.3 percent.

Some social changes delay the age of marriage, chiefly among men, in urban society. The causes of some of these changes are identifiable.

The legal marriage code has fixed the earliest age of marriage at fifteen for girls and eighteen for boys (this code commands considerable respect, especially in the cities). It should be mentioned that after the Revolution the legal marriage age was lowered to 13 for girls and fifteen for boys, but later on again increased to the previous levels (Hoodfar, 1994: 12).

The career and military service of men are also important. The male is expected to have started his career and completed his military service before marriage.

The increase in higher education delays marriage. Nowadays young women as well as young men in urban areas are likely to continue their education to higher degrees and this systematically delay marriage.

The amount of dowry is another relevant factor. One significant feature of the marriage contract in Iran is *mehr*, a sum of wealth agreed upon by both parties to be paid to the wife on demand. In practice, however, it is given to her at the time of divorce or death of her husband. In the past, families considered *mehr* as a status symbol in Iran. Similarly, the economic situation of the male was very important and contributed to late marriage for men, since it took some years to acquire a status acceptable to future in-laws. Following the Revolution, there seemed to be an overall de-emphasis on wealth and its accumulation, so young educated girls and their families changed their attitudes about mate selection and about requirements for their spouse. However, this has now changed again. As a result of many social changes that have taken place during the last decade (since end of the war) attitudes have changed and consequently the amount of *mehr* in recent years has been increased. This stipulation of the marriage contract and the high expectations of the women make it rather difficult for young men to marry.

Assumptions regarding who can marry significantly depress family formation and birth rates. For example, possession of a means of livelihood is a prerequisite to marriage. The principle that marriage should await possession of a means of supporting a family has had an impact on young people delaying marriage in Iran.

The requirement that the groom or his family pay bride-price (*shir-baha*) is functionally equivalent to requiring proof of means of livelihood, particularly when this must be paid in goods rather than in services for to the bride's father which mostly takes place in rural areas of Iran. The latter does not usually delay marriage. However there is evidence that bride-price has been disappearing in urban areas and so is less likely to present an obstacle to marriage.

The economic implications of marital patterns are varied. Marriage is perhaps the cause as well as the effect of social beliefs that women get married as soon as a suitable mate is found for them and they should not join the labour force and should perform household duties. Even highly educated girls are reluctant to work outside the home thereby intensifying this social attitude

The high birth rate of Iranian women is thus partly explained by patterns of early marriage, high rates of widow remarriage and high proportions of reproductive

life spent by women in marriage. However, Iranian women indulge in prolonged lactation after childbirth; there is evidence that the risk of pregnancy is somewhat reduced by this practice and that this may be a factor in keeping Iranian fertility below physiological potentialities. However, it should also be mentioned that Muslim customs in Iran do not require prolonged abstinence from sexual intercourse following childbirth, and Muslim women do not return to their parents' home for confinement, so postpartum separation is likely to be short.

2.2.1.1. Age of legal marriage

According to Article 1041 of the Iranian Civil Code, which came into effect in 1935, the marriage of females before reaching the full age of 15 and that of males before reaching the full age of 18 is forbidden. Until 1975 the minimum legal age of marriage for women was 15 but in 1975 increased to 18. After the Iranian Revolution in 1979, it was reduced to 13 for females and 15 for males. Nevertheless, in cases where proper reasons justify it, on the proposal of the public prosecutor and by sanction of the court, exemption from age restriction can be accorded. It should, however, be reported that in the past:

the law was rarely observed and due to of traditional and religious beliefs, earlier marriages were frequently seen in rural and tribal areas, and even in small cities of Iran in 1960s.
(Moezi, 1967: 977)

The 1966 census indicated that there were marriages below the legal age limits, mainly among the age group between 10-14. The proportion of such marriages for the male population was 0.1 percent of the total male population in the country (0.02 percent in the urban areas), the corresponding proportion for the female population was 2.3 percent (1.7 percent for the urban areas) (National Census of Iran, 1966).

Trends in the age at marriage, laws concerning the age at marriage, and the major factors leading to a persistently low age at marriage in Iran have been examined.

The study in Iran done by Momeni supports the hypothesis that there is no strong relationship between the actual age at marriage and the laws setting the minimum age at first marriage. Economic and educational variables seem to play a more important role in determining the actual age at marriage (1977: 165).

The corresponding figures in the 1986 Census for marriages below the legal age limit, for the male population was 0.59 percent of the total male population which is higher than 1966, and 1.97 percent for the female population.

Such marriages occur mostly among the tribes and in remote villages where law enforcement is not strong. Those which do occur in urban areas are usually carried out under falsified birth certificates.

This figure in the 1996 Census for the male population was 0.46 percent of the total male population and 1.25 percent of the total female population (Statistical Yearbook of Iran, 1996-97: 60-61).

In the autumn of 1991, the minimum age for marriage was raised to 15 and 18 respectively, making marriage below those ages legal only with a court's permission. The law in fact permits marriage for girls considered by the court and their parents to be physically mature. Socio-economic conditions, at least in villages, no doubt result in a number of exceptional marriages annually.

2.2.2. Premarital sex and marriage cultural rules

The population-limiting influence of rules regulating premarital chastity and marriage are probably very great. Opportunities for sexual intercourse may be limited by the culture in various ways including prohibition of premarital sex, obstacles or alternatives to marriage, and prescribed sexual abstinence within marriage. (Abernethy, 1979: 41)

In Iran, premarital sex is prohibited by Islam and cultural codes in various ways, but there is no serious sexual abstinence within marriage except during the wife's menstruation in which sexual intercourse is prohibited.

Unavailability of marriage partners may critically delay reproduction at two periods in a woman's life: after puberty if marriage has been delayed for several reasons, and again if she is widowed during her reproductive years. This effect alone is sufficient to extinguish small populations, or in larger ones, to greatly slow the rate of growth (Aghajanian, 1988).

Rules forbidding widow remarriage constitute a major intervention in the reproductive process. If a woman is married to a considerably older man, her chances of becoming widowed while still fecund are very high, and this is particularly true in a 'high mortality' society.

During the long period of the Iran-Iraq war, many young women lost their husbands. Despite the fact that clerical leaders encouraged single men to marry such widows, many of them remained widows or had to marry older men. This influenced their fecundity rates, which constituted a main intervention in the reproductive process. In Iran men, even the widowed ones, prefer to marry young single girls (not widows) and this situation reduces young widows' chances of second marriage. According to the 1991 data of the Statistical Centre of Iran, 13.6 percent of women in the 15-45 age group had lost their husbands, many in the Iran-Iraq war.

2.2.3. Family patterns in Iran

There are four distinct types of family in Iran. The most popular one is the nuclear family. Essentially, this type of family includes not more than one married couple. Basically, the household consists of one of the following: (a) a person living alone, (b) a married couple without any children, (c) a couple with unmarried children or (d) one parent with unmarried children.

The extended family is based on generational extension of two married couples of successive generations. Basically, the household consists of a senior couple, their unmarried children (if any), and usually not more than one married son and his spouse, and their unmarried children (if any).

The joint family is based on collateral extension of two or more married couples of the same generation. Basically, the household consists of married siblings, their spouses, and their unmarried children (if any).

The Compound family is based on both generational and collateral extension of three or more married couples. Basically, the household consists of a senior couple, their unmarried children (if any), two or more married siblings of the senior couple, their spouses, and their children (if any).

In extended families, high fertility is motivated by the parents' desire to strengthen the family name and to expand their own line and facilitated by a wide sharing of economic responsibility. In contrast, societies which emphasise the independent nuclear family and the responsibility of each man to support his own wife and children tend to have low fertility levels which, unless contraception is widely practised, are achieved mainly through late marriage and non-marriage.

Extended families are declining in Iran. Modernisation elements in countries like Iran have modified traditional family structures or distorted the relationship,

which existed earlier between the extended family and the fertility level. The relationship between extended families and high fertility is attributed to the common association of this family type with religious values and cultural patterns, which emphasise the strength and continuity of the family and motivate marriage and reproduction.

The pattern of extended family life has begun to disappear in Iran and the male can no longer depend on his parents to support his family. Such tendencies, however, are more pronounced in urban than rural areas where the requirements of wealth to live, education and support of the family are not so stringent.

In developing countries, there is a fear that people will continue to have large families because they lack the necessary conditions to achieve their lower family-size desires. Among several proposed courses of action to achieve this goal, somehow 'family planning' became the most widely advocated and the most controversial of all policies and approaches.

Conclusion

Iran entered an era of declining population growth rate in 1970s, but it was not sharp and it did not exist for long. During almost a decade after the Revolution (1979), Iran experienced a high population growth rate. In 1986, for example, the rate was 3.8 per cent. Such a high rate resulted in a very young population. However, in 1990, Iran entered a new era of declining population growth. One task of this thesis is to explore the role of population policies, including family planning, in these fluctuations.

A variety of socio-demographic characteristics of the Iranian population are likely to be linked to population and fertility trends. Among them are urbanisation, age at marriage and family patterns in Iran. In the next chapter, the effects on fertility of the status of women in Iran will be considered in more detail.

Chapter Three: The Status of Iranian Women and its Effects on Fertility

Introduction

In the available literature about fertility patterns in Muslim countries including Iran, the status of women has been referred to as an important influential factor in high levels of fertility (Kirk, 1968; Youssef, 1978; Moghadam, 1991; Aghajanian, 1992; Hoodfar, 1995). A high rate of fertility is the result of early family formation and continued childbearing to the end of the reproductive period. However, few empirical studies of the status of women and its relation to fertility levels have been carried out in Iran. Some authors have referred to the ideological and legal aspects of the situation of Iranian women and studied the status of women in the context of Islamic ideology, law and rules about women in such areas as property, inheritance, and divorce (Nashat, 1980; Mahdi, 1981; Fathi, 1985; Higgins, 1985; Afshar, 1997).

The objective of this chapter is to investigate the evidence for and determinants of gender inequality in access to valued resources, as one dimension of the status of Iranian women. Specifically, access to education, the economic resources of Iranian women at the community level, and their political activities will be conceptualised. Then the importance of the status of women in relation to fertility decline will be investigated.

3.1. Gender Studies

Feminist scholars define gender as the social organisation of sexual difference, or a system of unequal relations between the sexes. Oakley (1972) and Rubin (1975) are among the earlier contemporary scholars who distinguished sex as a biological category from gender as a cultural-social construct.

Like age, gender distinctions are basic to the social order in all societies (Ortner & Whitehead, 1981; Epstein, 1988). A number of feminists feel that women's subordination is such a truism, it is no longer necessary to 'prove' it scientifically; moreover, social science has not been 'innocent' in the perpetuation of gender distinctions and inequality (Nicholson, 1987). Others feel that further evidence is needed, and that gender inequality can be explained and measured in ways similar to class and racial inequalities (Beneria & Sen, 1982; Leacock & Safa, 1986; Hartmann & O'Farrel, Michael, 1989; Chafetz, 1984, 1990).

The position of women in the labour market is frequently studied as an empirical measure of women's status (Farley, 1985).

In many developing countries, women constitute a small percentage of the salaried labour force, while they carry out the majority of informal economic activities throughout Latin America, Africa, and much of Asia.
(Ward, 1990: 267)

In the formal sector, there is widespread occupational sex stereo-typing, wage disparities, and lack of support services for working mothers, which are a function of discriminatory economic and ideological systems (Hartmann, 1976; Reskin & Hartmann, 1986).

Moghadam (1991: 1336) argues that the gender division of labour at the societal level reinforces that of the household, and this is an important source of women's disadvantage and of the stability of the gender system. This situation is maintained juridically and ideologically. In most contemporary societal arrangements, 'masculine' and 'feminine' are defined by law and custom; men and women have differential access to education, political power and economic resources, and cultural images and representations of women are fundamentally distinct from those of men. Inequalities are learned and taught, and 'the non-perception of disadvantages of a deprived group helps to perpetuate those disadvantages' (Kynch & Sen, 1983 quoted in Papanek, 1989).

Because of gender bias or patriarchal controls, women have had fewer rights and opportunities than men in the areas of literacy, reproductive control, education, salaried work, property rights, and formal politics (Tinker, 1990; Agarwal, 1995; UNDP, 1995; Moghadam, 1998).

The 'status of women' is a relative concept and should be considered in comparison to that of men in a society or community (Mason, 1986). Therefore, the position of women relative to men can be conceptualised through a focus on gender inequality as a system maintained by certain rituals and institutions in the society. To the extent that this system is non-egalitarian, men are the beneficiaries of privileged access to resources, autonomy, and prestige and power in the society.

Some believe that in operationalising the concept of the status of women, through a focus on gender inequality, it is appropriate to measure the position of women relative to men with respect to three broad areas: (i) relative access of women to wealth and valued resources in the community (Safilios-Rothschild, 1982); (ii)

relative autonomy of women within and outside the household (Dyson & Moore, 1983); (iii) relative prestige and political power of women in the community (Blumberg, 1984).

Various institutions and customs can operate to support and reinforce gender stratification systems in different societies. These include patriarchal organisation and absence of bilateral kinship structure (Dyson & Moore; 1983); laws related to property and land holdings; significant economic transaction in the marriage contract; female limitation in social intercourse; political decisions made by male elders; the social customs maintaining inequality by prevalence of a high husband-wife age differential to maintain physical and psychological dominance; limiting choice in mate selection and arrangement of marriages by male and female elders of the family⁷.

Moghadam (1991: 1344) argues that:

gender systems may be designed by ideologues and inscribed in law, justified by custom and enforced by the police, sustained by processes of socialisation and reinforced through distinct institutions. But they are not impervious to modification, change and resistance.

Aghajanian (1992: 371) believes that:

two mechanisms can be considered in moves to change and increase the flexibility of gender stratification: (i) legal reforms to change the institutions and rituals maintaining gender inequality; (ii) expansion in the availability of resources.

Of course some aspects of gender inequality are influenced by expansion of the general resources in the communities. Shifts in culture, attitudes and changes in demographic, socio-economic patterns are also important in changing gender inequality.

Gender inequality is experienced differently by women of different social classes, and women's choices and opportunities are greatly determined by their place in the social class structure. For example, in all developing countries, access to education is largely determined by class and family income as well as gender.

⁷ Not all these institutions may exist in all societies with rigid sex stratification. Hence, it is not appropriate to measure status of women across societies in terms of existence or lack of any or a combination of these institutions. Rather, it is important to compare the outcome, and the relative status of women on objective measures such as access to education across societies.

The subject matter of women's status can be approached from several different dimensions. One predominant trend in terms of woman's ability is to exercise her rights, such as in the decision to marry, choice of spouse, time of marriage, and dissolution of marriage; and in rights pertaining to education, economic independence through work, and participation in public life. The position of women is determined by the number or range of roles she plays whether in public life or within the family confines. An important determining factor in the position of woman is her legal status. A large array of components such as economic participation and access to family and community resources have also been used by various authors as indicators of the status of women (Safilios-Rothschild, 1985; Mason, 1987; Aghajanian, 1994).

In the realm of education and employment, as Epstein (1988) has pointed out, not only is it commonly believed that women do not have the same interests as men and will therefore avoid men's activities, but care is exercised to make sure they can not prepare for roles considered inappropriate. Woman's reproductive function is used to justify her segregation in public and her restriction to the home, as well as her lack of civil and legal rights (Ghoussoub, 1987).

The Muslim countries of the Middle East and South Asia have a distinct gender disparity in literacy and education (Weeks, 1988), and low rates of female labour force participation (Youssef, 1978; Sivard, 1985; Moghadam, 1991). "High fertility, low literacy and low labour force participation are linked to the low status of women" (Moghadam, 1991: 1337). Female mortality is also linked to high fertility and to poor access to health care services during pregnancy and in childbirth (Miller, 1981; UNICEF, 1989).

There is significant reference to the status of women in studies of fertility decline in developing countries (Griffith, 1979, Youssef, 1980, Dixon, 1982, Aghajanian, 1992). The basic argument is that variation in the fertility level across societies is partially the outcome of differences in the relative status of women (gender inequality). In fertility analysis, women are considered as the most important segment of the population who is directly related to fertility rates. Most analyses of fertility behaviour focus on two aspects of women's status: education and employment. Each variable affects the others as well as fertility; employment opportunities are affected by education, conjugal interaction is influenced by the education and employment of the wife (and husband), and vice versa. Women's

experiences, aspirations, and range of options prior to and between marital unions play a crucial role in explaining their level of fertility within marriage.

Some analysts of women's progress world-wide suggest that education is the single most important factor in improving women's lives and status (Warnock, 1990: 80). There is also evidence that higher female education (particularly university) is accompanied by considerably reduced fertility and a relatively high proportion of employment in professional jobs. The direct effect of women's education on fertility is delaying marriage. It is also the indirect effect of women's higher educational status upon fertility that is significant. This is due to the inverse relationship between education and reproduction within marriage. It seems that women's educational level and their fertility and adoption of family planning are closely related (Obermeyer, 1992; Eickelman, 1993; Murthi et al, 1995; Hoodfar, 1995; Mehryar et al, 1997; Tabibian et al, 1998). Also there is an association between educational level and effective use of contraceptive methods adopted.

Educational level has been recognised as an important discriminator of sociological variables in most societies. Schools have been and continue to be mediators in role transformation of women from traditional family defined identities typified by high fertility.

As mentioned, one of the most relevant aspects of education for fertility regulation is delaying marriage and increasing the probability of non-marriage. One impact of educational attainment may be through marriage postponement, since even primary-level schooling is associated with delays in marriage greater than the actual additional years of schooling (Aghajanian et al, 1996). Continued educational involvement of women throughout their teens will, however, mean a delay in marriage (and consequent postponement of first birth), primarily because the practice of women's continuing education after marriage is not culturally accepted. However, in urban areas of Iran, there is some evidence of female participation in education at secondary and higher levels significantly reducing the fertility of married women. Nowadays, in Iran, women even with two or three children pursue education. However, it has not resulted in a larger proportion of women in the job market. It seems that for many women education is an alternative to paid employment in Iran.

Although the reasons for delaying marriage may be multifarious - lack of a suitable spouse, insufficient dowry, etc., the fact remains that women have a greater opportunity either to pursue their education or to seek gainful employment if marriage

is delayed. Thus the delay, whether voluntary or involuntary, can lead to some emancipation of women via education or employment; such influences further increase their age at marriage and their attitudes toward matrimony and reproduction.

Age at marriage is thought to be a useful indicator of relative status in a household: a younger wife is more vulnerable to the options, orders, and sanctions of her husband and in-laws, whereas an older bride is likely to have had more 'exposure,' more time to formulate opinions and develop an independent personality. She is presumably better able to withstand the pressures from husband and in-laws.

In Iran, studies done by Aghajanian et al, 1996; Mehryar et al, 1997 show that age at marriage has strong effect on fertility.

Age at marriage has an independent negative effect on fertility even with the inclusion of women's education, reflecting, no doubt, the shorter periods of exposure to pregnancy among women who marry later.

(Aghajanian et al, 1996: 66)

A potentially important change in Iran's demographic situation in the last decade has been the rise in age at marriage for women. The mean age at first marriage was 19.7 for women and 24.1 for men in 1979 which increased to 22.4 for women and 25.6 for men in 1996 (Statistical Yearbook of Iran, 1996-97). This suggests also a recent tendency toward narrowing in the male-female age differential at marriage.

There is no doubt that rising fertility has a negative impact upon women's mobility, especially on educational attainment and labour force participation. Many studies have shown that fertility and labour force participation are negatively related (Anker et al, 1982; Bodrova et al, 1985; Concepcion, 1974; Sathar et al., 1988).

Economically inactive women tend to have more children than economically active women. Women with incomes, especially in the formal sector, are presumed to have enhanced control over household decisions, increased awareness of the world outside the home, and subsequently more control over reproductive decisions. The influence of the gainful employment of women on fertility and adoption of family planning methods has been great. Although the relationship between female employment and fertility has received considerable attention both theoretically and empirically, there is still disagreement concerning the existence of the relationship, the conditions under which it may exist, and its nature, direction, and explanation.

Many studies have leaned heavily towards the interpretation that fertility influences labour force participation more than labour force affects fertility (Dixon

quoted in Anker et al, 1982: 52). However, research to date has failed to provide a clear and consistent explanation of the relationship between women's employment and fertility, and has not confirmed the causality.

3.2. Women's Status in Iran

In Iran, the rise of *shi'ism* as a popular political force in 1979 included an appeal to women to reject 'Westernisation'. The exploitation of women as 'sex-objects' was identified as a product of Iran's economic and cultural dependence on the West. Women were encouraged to embrace the new *shi'ie* model of womanhood which represented 'authenticity' and 'independence'.

Contrary to common views, the Revolutionary Iranian government has found the advancement of women compatible with its interests. The religious reinterpretations have led to adaptations to modern life.

In discussions of the status of women in Muslim societies, it has long been axiomatic that secularism is the principal prerequisite for progressive reforms in women's social, economic and political lives. In the light of the empirical evidence emerging from Iran, however, it might be prudent to re-examine that assumption. Paradoxically, and contrary to all expectations, this essentially theocratic state has been quietly introducing progressive reforms affecting women, even in areas of law pertaining to marriage, divorce, and child custody, the areas traditionally most resistant to change.

(Ramazani, 1993: 409)

However, it should be emphasised that the gap between the legally available options and rights and those that are accessible to Iranian women in reality is wide. This is not only because of structural barriers, but also because of prevailing cultural ideas that render many options in different life stages totally unacceptable for women.

3.3. Education

Education is one of the most objective dimensions of the status of women in any society today (Youssef, 1978; Mehran, 1991; Hoodfar, 1994). Education services are among the most expensive and scarce resources in most developing countries. Legally, in many of these countries (including Iran) elementary education is compulsory and should be provided free by the government. The Constitution of the Islamic Republic establishes the government's responsibility for providing free education for all citizens up to secondary level (Article 30) (Algar, 1980: 59).

In reality, however, access to such education services is a cost to the household. Costs relating to books and stationery, for example, are a heavy burden on the limited family income. In rural areas, at secondary levels of education, children often have to be sent to a larger village where there is a high school. Housing and transportation and maintaining separate living quarters for a student are very costly.

Respected by Iranians for its own sake, and giving access to respected professions and jobs in the modern sector of the economy, education gives the younger generation a generally acknowledged superiority over the old, and gives women a chance of achieving status and power for themselves (Mehryar et al, 1997). Iranians have experienced what can be described as an educational revolution in one generation.

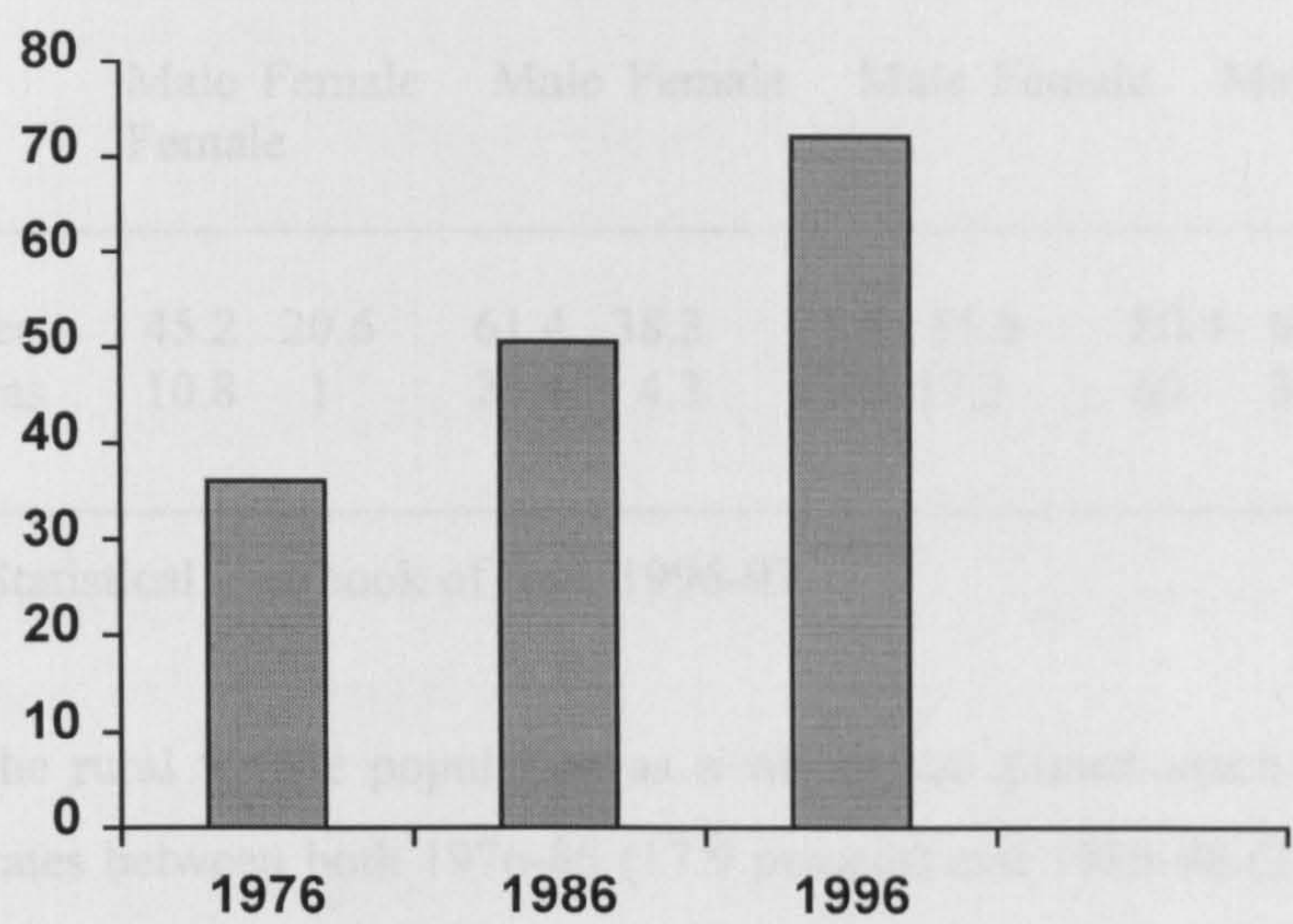
The mass movement of Iranian women into education came later than that of men because of the strong economic and cultural pressures against it (Higgins et al, 1994). A larger proportion of males than of females learned reading and writing in the traditional *maktab*.

The first 'modern' school in the country, the Dar al-Fonun, which opened in 1851, was exclusively for males, and Western-style elementary schools were established late in the nineteenth century, first for males and only later for females.
(Arasteh, 1969: 67)

As in many other societies, education was traditionally not thought necessary or desirable for girls. It was not necessary, because of women's position in the economic structure of the family; women did not earn income, and their unpaid domestic labour (for which education might render them unfit) was essential. It was not desirable for the family's survival, because it was seen as threatening male honour and male position in the social hierarchy.

With the introduction of modern technology in industries and the accompanying spread and development of education, the granting of the right of education to women became a necessity and has been considered since then one of the most important factors which led to their emancipation, thereby enabling them to share responsibilities with men and participate actively in professions requiring a high degree of ability and skill. At the same time the Qur'anic command that all Muslims, men and women, should be properly educated would keep open women's access to knowledge and learning. Diagram 4.1 shows a steady improvement in women's education since 1966.

Diagram 3.1: Literacy rate in women (6 years of age and older) Islamic Republic of Iran



Source: Iranian Ministry of Education, 1997

In Iran, a steady improvement in women's literacy rates is evident from the Censuses (see Table 3.1). In the decade 1956-1966 the literacy rate improved from 8 percent to 17.9 percent for women, and 22.4 percent to 40.1 percent for men (Statistical Yearbook of Iran, 1966). According to the 1976 Census, 55 percent of urban women were literate while the figure was just 17.3 percent of rural women (Statistical Yearbook of Iran, 1976). In 1986, 65 percent of urban women (and 80 percent of urban men) were literate. The rural rates were: 60 percent of men and 36 percent of women were literate. In 1996, 84 percent of urban women were literate and the figure for rural women was 60 percent (Statistical Yearbook of Iran, 1996-97).

Table 3.1: Literacy Comparison in Percent Between Men and Women in Four Censuses

	1956		1966		1976		1986		1996	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
Urban areas	45.2	20.6	61.4	38.3	74.4	55.6	80.4	65.4	81	72
Rural areas	10.8	1	25.4	4.3	43.6	17.3	60	36	65	53

Source: Statistical Yearbook of Iran, 1996-97.

The rural female population as a whole has gained much more in terms of literacy rates between both 1976-86 (17.9 percent) and 1986-96 (21.24 percent) than its urban counterparts (7.6 percent and 12.6 percent). The 110% increase in the literacy rate of rural women between 1976-86 (as compared with a mere 37.5% gain for men) as well as its 71% rise (as compared with a gain of 28% for rural men) between 1986 and 1996 are impressive. However, the baselines for rural women were much lower.

If we compare indicators of women's access to elementary education in rural and urban areas over time, we find that the literacy rate for rural women doubled between 1976 and 1986 (from 17.3 percent to 36.3 percent) while it increased by 9.8 percent for urban women (from 55.6 to 65.4 percent). Again the 1996 Census in Iran reveals that the literacy rate for women in rural areas rose faster than that of women in urban areas (17 percentage points comparing to 9.8 percentage points respectively).

At the higher levels of education, with higher costs, the enrolment rate of female children declined. In 1986, at the secondary school level, the rate of female enrolment was only 54 percent of the male enrolment rate. At the high school level, the rate of female enrolment was less than half that of male enrolment. In 1986, at primary level, the figure increased to 80 percent and at secondary level it increased to 60 percent while for high school level it remained the same.

As far as completion rates are concerned, girls show high achievement. During the 1987-88 academic year, 88.81 percent of girls succeeded in completing primary school compared to 85.03 percent among boys. At secondary level, the gap widened to 85.11 percent achievement rate among girls as opposed to 78.42 percent among

boys. Male pupils' completion rate is reduced systematically as the grades go up, leading to only 73.87 percent completion rate at high school level compared to 90.20 percent for girls. Female pupils at Technical-Vocational Schools also fare better with 89.74 percent success rate, while boys lag behind with only 65.97 percent of them passing examinations (Ministry of Education, 1989).

The lower educational disadvantage for girls in urban areas may be associated with such factors as easier access to schools, cultural attitudes more favourable to universal education, and greater awareness of the benefits of school attendance for girls, in urban than in rural areas. Between 1976 and 1986, the female proportion of elementary age school enrolment increased in every province save one (Sistan Baluchestan), and the increase was greater in the least developed provinces (Statistical Centre of Iran, 1986).

While the total number of students attending high school and university had increased 4.45 times between 1976 and 1996, those from rural areas had risen by a factor of 9.4. The number of university students from rural areas (93,000) revealed by the 1996 Census equals 23.25 times and 7.75 times of those registered in 1976 and 1986 Censuses, respectively.

Mehran (1990: 57) argues that the leaders of the Islamic Republic have placed considerable importance on education for women in their ideological statements and planning documents. Higgins et al (1994: 42) have got the same view and state:

discussions of Iranian education after the Revolution in Western media and scholarly literature have been dominated by politically motivated critiques, often with little supporting data. The review of the policies and practices of the Islamic Republican government indicates that there has been considerable support for women's education, especially at the elementary level.

The government's support for education, especially elementary education, can be seen in the government's budgetary priorities as well. Despite the expense and dislocations of the Revolution and the war with Iraq, education has been allocated a generous portion of government expenditure, 21.9 percent of the 1989 budget which has gone up to 30 percent of the budget in 1996.

Although the gap between male and female literacy remains considerable, women's literacy in rural areas after the Revolution improved at a much faster rate than during the pre-Revolution era. In promoting the education of women, in 1988

Rafsanjani ⁸asserted that in Islam, there are no barriers to the education of women in any field and as president, in 1989, emphasised the need to create greater higher education opportunities for Iran's youth of both sexes as well as equal pay for equal work for women (FBIS-NES, Feb. 11, 1988: 60).

3.3.1. College education

There has been an increase in the percentage of female students and instructors at university level since the 1979 Revolution. However, compared to primary and secondary levels, there is a greater gap in the post-secondary student population. According to Iranian sources, during the 1974-75 academic year, female university students formed 28 percent of the total student population. In the same year, 32 percent of university graduates were girls. About 15 years later, in 1989 the percentage of female graduates rose to 34 percent. In 1996, the percentage rose to 36 percent (Statistical Yearbook of Iran, 1996-97).

Out of nearly 182,000 who received higher education in 1986, just over 56,000 (or 31 percent) were female. In 1996, a decade later, 526,000 received higher education in which 172,000 were female (ibid.). We can see from the figures that the number of Iranian women in higher education has tripled. Women's enrolment equals or exceeds that of men's in the country's public health and medical schools. In 1985-86, 47 percent of the students studying dentistry were women, together with 40 percent in laboratory sciences.

In the early 1980s, the Iranian authorities declared certain areas of study (technological, veterinary, and some art programmes) off-limits to women. The reasons officially cited were the limited capacity of the universities, lack of job prospects for women in those fields, and the need for women specialists in other fields. Female university students have also been discouraged from entering certain 'male-oriented' fields of study. Specialisation that demand extensive fieldwork such as mining and petroleum engineering are closed for women, while male students can not apply for admission to obstetrics-gynaecology. Some disciplines including banking, accounting and archaeology remained closed to women (Zan-e Ruz, no. 1327, 1991).

⁸As Majlis Speaker before his accession to the presidency in 1989.

The largest number of women university students are in health and medicine, teacher training, the humanities, and the natural sciences. Engineering is the most popular field for male students. Women who were attending the prohibited courses were asked either to drop out or change subject. Overall, 54 percent of subjects offered by higher education institutes were closed to women (Mojab, 1991). The representatives of the Islamic women's movement rejected these arguments against women's education as "illegal and discriminatory" and continued to lobby for "participation of women in all fields of study at higher education level" (Zan-e Ruz, 24 June, 1989). Azam Taleqani, the member of the first *majlis*, who founded the Women's Society of Islamic Revolution told the press:

about half the women in this country live and work in the rural areas and carry a major burden of agricultural activity. Nevertheless we do not allow our women to study agricultural science at the university.
(Zan-e Ruz, 25 Dec. 1990).

In 1986, the government began to modify earlier policies that had closed certain technological, veterinary, and art programmes to female university students and because of the removal of many of these barriers, female students at university are now studying in nineteen academic disciplines, including some engineering fields.

In the summer of 1989 the limitations for women at universities were further removed from many disciplines. In 1991 '*Shorayeh Farhangi va Ejtemayieh Zanan*' (the Women's Cultural-Social Council) appointed by the High Council of Cultural Revolution to co-ordinate government policies on women, submitted a project which was considered and ratified by the Council. It was a proposal to eliminate the prejudicial treatment of women in higher education and in the selection for degree courses (Zan-e Ruz, 31 August 1991).

Some revealing statistics show that as early as the academic year 1987-89, female admissions to such fields as physiotherapy, audiology, statistics, optometry, radiology, and radiotherapy were on a par with male admissions (Najmabadi, 1990: 39-40). Medicine, the most prestigious faculty in Iranian universities, has become more open to women, and their admission in different medical fields is now on a par with males. In other fields, such as agriculture and veterinary medicine, female admissions went from zero to 10 percent (Ramazani, 1993: 412). Although the largest number of female students is still in health and medicine, teacher training, humanities,

and the natural sciences, other disciplines now open to women will undoubtedly gradually attract more women as job opportunities in these fields have increased during the post-war Reconstruction Period.

Table 3.2: College Population Males and Females, 1986, 1996

	Total	Post diploma	Bachelors	Masters	Doctorate
Total (1986)	181,889	60,490	96,353	10,394	14,652
Total (1996)	579,070	85,165	418,692	26,832	48,381
Male (1986)	125,327	42,357	65,263	7,869	9,838
Percentage total	69%	70%	68%	75.7%	67%
Male (1996)	369,907	58,209	257,327	22,061	35,077
Percentage total	63%	68%	61%	82%	72%
Female (1986)	56,562	18,133	31,090	2,525	4,814
Percentage total	31%	30%	32%	24%	33%
Female (1996)	209,163	26,956	161,365	4,771	16,071
Percentage total	36%	31%	38%	17%	33%

_Source: National Census of Population and Housing, 1996.

Gender gaps in higher education may explain why women’s participation in political decision-making positions is almost insignificant in today’s Iran. Based on United Nations information (1995: 174), there is no female minister in Iran, and out of 182 sub-ministerial level positions, women occupied only 0.5 percent in 1994.

Higher education abroad presented problems for women. A *majlis* bill on education abroad which was ratified in 1985, barred married women students from taking up education abroad unless they were accompanied by their husbands (Kayhan Havai, 24 April 1985). Two female deputies in the *majlis* fiercely attacked the bill on the grounds that it blatantly discriminated against women. However, this restriction was lifted and now women, even single ones, can get a scholarship and study abroad. Full and free selection of fields of study at university level is still not available to women, so it seems that the 1991-proposal law has not been enacted yet. However, it should be said that the female share of total university population has improved at a much faster rate after 1986.

By 1987, 32.2 percent of university graduates, 24.3 percent of postgraduates, and 32.9 percent of the population with doctorates were women (FBIS-NES, June 10, 1992: 40). In 1996, it increased to 38 percent for university graduates but it decreased to 17 percent of postgraduates and the same percentage (33 percent) of people with doctorates for women (Statistical Yearbook of Iran, 1996-7).

The main reason for these decreases occurring at post grade level for women is that admission to the universities have not changed since the Revolution and have remained extremely difficult for both men and women to enter the universities which are free. So they have to pass the examination entrance and compete regardless of their sex. Of course, in case of going to open universities in which they have to pay, the competition is not high.

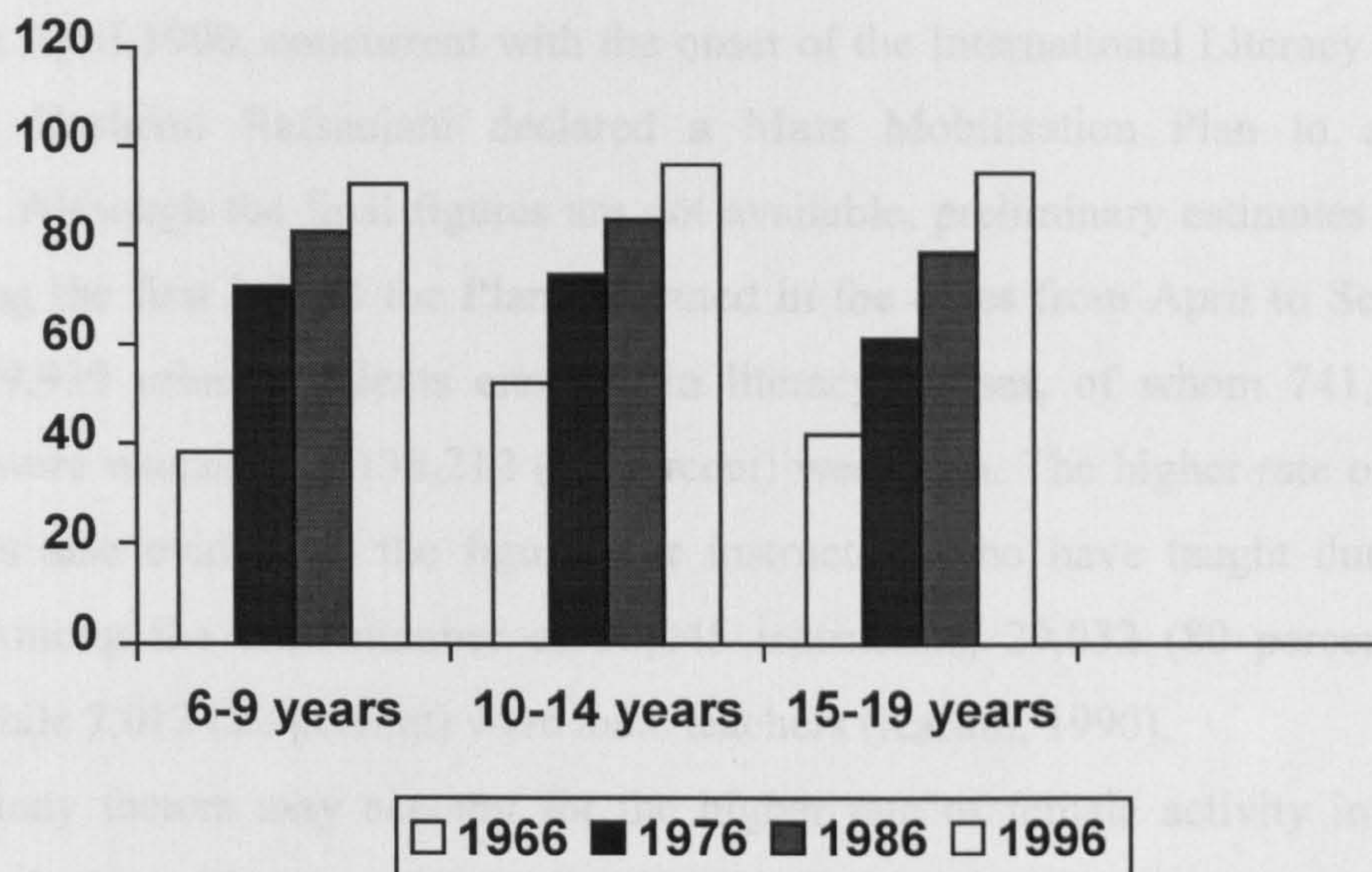
Of particular importance for the future education of women was that in 1990-91 five times as many women were preparing at college level to work in education as had been in 1977. Similarly, three times as many women were training in mathematics and computer science, two and a half times as many in health and medicine, and one and a half times as many in engineering (Higgins et al, 1994: 34).

Education is one of the most important factors, which affect the status of women in a modern society. Despite the fact that men and women have legally equal education opportunities in Iran, there are more illiterate women than illiterate men, and many girls aged 6 to 12 years old, at least in rural areas, do not receive any education. This is likely to be partly due to the persistence of traditional thinking in rural areas, but Sometimes they do not have any school at all in their village to attend. Village boys can more easily go to nearby schools, which have schools.

In Iran, increased literacy has contributed to women's confidence, and has increased women's perceptions that they have options in many aspects of their lives, particularly women in rural areas who have been much more constrained by traditional social norms. Hoodfar (1996: 37) states that many of the rural women interviewed in her study wanted their daughters (and sometimes themselves) to become the village teacher or nurse. A few of them said they would like to become members of parliament or religious leaders.

Diagram 3.2 represents improvement in literacy rate in aged 6-19 years old in four Censuses of Iran.

**Diagram 3.2: Literacy rate (%) in 6-19 year olds
Islamic Republic of Iran**



Source: Statistical Yearbook of Iran, 1996-1997

3.3.2. Adult education for literacy

Education for adults outside the structure of schools and colleges has been the focus of great interest and activity. Since the Revolution (1979), when it was instigated and controlled by a government organisation (*nehzate savadamozi*), education was part of the 1980s commitment to mobilise the population, and later of the desire to develop appropriate and self-reliant services. Women are the main beneficiaries of adult education, which is often aimed at compensating for their disadvantaged access to formal education and limited social contacts, and in particular at helping them earn money and manage their domestic responsibilities better.

The adult literacy sector can be more flexible and more responsive to changing needs than institutional education. It requires much smaller financial investment, relies on the commitment and enthusiasm of its activities, and is closer to the people it serves. The main aim of many classes in rural areas is that they mobilise people and provide a social and general educational activity for village women who lack stimulation and opportunities to leave home.

From its establishment in 1980 up to 1989, the Literacy Movement of Iran for adults attracted a total of 8,218,360 learners, of whom 5,357,373 (65 percent) were women and the remaining 2,860,987 (35 percent) were men. By 1988 only 41 percent

of the students enrolled in previous years had received their certificates of completion, but women did so at a greater rate than did men (47 versus 30 percent) (Iran Statistical Yearbook, 1990).

In April 1990, concurrent with the onset of the International Literacy Decade, President Hashemi Rafsanjani declared a Mass Mobilisation Plan to eradicate illiteracy. Although the final figures are not available, preliminary estimates indicate that during the first half of the Plan, executed in the cities from April to September 1990, 879,939 urban residents enrolled in literacy classes, of whom 741,727 (85 percent) were women and 138,212 (15 percent) were men. The higher rate of female activity is also evident in the figures for instructors who have taught during this period. Among the total number of 36,045 instructors, 29,032 (80 percent) were female while 7,013 (20 percent) were male teachers (Karimi, 1990).

Many factors may account for the higher rate of female activity in literacy education in Iran. First and foremost is the high percentage of female (48 percent) compared to male (29.1 percent) illiteracy in 1986 which meant more women than men would enrol in literacy classes once they were held. Second, the economic hardship imposed on Iran since the 1980 Iran-Iraq war has led to double employment and after-hour work shifts for many men who are the main bread-winners of the family in Iran. "Lack of time and physical exhaustion among overworked men is one of the main reasons for their low rate of participation in literacy classes" (Mehran, 1991: 47).

Adult education in Iran is directed toward improving literacy among the populace. Important as this is, efforts need to be made to incorporate additional use of knowledge and skills into the educational process that is relevant to daily adult lives as the content of textbooks for adult education is different. Furthermore, parliament (*majlis*) has passed a bill making elementary schooling compulsory for both sexes under forty years old in the Second Five-Year Plan, so adults who are illiterate due to a lack of elementary education as children will have to attend elementary schooling (Ettella'at, 14 Nov. 1994). It is interesting to note that the famous statement of the Prophet Mohammed: "seek knowledge, even if it be in China, for the pursuit of knowledge is obligatory for every Muslim, man or woman" can be seen in Iranian literacy classes held for women with the last part of the statement underlined.

In 1998, Iran was named one of the most successful countries in Asia in eradicating illiteracy among women by UNESCO (Kayhan, 30 June 1998).

3.4. Employment

Women's participation in the labour market is generally taken as an indicator of the status of women, especially in developing countries, and employment of women is considered a means, even a necessity, for women's emancipation.

However Afkhami, 1994 argues that based her observation and research in Iran, a woman's labour contribution is not in itself a reliable indicator of a woman's autonomy and power, at least among the lower classes. Hegland (1991: 23) reports from a village in south-west Iran that employment outside the home was considered an indication of low socio-economic position and a source of shame both for the women involved and for their relatives.

The work women do, whether in, or outside of the home, can be tapped by women as a source of power under certain conditions; (i) the work creates dependencies that the woman can exploit; (ii) the work creates resources that the woman can control; (iii) the work creates skills that enable the woman to access other sources of power and creates in her the self-confidence to shrewdly exploit them.

(Afkhami et al, 1994: 160)

It is fairly obvious that waged women, whether educated or not educated, differ in their behaviour from non-waged ones. Spending the greatest part of the day outside their homes interacting with different people gives them more experience and makes them more alert and open to change.

In a country like Iran, whose economy is oil-based, some pressures like inflation, a high foreign debt, high unemployment may be leading to a number of policies in which women's economic and social participation may change. Moghadam (1998: 153) argues that:

patterns of women's employment in Iran have been influenced by the oil-based nature of the economy; by the policy of import-substitution industrialisation which has favoured capital-intensive, male-intensive industries; by cultural attitudes and gender bias which render many occupations inappropriate or off-limits to women.

Iranian women share a consistent pattern of occupational segregation and subordination with women in other parts of the world (Roos, 1985; Carty, 1987; Garcia de Fanelli, 1990; Ghorayshi, 1995).

In Iran, while the government has readily promoted education for women, other means, such as labour market participation, contradict the state vision of

women's role (Hoodfar, 1995: 135). Article 43 of the Constitution undertakes to provide employment opportunities for all. But in reality, this opportunity has not yet been provided. The political elite of Iran claim to believe in women working outside the home. The leader (Ayatollah Khamene'i) in one interview urged women not to abandon their social responsibilities only because they are mothers and wives (Zan-e Ruz, 1990). In one of his many comments, President Rafsanjani stated that there is no problem in a lifestyle where the female is the professional worker and the male is the househusband (Iran Times, March 21, 1986).

3.4.1. Women's employment in the 1980s

According to Census data, the economically active population in 1986 numbered 13,041,000 persons. Of the total employed population, 65 percent was engaged in the private sector and 31 percent in the public sector (Iran Statistical Yearbook, 1988: 476). About 1 million women were classified as employed, representing only about 9 percent of the total employed population. It shows a decline in women's employment percentage compared to 1976 Census of 11 percent. Total female employment increased to 12.7 percent in 1996, but the percentage of females is still low. The largest number of enumerated women were in private and public services. Agriculture ranked second, with about 263,000 women, and industry third, with 216,000 women employees. Clearly vast numbers of women were not being counted in the agricultural sector; the figure for men in agriculture was nearly three million. Only about 508,000 women were reported as (salaried) employees, of which 408,000 were in the public sector (out of a total of 3.4 million public sector employees) and 100,000 women in the private sector (out of a total of 1.8 million private sector employees).

In terms of distribution of the female labour force across occupational groups in 1986, women were found in: (a) professional, technical and related fields (35 percent of employed women), (b) agricultural, animal husbandry, forestry, fishing and hunting (26.6 percent of employed women), and (c) production and transport (23.4 percent of employed women) (Statistical Yearbook of Iran, 1986). Most women who were waged and salaried were in government employment (the civil service) or in public sector enterprises, where they enjoy social insurance, including pensions, health-care, maternity leave, and other benefits, but most women in the private sector receive no benefits at all. Out of about one million professional and technical workers,

343,000 (32.5%) were women. Among managers and administrators there were 2,000 women compared with 43,000 men (Nassehy, 1993: 207). In 1986, close to half the employed women or 44% were engaged as teachers and professors in the nation's educational system, both public and private. Another nine percent (47,000 women) were employed as nurses, midwives, physicians, dentists, and other health-related occupations. In medicine, the numbers of women doctors were low compared with men: 2,832 female physicians (compared with nearly 15,000 male doctors), 2,873 trained midwives, and an additional 696 traditional midwives. There were only 654 women dentists, compared with 4,351 male dentists (Statistical Centre of Iran, 1986).

Women were mostly concentrated in the typically female jobs of teaching and caring. 82.7 percent of women civil servants work in teaching and education followed by administrative, financial, clerical, health and medical profession. By 1986 over 26 percent of all employed women were teachers⁹. If the Ministries of Health and Education were excluded then women's employment in the public sector fell to about 5 percent of the total. There had been an average annual fall of 6 percent per annum in the percentage of females employed by the private sector 1976 and 1986 (Bagherian, 1994: 22).

In 1986, women formed 30 percent of public sector employees: 50 percent of the staffs of the Education Ministry were women, while in the Health Ministry the percentage is 45. 35 percent of instructors teaching in medical faculties in Iran were women, but the level of female employment in the private sector fell from 332,000 women in 1976, to 97,000 in 1986 (Ettela'at, Nov. 30 1994).

The main elements of government policy included an emphasis on the ideological importance of training women for certain professions such as education, welfare, health and medicine (Moghadam, 1995; Afshar, 1998), and the adaptation of women's employment to the needs of the 'Islamic family'. Therefore, women's employment was directed to those professions, which were seen to be compatible with 'woman's nature' and her family responsibilities. This was in line with its policy on women's higher education.

In Iran, in 1986, women in the public sector tended to be largely professional, highly educated. Typically the women were considerably better educated than their

⁹ Women themselves are interested to work as teachers, because of the shorter times of the work and also during the school holidays, mainly in the summer they can stay home with their children.

male counterparts in formal sector; only 6 percent of male civil servants had tertiary qualifications, compared with 18 percent of the females. But only 3 percent of the women reached the higher echelons of the civil service (Sharify, 1992).

Women do not exceed one-third of university faculty in any country in the world, nor does the proportion of full professors who are women anywhere exceed one-fifth (Lie et al, 1994: 53). The proportion of female instructional staff in Iranian universities increased from 11.3 in the 1972-73 academic year to 17.3 in 1990-91. Overall figures indicate that women constitute 25.9 percent of Assistant Instructors, 19.3 percent of Instructors and Lecturers, 12.3 percent of Assistant Professors, 6.4 percent of Associate Professors and 5.9 percent of Full Professors (Malik, 1995: 185). These figures are not favourable compared with Turkey, which has a high proportion (20 percent), of full professors who are female. This compares favourably not only with other Islamic countries, but with Norway, the Netherlands, France, the United States and Russia (Lie et al, 1994: 57). In Iran, women are less visible in higher level jobs, particularly in the public sector. This has been the subject of numerous complaints from women officials and Islamic activists.

The 1986 Iranian Census categorised 11 million Iranian women as 'homemakers' which seems to constitute mostly women in rural agricultural areas more. In agricultural occupations, however, the largest numbers of women in 1986 were in the age group 15-19 followed by the age group 20-29. In rug weaving, the largest numbers of women are in the 15-19 age group (National Census of Iran, 1988: 160-161). So, they were not considered economically active and they were categorised as 'homemakers'.

In the urban areas, women who are classified as 'homemakers' may actually be part-time workers in the informal sector. Or they may be urban women whose domestic work and child care take up so much time that there is not time left for work outside the home. Other women may be bound by cultural or familial constraints; yet others may voluntarily choose to stay at home, as such constraints are gradually disappearing in urban areas. Because of the low prestige of certain occupations, some women may identify themselves as housewives rather than workers, so underestimating the participation of Iranian women in the labour market.

A significant element in Iranian women's particular and gender-specific weakness as workers is one that women experience all over the world: they are channelled into special jobs designated as 'women's jobs'. In the formal sector, there

is widespread occupational sex stereo-typing, and lack of support services for working mothers, which is a function of discriminatory economic systems. While women constitute a small percentage of the salaried labour force, they carry out the majority of informal economic activities. However, those women considered 'economically active', i.e. those who contribute money to the family income, are represented in Census figures regarding the labour force. The agricultural activities which rural women perform are considered routine household tasks and are not enumerated. Despite their significant input in agriculture, women work mainly as family workers rather than agricultural workers, and as such are largely recorded as 'unpaid family labour' in official statistics, if reported at all. In many rural areas of Iran, carpet weaving is traditionally done by women in their homes as part of their house-keeping duties for the family's use as well as for earning extra income, and in many northern parts of Iran, women do the agricultural tasks although this is not taken into account. Thus women were reported to comprise only 22.8 percent of the agricultural work force in 1976, and as little as 8.1 percent in 1986, although their estimated share was raised to 22.3 percent in 1991 (Plan and Budget Organisation of Iran, 1992).

Table 3.3: Female Employment

	1976	1986
Managerial	1,348	1,021
Office Workers	63,340	47,048
Trade and saleswomen	7,659	10,097
Service sector	67,732	33,487
Agriculture	227,637	273,290
Production and transport	640,560	226,197
Others	16,888	49,239

Source: National Census of Population and Household, Statistical Centre of Iran, 1976 and 1986.

The High Council's declaration (which was established after the Revolution) states that working women should have job security, unemployment benefits and welfare provisions (Article 10). In addition women who are heads of household should be entitled to special retraining programmes to enable them to return to the labour market (Article 11) and the government is urged to provide co-operative-type organisations to facilitate home working for women who wish to combine their paid and unpaid jobs (Article 12). Some other articles laid down special protection for

women workers. Article 75 of the law prohibited the carrying of heavy weights and undertaking dangerous work for women workers. Article 76 prohibited night shifts for women except in relation to educational, health and medical work (Ettela'at, 24 October 1987).

Unemployment among women is higher than among men. The rate of unemployment of economically active women in urban areas reached 30 percent in 1986 (Kian, 1995: 410). Based on the 1991 Census of Iran, in 1990, 1.2 million women were employed while nearly 400,000 reported themselves unemployed and seeking employment. For men, the figures were 12.1 million employed and 1.6 million unemployed. The number of unemployed women who were seeking jobs based on the Statistical Yearbook of 1996-97 was 272,000 compared to 1,184,000 men in 1996. To get a taste of obstacles faced by women in seeking employment and in their working conditions, it is useful to refer to surveys published in *Zan-e Ruz* magazine. A study conducted by the Population and Manpower Department of the Plan and Budget Organisation in April 1984 was of job adverts in two newspapers over a period. Over 50 percent of the adverts asked for male applicants only. The other half did not specify gender. The study concluded that a woman's chance of getting one of the jobs which were open to both sexes, was one-eighth that of men (*Zan-e Ruz*, 22 August 1987).

Even, if women find a job, they do not benefit from equal pay for equal work provisions. Married women pay higher tax on their incomes than married men; and women pay higher child-insurance premiums than men. Men get larger bonuses, because it is assumed that they are the heads of a household. According to one account, 'the New Year bonus' was paid differently in Iran Aeroplane Industries to men and women employees. Married women employees were given the single person's bonus (Nasschy, 1991). According to a government publication, a bill was passed in 1992 to guarantee equal payment of New Year bonuses for women and men (*Zan va tawse'eh*, 13 July 1994). In spite of the fact that neither the Constitution nor the work legislation stipulates such salary disparities among men and women, and although Article 9 of the 'policies of women's occupation' stipulates that women should have equal pay, bonuses and allowances, no legislation has been passed to enforce these measures.

Men are entitled to cheap goods from the civil service co-operatives; their share increases with the number of their children. Not so for women, who do not even get a share for themselves (Shahriar Afshar, 1992).

Recognising the double burden that working women in Iran carry as do many elsewhere in the world, i.e. the care of their children and homes as well as their jobs, the government has introduced laws to try to address their problems. A 1985 law mandated part-time work privileges for mothers of young children. It also instituted three months of paid maternity leave for the first three children, and two half-hour periods per day for nursing mothers to feed their babies; established pension benefits for women; and decreed that companies hiring women should provide day-care facilities for the young children of female employees (Zan-e Ruz, 1991, no. 1316; no. 1317; and no. 1321).

At present, the public sector is far more likely than private sector establishments to provide social insurance for its employees and to implement the provisions in the Labour Code for maternity leave and job-back guarantees, child-care facilities, and nursing breaks. Moghadam (1995: 193) states that in the public sector, some ministries and agencies provide free or extremely inexpensive child-care, while others direct parents to privately-owned child-care centres that may or may not be subsidised.

In the private sector, large establishments are far more likely than smaller ones to provide social insurance and benefits for working mothers, as well as a shorter working week. The shortage of day nurseries, kindergartens, and other child-care facilities is one of the main problems facing employed women in Iran.

Working women, however, are finding these laws inadequate and are voicing their complaints in letters to women's magazines, through female representatives requesting stricter enforcement of existing laws; shorter working days (by two hours), more available and better quality day-care; provisions for keeping jobs while on leave; longer maternity leave; job-share; greater availability of part-time work, and higher wages for it (rather than the current rate that is lower than that for full-time work); 10-15 extra days of personal leave for women (so they may take leave when their children get sick) and earlier retirement (non-compulsory, after 20 years service) (Zan-e Ruz, no. 1316, 1991). Female deputies necessitated some radical reforms in the existing laws and consequently the *majlis* passed a bill allowing women to retire

from the public sector after 20 years of active service regardless of their age on full pensions, while men still have to serve 25 years.

Ramazani (1993: 413) argues that the government, however, faces deeply entrenched norms and attitudes that make it difficult for women to enter the work force. One study, conducted over a period of two years (1985-87) in Iran, found that for all 72 women interviewed, working outside the home was neither a major goal nor highly valued. These women viewed work as an 'obligation' to undertake in the event of necessity, such as when men are at war, or sick, or deceased, or unable to support the family. However, for some, work was a means of achieving social distinction (Adelkhah, quoted in Ramazani, 1993: 413). One of the main reasons for this attitude is that women are overburdened by the combination of reproductive labour, housework, and outside work. Few women have felt the need to be self-sufficient through employment because of the availability of economic support from others. It is only when responsibilities of the husband for the economic support of the family begin to be questioned¹⁰ or following divorce that women find working outside the home is a necessity.

Aghajanian (1994: 50) believes that the decline in the economic activity rate of Iranian women between 1976 and 1986 from 11 percent to 9 percent was partly consistent with the strong emphasis on the priority of familial and household roles for women by the elite in the period following the 1979 Revolution.

In Iran, however, women have to combine career with marriage, motherhood, and household responsibilities if they work outside the home. However, they have worked primarily in a world of women and children and expect and are expected to give priority to their family roles. Even the highly educated ones who were ready to explore external sources of prestige and satisfaction, were not prepared to do so to the exclusion of their marriage and maternal roles (Adelkhah quoted in Ramazani: 414). But 5 years after the study done by Adelkhah, in 1993 attitudes of women towards employment seemed to have changed. In her study, Nassehy reports on a recent survey on women's employment, conducted by the Islamic Republic of Iran broadcasting service: 60 percent of the women were in agreement with women working outside the home. Another 20 percent agreed under certain conditions, the main one being "if there would be no detriment to family life". The more educated the

¹⁰In Islam, the male head of household has the obligation of paying for the household's needs.

women, the more they were likely to agree with women working outside the home (Nassehy, 1993: 50-58).

Among the major obstacles, one of, which will admittedly require a long time to change, is women's own perception of themselves as inferior, second-class citizens. Similarly, changes in men's attitudes and beliefs regarding women also will be required. Social norms do not encourage women to work outside the home. Iranian women face deeply entrenched norms and attitudes that make it difficult for women to enter the work force in large numbers. Women are mainly responsible for domestic and familial tasks. Ghorayshi (1996: 453-459) who interviewed 34 married working women in Iran in 1996 argues that, only four women interviewed received help from their husbands and only in two households, did the couple share most domestic tasks. Eight women received help from their children, parents and in-laws, but the majority had sole responsibility for the domestic tasks. In general, even those men who helped their partners in household chores were under extreme pressure. For instance, in one household, the husband did the dishes, but avoided being seen doing so by friends and especially relatives. This was a cautionary act to avoid being labelled as 'feminine'. The result, as can be imagined, is that washing, and cleaning is a salient part of women's lives. In Iran, regardless of education and economic status, women are also responsible for keeping family ties. Entertaining relatives and friends, a central feature of Iranian family life, is seen as the woman's responsibility. Thus, without egalitarian domestic division of labour and public services, women are overburdened with responsibilities and must rely on help from relatives to be able to hold a full-time job.

The family is accepted as central to Iranian society, but it can be argued that women are not only mothers but the public domain too is in great need of women's specific talents and valuable contributions.

Women's work in the public sphere is an opening to social life. It is also a means of achieving both social and individual recognition and status which domestic work does not provide. Today, work for women is becoming more socially acceptable, though the change in attitudes lags behind the facts of the situation. The degree of acceptance varies from one place to another. In most parts of Iran, the expectation is still that women will marry, and that if they work at all, they will regard their jobs as less important than their position at home. Many women students share this expectation, but even many of those who do not are unable to find work, because

of the shortage of acceptable jobs. What women gain from university is the pleasure and status of education for its own sake, the opportunity to prove equal capability with men.

Sociologists concerned with women's status and position in society often assume that all women desire to work, but are constrained from so doing by an external male or public-induced system. If the conditions of need, opportunity and ability are met at the state and the popular levels, then women will be integrated into the work-force. In Iran, it seems that as long as men are considered as the main breadwinners of the family, integrating women fully in the labour force is difficult. Also, their pursuit of employment is not taken as seriously as men's by the government. Also, it is necessary if men share the responsibilities of housework with women enabling them to work outside the home.

3.4.1.1. Women's employment after the Iran-Iraq war (Reconstruction Period)

The so-called Revolutionary period (Kian, 1997), ended in 1986, and the end of the war in 1988 marked the beginning of what the government called 'the Period of Reconstruction'.

This period was marked by financial difficulties that the economic crisis had inflicted on households, especially the middle class, who could not make ends meet with one salary earner. Women, whose financial contribution proved essential, were thus compelled to participate in the labour force.

(Kian, 1997: 83)

The condition of women did not constitute a priority for the political and religious elite during the Iran-Iraq war (1980-88). Kian (1997: 75) argues that the end of the war and the implementation of 'Reconstruction Policies' provided an opportunity for a new generation of gender-conscious Islamist women to seek allies among secular women, to present a modern reading of Islam and make radical demands for change in women's status by using politics as a potent agent. Since then the elite's ideological discourse has become more moderate and more tolerant vis-à-vis working women, although the private sphere is still considered the most suitable place for women's activity.

The government when faced with the need for skilled women workers in many fields, started a process of re-educating the public to the 'progressive' attributes of Islam and the values of women working and being socially active (Ramazani, 1993:

413). President Rafsanjani suggested in 1990 that women should play a greater role in Iranian arts, sports, politics, and religion, and said, “We are in need of a women’s labour force” (FBIS-NES, 6 July 1990: 41).

There were voices throughout the Iranian bureaucracy with a new message: economic growth and national development can not take place in a situation of unbridled population growth and the economic marginalisation of women (Moghadam, 1995: 191). As a result of these calls for equity and efficiency, the government has undertaken a number of measures pertaining to women and work, including: (a) technical and on-the-job training under the supervision of the Ministry of Labour and Social Affairs (between 1987 and 1990, some 22,081 women were thus trained); (b) increasing the annual leave entitlement of women workers from 12 days to one month; (c) establishing centres ‘for the employment of needy and guardianless women’; (d) selection, since 1989 of the best woman worker of the year, on Labour Day; (e) training courses for rural women in carpet-weaving, sewing, hygiene, midwifery, and dairy production (Zan va tawse’eh, no. 15, 1992). Moghadam argues that observations during research travel in May 1994 suggests that women are now engaged in a wider variety of occupations and professions than before. However, they are overburdened by the combination of reproductive labour, housework and outside work.

Table 3.4 provides data on economic activity, status of employment, and unemployment in Iran in 1996.

Table 3.4: Population, Economic Activity, Employment Status, and Unemployment in Iran, 1996

Description	Male	Female
Population and economic activity		
Population 10 years of age and over (total)	23,022,000	22,379,000
Active population	13,990,000	2,037,000
Employed population	12,806,000	1,765,000
Urban areas		
Population 10 years and over	14,561,000	13,943,000
Active population	8,522,000	1,133,000
Employed population	7,808,000	991,000
Rural areas		
Population 10 years and over	8,390,000	8,363,000
Active population	5,412,000	894,000
Employed population	4,945,000	766,000
Employment status		
Total	12,806,000	1,765,000
Employer	3,560,000	698,000
Own-account worker	852,000	347,000
Public-sector wage and salary earner	3,021,000	250,000
Unpaid family worker	431,000	367,000
Not reported	384,000	79,000
Unemployment rate		
Urban	713,000	142,000
Rural	467,000	128,000

Source: Statistical Yearbook of Iran, 1996-97.

According to one female deputy in the *majlis*: “in our country a change has occurred in looking at the issue of women”. She continued: in the First National Plan (1989-94), the role of women was mentioned in passing. In the Second National Plan (1995-2000), this role is more conspicuous, but it has not reached our ideal level yet (Sedighi, quoted in Kian, 1997: 89). As a result, the representation of women in the economic arena began to expand. Various jobs from which women were excluded are now said to be physically and morally compatible with women’s characteristics (Kian, 1995; Afshar, 1995). These include laboratory sciences, electrical engineering, pharmaceutical sciences, translation, social work and quotas of 25 percent female representation in the fields of neurology, brain surgery, cardiology, and similar specialisations (Moghadam, 1995). Some other jobs, e.g. fire-fighting, are forbidden

because they are considered 'dangerous' for women. However, the film industry is a good illustration of women's increasing presence. Of the fourteen films made by female directors after the Revolution, twelve were made during the Period of Reconstruction (Naficy, 1991: 156).

Sansarian (1992: 64) outlined some of the important reasons why women's participation was encouraged in the modern sector of the economy: the regime's need to continue economic development, the economic needs of women, especially those with prior work experience, the Iran-Iraq war, and the conflicting views of the political elite.

The government is, nevertheless, also acutely aware of the role of female Islamist activists. This awareness, combined with the intense agitation engaged in by women of all classes and political persuasions since the Revolution, has resulted in a number of limited measures to improve the status of Iranian women in the labour market. Based on the 1996-97 Statistical Yearbook of Iran, the participation of women in the labour market has increased from 9 percent in 1986 to 12.7 percent in 1996.

In the cities, one of several factors which combine to bring women into work is the increasing need for money. Both material standards of living and expectations have risen exceptionally fast. Finally the long war with Iraq resulted in high prices and the low level and unreliability of men's wages. Urbanisation in Iran moved very fast and has resulted in the modernisation process in Iran. Urban men are not reluctant to marry an educated woman, as it seems neither her earnings nor the social recognition she derives from work threaten the status and authority of the husband. In Iran, some young educated urban males now seek wives who have jobs because of the economic advantages that a double salary can provide.

Women's access to judiciary occupations was closed after the Revolution. But for the first time in the Islamic Republic, a woman was appointed vice director general of Tehran's Justice Department (Zan-e Ruz, no. 1559, 1997). In January 1996, the Ministry of Justice in Iran, appointed 200 women judicial counsellors to preserve women's rights more satisfactorily in courts (Agonise France Press, 27 Oct. 1996).

It is evident that much remains to be done in Iran, to give women full educational opportunities and particularly to involve them more in the work force. Yet it is clear that practical realities are forcing the issue.

3.5. Political Activities

There is a lack of women's representation in key posts in Iran where macro-politics and planning are decided. In the first election of the 'Assembly of Experts' in charge of drafting the Constitution, Mrs Monireh Gorji was the only woman representative of the seventy members.

In Iran, women can vote and run for parliament (*majlis*). In the *majlis*, for the first decade after the Revolution, there were only three women representatives. But in the 1992 elections, nine of the two hundred and sixty-eight deputies were women, increasing to 13 in the 1996 elections. Of these in 1992, two had degrees in philosophy and Islamic law, one in French language and literature, one in midwifery, one in Islamic culture and one in philosophy. One was a surgeon, another an obstetrician (Zan-e Ruz, no. 1359, 1992). Despite their tokenistic presence, they have played an important role in initiating legislation on women. Female deputies are allocated seats in consultative committees set up by various ministries. However, Maryam Behrouzi, a woman representative pointed out that women are not elected to high-powered committees. Nor did they become chairs or officers of other parliamentary committees (Zan-e Ruz, 23 January 1991).

Female representatives are vocal supporters of rights for women. In 1986, the *majlis* passed a 12-article law on marriage and divorce that limited the privileges accorded to men by custom and traditional interpretations of Islamic law. In respect to women's rights in divorce, by the late 1980s the law contained some strikingly forward-looking provisions (Najmabadi, 1990). In a remarkable move, women representatives managed to change divorce laws to make it more expensive for men to leave their wives at will. Nevertheless on divorce they were also entitled to a share of their husband's property. In 1993, as a direct result of having a larger number of women representatives, the *majlis* passed a bill demanding that men who 'unjustly' divorce their wives should pay 'wages' for the wife's domestic work during their marriage. The husband is even under obligation to pay his wife for breast-feeding her own child. Also, under the new law, the first wife has the right of divorce should the husband take a second wife without her consent. The important point is that it indicates the possibilities of reforming *shari'at* within Islamic jurisprudence.

In October 1996, the fifth *majlis* approved an act presented by women deputies to create the Special Commission of Women's and Family's Affairs

composed of thirteen members, nine of which are women. This commission aims at reforming laws to improve the protection of women's rights.

The Islamic calls to improve the status of Iranian women are not isolated incidents, nor are they the empty rhetoric of a handful of women in high positions. Rather, they must be seen in their social and historical context as part of a widespread and unprecedented participation of women in Iranian society. Paradoxically, under clerical rule women seem to have a greater sense of participation than they had under the Pahlavi dynasty, when all the models for appearance and behaviour were Western and far removed from native norms.

(Adelkhah quoted in Ramazani, 1993: 414)

In 1988, the High Council of Cultural Revolution, chaired by President Rafsanjani, founded the Social and Cultural Council of Women to promote women's economic and social activity.

The most significant rise in the status of women has been in the government sector, where several female mayors, a female deputy Minister of Health and a female vice president for environmental affairs have been appointed.

(Aslan, 1998: 52)

After the Revolution, women were without official representation at the highest level of government. Then, in January 1992, President Rafsanjani appointed Shahla Habibi as his advisor on women's affairs. An offshoot of the presidential bureau was created to 'detect problems and shortcomings and to propose solutions to ameliorate women's status and their economic, social, cultural and political role'. Habibi is a university graduate, a biologist, with years of political activity to her credit, including during the Revolution. During the 1980s, she took up educational affairs, supervising and evaluating teacher-training programmes and was charged with identifying the needs of women and drawing up plans to address them. Several years later she was replaced as the advisor on women's affairs by a female doctor, Masomeh Ebtekar.

There is a women's bureau in the office of the president with the express purpose of examining and enhancing the status of women; a women's affairs office in each ministry and government agency; input by these offices to the government's planning and policy efforts; and other governmental and non-governmental organisations dealing with women's concerns, including economics and employment issues. Women are also included in the Islamic Republic's delegations to international

conferences and events. Moghadam in her report on the Fourth World Conference on Women in Beijing (4-16, Sep. 1995) states that it is noteworthy that although several men were among the Iranian delegates, including the Minister of Islamic Guidance and Culture, the women were the most active and visible (Moghadam, 1996: 18)¹¹.

Furthermore, many governmental and non-governmental women's organisations have joined the women deputies, including the President's Office for Women's Affairs, the International Office for Women's Affairs in the Foreign Ministry and Ministry of Justice and Organisation of Rural Women's Activities and so on.

Hoodfar (1996: 31) argues that:

women's advocates have tried with success to link their goals to the government's development objectives, including women's support for family planning and smaller families.

3.6. Women's Status and Fertility Reduction in Iran

Women's status and their family planning decision-making are closely interrelated (Farooq et al, 1985; Lloyd, 1991; Aghajanian, 1991; Hoodfar, 1996). Blumberg et al (1995: 153) argue that it is well known that educated and employed women have lower fertility rates and that their knowledge and income contribute considerably to household well-being.

Family planning decision-making is closely associated with women's socio-economic status in society, and their autonomy and security within conjugal bonds. It is within this socio-economic and legal context that women decide the size of their family.

One of the crucial factors in determining women's status in the society is their access to education. Also, increased female education has been demonstrably associated with greater knowledge and use of contraceptive methods.

Educational attainment is generally a reflection of socio-economic status and is used fairly widely as a proxy for earnings. There is one further mechanism argued by Mehryar et al (1997) whereby education may affect fertility. Based on their research, educated parents aspire to have educated children. This raises the cost of child bearing and hence lowers the desired number of children.

¹¹Iranian women photographers took all films and photographs of the Iranian delegation.

A report of 1987 Social and Economic Household Survey in Iran indicates that women with no education reported 6.2 children on the average. Interestingly, women with just some primary education reported half the number of children ever born to illiterate women. The average number of children ever born to women with college education is 1.8 which is slightly lower than the average reported by women with some secondary education.

The gross effect of women's education is very strong. Aghajanian et al (1996: 68) shows a systematic negative relationship between education and fertility in Iran. In the model, however, the effect of women's education is reduced significantly after the adjustment for age of marriage and other variables. It is clear that most of the effect of education on fertility is through age of marriage. Education postpones family formation by increasing the age of marriage and age at first birth. Both of these factors have strong negative effect on fertility. Based on Aghajanian et al's research (1996: 65-70), there is a relationship between age of marriage and number of children ever born. Women married at age 14 or less have on average 5.5 live births. Women married at age 25 and older have 1.6 live births less than women married at age 14 and younger.

One important factor that influences early family formation is female labour force participation. It has been argued that women working in factories and other organisations outside the home will have ready access to some types of educational influence that help them reduce infant and child mortality as well as undesired fertility.

Female employment should have a negative effect on fertility under conditions or vice versa of role incompatibility of motherhood and work (Aghajanian et al, 1996: 64). However, the issue of role incompatibility may be less important if child care is available from relatives, such as grandmothers. In the context of Iranian society, such help is usually available for women working outside the home, except in large cities like Tehran where the traffic and length of journey, means the situation is different and such help is not available, however, it does not mean that female employment is lower in Tehran. Both the nature of the work activity and the familial child-care arrangement in Iran are behind this limited effect of the working status on fertility. Most of work carried out by women is in the context of household and cottage industries such as carpet weaving. The latter is very popular in a large number of cities in Iran. Women work on carpet looms and earn wages in their own homes. As

such, this activity is compatible with taking care of children. Aghajanian et al (1996: 60) argue that their study shows that Iranian women with professional and clerical jobs have the lowest level of fertility. However, once the effect of age and other variables are adjusted, the net effect of having a professional job reduces to less than half a child.

In the above study, the gross effect of the work status variable reveals a higher average number of children ever born for women who report being employed in agricultural activities than women with service and professional jobs.

Family planning programmes can acknowledge women's central role as active agents and decision-makers regarding their fertility. The Iranian Health Deputy Minister, Malek Afzali (1992: 34) argues that several documents prepared by the Ministry of Health in Iran underline the improvement of women's position within family and society as the cornerstone of success of family planning in Iran. Empowering women by providing information, facilities and culturally appropriate channels of distribution of contraceptive is important, so that they and their families can fulfil their choices, and women will be able to find sufficient leverage to raise other demands for reform. Hoodfar (1996: 36) argues that:

there is a strong relationship between women's fertility behaviour and the way in which they assess their rights and responsibilities within the marriage, especially in relation to divorce and custody of children, and financial rights during marriage as well as widowhood.

Conclusion

We should bear in mind that gender relations are determined and affected by such factors as state ideology, level of economic development, extent of industrialisation and urbanisation and integration into the world system (Moghadam, 1991). Strategies to improve women's positions include making economists and planners more aware of gender (e.g., Elson, 1995; Moser, 1993; Bencriva, 1995; Pearson, 1995); calling on governments and employers to spread women's reproductive responsibilities equitably (Palmer, 1995; Moghadam, 1996); and calling for greater investments in women's education, access to credit, and employment (Fong and Perrett, 1991; Khoury and Moghadam, 1995).

As women's adoption of smaller families has been crucial to the success of Iran's population programmes, improving women's educational, economic and public

involvement, as well as their position within the marriage institution is likely to have been crucial to this process.

Although the gap between male and female literacy remains considerable, women's literacy in rural areas has improved at a much faster rate than during the pre-Revolutionary era (Mehran, 1991; Moghadam, 1993: 182-84). The rise in the literacy rate of women is very impressive. This rate had an increase of 16.6 percent between 1976-86 and by another 22.1 percent between 1986-96 compared to increased literacy rate for men by 12.1 percent between 1976-86 and another 13.65 percent between 1986-96 (Statistical Yearbook of Iran, 1996-97).

Improvements to female education in Iran (both formal and informal) after the Revolution has been demonstrably associated with greater knowledge and use of contraceptive methods. It has also been associated with a stronger relative position of women within the household and a greater voice in fertility decision-making (Hoodfar, 1995; Mehryar et al, 1997). Also there have been concepts of self-identity among women in Iran which have had effects on fertility behaviour and levels in Iran.

Another relevant aspect of education for fertility regulation is a reduction in desired family size by creating aspirations for higher standards of living and stimulating women's interest and involvement in extra familial activities; and exposing women to knowledge, attitudes, and practices favourable to birth control communication (Sheykhi, 1995; Paydarfar, 1995; Mehryar et al, 1997).

Family in Iran is an influential agent of socialisation that emphasises education for girls. By claiming that education is the Islamic duty of every Muslim and using sayings of the Prophet to support that claim, religious leaders have supported the idea.

Theoretically, one may conceptualise a smooth progression from the time when men begin to want fewer children, to the development of conditions in which, first, the male's valuation of woman's traditional role declines, and second, women themselves begin to manifest significant interest in extra-familial activities and functions.

As far as the economic role of husband and wife in the context of the family in Iran is concerned, it is the traditional and legal obligation of the male head of the household to provide for the family's livelihood. In this respect the man has been considered to be the 'bread-winner' and the woman the 'carer'. That is one reason why the labour force participation of Iranian women has been relatively low.

In recent years, due to socio-economic changes in Iran, women are culturally prepared to cope with the structural ramifications of the demographic transition that resulted in a lower value attached to large numbers of children.

In addition, by reducing the gap in the level of education between men and women, and by improving the actual level of education of women, genuine female occupation will be guaranteed to some extent if jobs are available for women.

Some argue that the possibility of independent employment for women decreases the dependence of the wife upon her husband and his family and increases her bargaining power within the conjugal family.

In the case of Iran, during recent years, despite considerable fertility reduction, the participation rate of women in the labour force has remained almost the same as before. It seems that in the case of Iran, the negative correlation between women's education and fertility has been substantiated while the correlation between employment and fertility has not yet been evident in Iran, because, while female participation in the labour market remains low and has not increased considerably in the last decade (from 9% to 12.7% of the total employed population), the fertility rate has come down from 3.8 percent in 1988 to 1.4 in 1996. However, the fertility rate may decline more if women's employment rates in Iran go up.

Clearly, there are still many cultural and traditional barriers for women in their attempts to gain higher status in Iran. Honour is a value still upheld, especially in small cities and rural areas of Iran, and still measured according to traditional behaviour and relationships. Many traditional and less educated men see the education and modern behaviour of their daughters and wives as undermining their authority over the family and their position in the community.

Zahra Mostafavi, Ayatollah Khomeini's daughter described her father as having been a staunch advocate of female education and claimed that "the bias of Iranian society in favour of male education is attributed to 'erroneous traditions', that are incompatible with Islam" (Zan-e Ruz, no. 1327, 1991). We should distinguish between religion and social custom and realise that many of the general beliefs about the role and rights of women practised in Iran are based only on traditional customs and values.

One of the problems in dealing with women's issues in Iran, like many developing countries, is that women constitute a small percentage of the salaried labour force, while they carry out the major part of agricultural work and majority of

informal economic activities. Women's presence is proportionately much smaller in positions of power. Ownership of land, modern technical expertise and decision-making are largely in the hands of men. The obstacles towards implementing radical change in conditions for women are as much intertwined with traditionalist impediments as they are with social, cultural and legal ones (Kian, 1997: 95).

However, some commentators argue this is changing:

in Iran today, women may be veiled, but they are found in schools, universities, government offices, factories, and the *majlis*. Ideologies of gender difference and the practice of gender inequality exist, but these conditions are subject to the challenges of economic development and demographic change, such as the growth of an educated female population.
(Moghadam, 1991: 407)

Women in Iran, like men, have shared in the sense of power, dignity, and newly awakened pride in their culture, and the very controversy over women's roles has highlighted the importance of women. Iranian women who do not seek access to the same rights, opportunities, and responsibilities as men still strive for the achievement of equality in power and status within a society.

Higgins (1985: 490) argues that:

Iranian women would not be likely to campaign en masse for equal rights in the Western sense even if more immediate economic and physical needs were met. Such protest is unlikely because most Iranian women do not share the definition of equality or the vision of an ideal society on which Western feminism is based.

For example, since men are held legally, religiously and socially responsible for the financial support of their families, Iranian women even the educated ones, do not share the same view with women in the West about gaining equal participation in the labour market with men. Ideologies provide frameworks within which individuals act, understand the world, establish goals, interpret events, and evaluate the behaviour of others.

Iranian women now see themselves in a leadership position in the Muslim world. They sponsor conferences on Islam, discuss the real meaning of passages from the Qur'an, head cultural exchanges, and even criticise other Muslim countries for not living up to Islamic precepts, for example, when they criticised Kuwait for not allowing women to vote. Ramazani (1993: 134) argues that:

the empirical evidence of the advancement of women in the case of Iran calls for an important reassessment of the correlation between

secularism and reformism. The former may not be the prerequisite of the latter if, indeed, religious reinterpretation can lead to adaptations to the realities of modern life.

Finally, it should be mentioned that the successive population programmes in Iran give ways for re-examining the widely held assumption that Islamic ideology is the antithesis of modernity and surely incompatible with any form of feminism.

It seems that by raising education and status of women is associated with fertility reduction in Iran. As the role of Islam and views of *ulama* have been important in shaping the Iranian state's ideology, family planning in the legacy of Islam will be discussed in the next chapter.

Chapter Four: Islam and Family Planning

Introduction

In the second half of the twentieth century as has been discussed in chapter one, it was widely asserted that rapid population growth in some parts of the world, particularly Third World countries, threatened to frustrate human aspirations to live a better life. Conscious of this, many developing countries, including Iran, have of late accepted the small family norm as a principal element in long-range national planning. The family planning debate has acquired new dimensions. It has extended to public fora, conferences, seminars, newspapers, radio and television and has been considerably politicised in the process. Various socio-economic factors potentially affecting fertility have been studied in this regard. One of the major factors which should be examined is religion. Among socio-cultural factors affecting human fertility, religion plays an important part.

One of the issues related to fertility in the Muslim World concerns pro-natalist tendencies contained within Islam. Several writers (Youssef, 1978; Gadalla, 1978; Eickelman, 1993; Hoodfar, 1994) have maintained that this orientation in Islam stems less from prohibitions on birth control and direct injunctions to procreate than from the support of conditions that produce high fertility. Among the injunctions are the prevalence of marriage and the positive value attached to sexual intercourse. This chapter, will attempt to explore Islam's attitudes toward family planning. The implication of some Qur'anic texts, rulings of the Prophet and the verdicts of *ulama* in the context of family planning will be discussed.

4.1. Religion and Family Planning

The relationship between religion and fertility is not so simple as whether the religious teachings favour high or low fertility, prescribe large or small families, or approve or disapprove of fertility control. People with different religious affiliations will not necessarily have different fertility behaviour, nor will people with the same religious affiliation necessarily have uniform fertility behaviour. Gadalla argues that: "Objectively, Islamic doctrine has radically different effects on population at different educational and social levels and with different religious experience" (1978: 14). Dealing with the influence of religious values on fertility is complex.

The influence of religious norms and values (including those of Islam, Hinduism, Christianity and Judaism) has been predominantly pro-natalist (Sheykhi, 1995: 77). In countries where the Roman Catholic Church is predominant, the Vatican ban on artificial means of birth control provides a powerful pressure on to the faithful to have large families (CQ Researcher, 1993: 610). With the advent of industrialisation and modernisation religions have more or less changed their strategies, but most of their prescriptions are based on increasing the number of their followers (Sheykhi, 1995: 78). However, it does not work in European countries even those with a predominantly Roman Catholic population. Spain, France and Portugal have fertility rates below replacement level. High fertility rates used to persist in many developing countries of Latin America where the church used to provide a strong influence, such as Honduras and Guatemala, where women averaged more than five children. However, even here, the situation has changed. In the 1990s, Guatemala has been amongst the most successful countries in the world to bring its population growth rate down (CQ Researcher, 1993: 613). In Mexico, even after the 1968 Papal Encyclical condemning contraception, respondents in several large surveys rejected these particular teachings of the church hierarchy (Nagel, 1978: 16). One of the smallest average family size in the world is found in Italy, where the Pope resides.

Islam has no such ban on birth control and even allows for abortion in certain circumstances which will be discussed later. Richards & Waterbury (1990: 89) argue that Islam is a living religion; its content is in part defined by how its adherents interpret their own tradition and contemporary situation. Many Muslim scholars believe that many of the practices that Westerners label 'Islamic' are in fact a corruption of Islam, derived from customary law and so on.

4.2. The Family in Islam

Islamic scholars believe that Islam has a pervasive social character and the family is the core of its society. For this reason, marriage is placed at the first order of duties to be fulfilled by every Muslim, because without marriage there could be no Muslim nation in quantity and quality. Islam tends to consider the family as something absolutely good and almost sacred. Besides providing tranquillity and mutual support and understanding between husband and wife, the obvious function of a family is to provide a culturally and legally acceptable way of satisfying the sexual instinct as well as to raise children as the new generation. In fact, Islam does not share

the ascetic ideals of other religions and as Obermeyer (1994: 43) argues, there is a generally positive attitude exists toward sex in marriage in Islam, as does a clear recognition of a woman's right to sexual enjoyment.

Islam has other essential roles for the family, however. It is within the family system that Muslims acquire their religious training, develop their moral character, establish close social relationships and sustain loyalty both to the family and to society at large. (Omran, 1992: 13)

The support system in the family (financial, social and emotional) is considered to be paramount in establishing the peace of mind and security needed for the journey of life. This is particularly important for those whom the structure of society renders socially dependent, namely children, older people, single adults (especially females), as well as the sick or handicapped. Marriage and family formation are thus grave responsibilities and are subject to specific regulations (ibid: 16). Marriage has been hailed by the Prophet as a part of his way. As a rule, Islam places great emphasis on the family and its welfare. The Qur'an, for example, recommends marriage and procreation for all those who are physically and economically able.

The planning of marriage and family formation is, therefore, in order. It requires preparation, co-ordination and planning, from the choice of a marital partner, to the timing and spacing of pregnancies. It is accepted in Islam that family planning or the planning of births enhances the family's well-being. Furthermore, family planning is seen in Islam as desirable from the viewpoint of protecting the rights of children and sheltering them from poverty, ignorance and sickness, and attending to their physical, moral and religious education. As Omran points out:

Islam has considered the question of family planning with objectivity and compassion for the believers, being a religion of ease not hardship, and, having sponsored planning in all individual, communal and social affairs, birth planning is no exception. (1992: 1)

There is no objection from the *shari'at*¹² point of view to the consideration of family planning as a measure, if there is need for it. *Shari'at* refers to the body of institutions, rules and regulations which God has ordained to guide Muslims in matters of worship or in his/her relations with their fellows, within the family, the

¹² The original source of *shari'at* are two: The Qur'an and the *sunnat*.

group, the society and the world at large. It is believed by Muslims that the origin of *shari'at* proceeds directly from Allah who is the only authority to qualify things as permissible (*halal*) or prohibited (*haram*). This is done through the Qur'an or *sunnat*¹³ which is divinely inspired.

Fiqh is the science of *shari'at*. Literally the term means knowledge, understanding, insight, intelligence. Technically, it is the product of *ijtihad*¹⁴ which is the systematic intellectual search and insight in the analysis, interpretation and development of judgement. *Ijtihad* can be practised only by a qualified jurist called a *mojtahed*. The Qur'an and the *sunnat* of the Prophet have been designated as the foundation of Islamic *shari'at* or law. They are prerequisite in the sense that they are the foremost reference in *ijtihad*. All judgement or *fatwas*¹⁵ have to be drawn directly from these two sources. If this is not possible, the other sources and venues can be used but have to be based on or fall within the spirit of the Qur'an and the *sunnat*.

Many believe that family planning is the answer of the modern age to many contemporary problems. In this respect we should first clearly distinguish between the doctrine of family planning and the techniques for the adoption and implementation of this doctrine. It is one thing to agree to the doctrine, but quite another to accept or not accept a particular technique of it. Techniques and modalities of any doctrine can not remain static; they change with the advance of human arts, sciences and other branches of knowledge. This is true also of the techniques of family planning. Therefore, in determining how far Islam and the Qur'anic way of life can accommodate modern concepts of planned parenthood and birth control, the focus of our inquiry has to be on the doctrine of family planning.

4.3. Islam and Family Planning

Many scholars in Muslim countries argue that Islam is not only a religion, it is also a social system, a culture and a civilisation. As such, it has values, ideals and goals which it regards as the culmination of human perfection in all aspects of life. They believe that Islamic legislation is comprehensive. It does not deal exclusively with questions of faith and worship. Omran (1992: 59) argues that Islam also

¹³ Sayings, doings and tacit approvals of the Prophet.

¹⁴ Fresh interpretation of old texts; deduction of new rules from religious sources.

¹⁵ *Fatwa* means a religious opinion formed and issued by a *mojtahed*, where upon it becomes binding on his followers.

regulates moral behaviour, social interaction, and business dealings as well as systems of legislation, taxation, family formation, community development, societal structure and international relations.

Mahmood (1977: 33) believes that Islam effects modifications, alterations and reforms wherever necessary. It does not deny its followers the freedom to pick and choose for themselves from amongst the various worldly things, concepts, ideas and practices known to or later developed or discovered by the world.

Several general precepts of Islam provide a convenient context for the proper formation of the Muslim family in a changing society and lend support to the principle of family planning whenever justified. As Islamic teachings are flexible, several aspects of Islamic doctrine are clearly compatible with a changing society.

It is interesting that in the galaxy of world religions it is Islam which has had an outstanding law of family planning, interestingly meticulous and refreshingly humane. Being chronologically the latest among the monotheistic faiths, Islam has enlightened Muslims in respect of this very significant aspect of modern life.
(Omran, 1992: 2)

Each of the classical sources of Islamic law contains, in its own traditional way, precepts and principles relating to various aspects of family life, birth of children and parenthood. In these very precepts and principles we find rules of family planning, birth control and planned parenthood. While many of these do not explicitly mention the concept of family planning and the devices of birth control, some of them indirectly throw light on the virtues and the advisability of planned parenthood. Some argue that there are pro-natalist tendencies contained within Islam which affect marital fertility in the Muslim World. Some writers like Kirk (1968), Youssef (1978) and Moghadam (1991) claimed that Muslim fertility (i) was almost universally high, (ii) showed no evidence of substantial decline over time, and (iii) was generally higher than that of neighbouring people of other religions. But some others like Eickelman (1993: 657) argues that:

Islamic beliefs and values, given present and past variations, are not responsible for the high birth rates prevalent today in many parts of the Muslim countries. These high birth rates are relatively recent rather than a continuation of age-old fertility patterns.

It is worth mentioning here that in its beginning Islam was a new religion with few followers, whose future mission encouraged a 'multitude' of its people. But now we find that conditions have changed. The density of population in the world is

perceived to threaten a serious reduction of the living standards of mankind to the extent that many nations have been prompted to promote family planning. In addition, many individuals have sought family planning for other reasons.

A brief review of Islamic jurisprudence shows that coitus interruptus (*azl*) was permissible at the time of the Prophet. The companions of the Prophet used to practise it at the time of the Prophet. He came to know about it and did not prohibit them according to Jabir's *hadith* reported in Muslim (a book) and while the Qur'an was being revealed as reported in al-Bukhari (quoted in Mahmood, 1977: 27). In his book *Ihya' Ulum al-Din* (Vol. 2: 17), Imam al-Ghazali (one of the greatest jurists of his time), specified five acceptable reasons for preventing pregnancy which include preservation of the wife's beauty and fitness and protecting her life from the dangers of labour, and the need to avoid economic embarrassment and physical hardship entailed in having to work to support too many children [quoted in al-Bukhari, A. A. M Ibn Isma'il (869) and also in Muslim, A. H. al-Hajjaj al-Qusheiri (875)].

Islamic law deals with matters that change with the changing conditions of humanity or with time and place, it does not lay down a fixed, uniform rule or a rigid, definitive formula, but rather leaves this to the opinion of the most influential scholars of the community within the framework of Islamic jurisprudence. Birth control is an important question of our times. Though discussed with great disputation, the matter is not very intricate or complicated. The purpose of marriage, according to Islam, is not only the satisfaction of sexual impulse, but also multiplication of and contribution to the maintenance and growth of human population.

However, Islam can hardly be expected to shut its eyes to the hard facts of life which human beings or nations may have to face. "Islamic history tells of many forms of family planning. These range from simple withdrawal and abstinence to complex potions and suppositories" (Elgood quoted in Nashat, 1983: 255).

4.3.1. Family planning in the Qur'an

The holy Qur'an is regarded by Muslims as symbolising the fundamental character of their religion. Islamic jurists believe that Muslims should look first to the Qur'an for guidance in regard to any problem that they have to solve in any age and in any part of the world. It should however be understood at the very outset that the Qur'an is a book of basic guidelines. It is not a code of law, a statute book or a constitution in the modern sense of any of these terms. Unlike these, therefore, the Qur'an contains,

generally, only the fundamental principles for the regulation of human life. There are very few aspects of human life in regard to which the actual legal rules are laid down in the Qur'an in detail. Mostly the Qur'an enumerates those 'basic laws' in the light of which humans may, by exercising their reasoning faculties, decide what they should do as an obligation and from what they should refrain. The entire edifice of Islamic law and morals has been built up by jurists or theologians in the light of these basic laws of the Qur'an. It is essential to be aware that interpretation of the Qur'an requires at least the following considerations:

As the Qur'an was revealed to the people through the Prophet of Islam over the years, each verse (*ayeh*) or set of verses (*ayat*) has its own specific conditions of revelation. Considering this will aid proper understanding.

The verses of the Qur'an and the sayings of the Prophet do not relate to a single period of time, but are spread over many years. Since each verse or saying was linked to a particular circumstance or incident, and to a particular setting in terms of place and time, they often tended to embody a particular setting in terms of place and time, and could thus embody conflicting directives or ambiguous instructions.

El-Saa'dawi argues that:

religion cannot be understood properly if it is looked upon as a series of isolated principles, teachings and directives sent by God, without attempting to see them in their interconnections with specific situations, each of which is characterised by its own social, economic, and cultural setting.
(1980: 65)

As far as family planning is concerned, most scholars believe that in the light of careful study and consultation, there is no verse in the Qur'an (i.e. no explicit text) which forbids the husband or wife spacing pregnancies or reducing their number according to their physical, economic or cultural abilities, i.e. there is no text prohibiting any method of contraception.

4.3.1.1. Foundations of marital relationship

The Qur'an is not ambivalent with respect to the importance of marriage as a universal institution for Muslims. Specific institutional and religious prescriptions include the following injunctions: all Muslim males are enjoined to marry to "complete half their religion"; the early and universal remarriage of widowed and divorced women is highly encouraged; and the purpose of marriage is explicitly stated

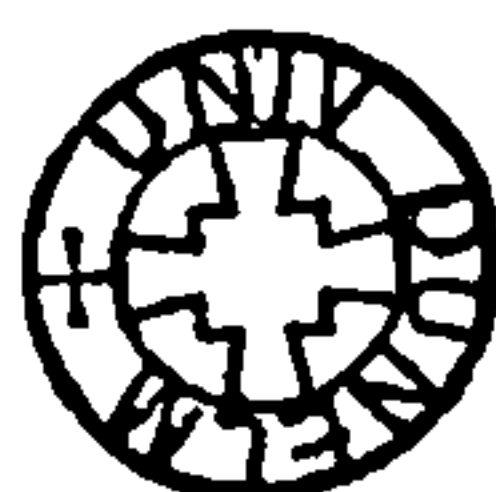
to be not only procreation but also the gratification of spiritual and physical needs. This means that sexual intercourse within marriage has positive value independent of reproduction itself.

While some religions have emphasised the negative aspect of sexuality, Islam views its positive aspect as a means of perfection of the human state and, on the highest level, a symbol of union with God, sexual relations being of course governed by the injunction of the Divine Law. Thus, Islam envisages the love of man and woman as being inseparable from the love of God, and leading to the highest level (Nasr, 1987: 50).

The husband and wife are the principals of family formation. The size of one's family has a great relevance to the mutual relationship between the husband and the wife. The Qur'an tells us that matrimonial relations are to be built up on the foundation of three basic principles; tranquillity, affection and grace (Qur'an, XXX: 3).

Tranquillity is an overall purpose of marriage, which is more equitable since all couples can achieve tranquillity, but not all couples are fertile. Procreation is also important in maintaining the human race. Other verses in the Qur'an mention procreation. For example, "God has made for you mates from yourselves and made for you out of them, children and grandchildren" (Qur'an, XVI: 72). While procreation is an expectation in marriage, it is not its exclusive purpose. When procreation takes place, however, it should support and endorse tranquillity rather than disrupt it. It also means that sexual relations in marriage need not always be for the purpose of having children. This is a point of departure from other religions where procreation is the ultimate purpose of marital relations. Elsewhere the Qur'an describes spouses as intimate associates of each other (Qur'an, II: 23). Spouses are told that they must not forget kindness in their behaviour towards each other. According to Qur'anic teaching, spouses are directed to be good to and to protect each other (Qur'an, IV: 19). The importance of cohabitation in a reasonable manner is stressed in the Qur'an again and again.

Procreation of children is considered in Islam as a natural and a religious right. If the individual, familial and national circumstances and resources are favourable, this will be regarded as a religious necessity which should not be interfered with. However, most scholars believe if the family finances and/or national problems are such that restriction of the population is desirable, such restriction will not be



regarded as an interference with religious affairs. Ayatollah Sanei (1990: 3) argues that just as no government can legitimately demand that its citizens not have any children at all, families can not have as many children as they please since the government, and by implication the public, bears much of the expense from the time a child is conceived throughout his or her life. Therefore, if Iranians want to build an able, intelligent, educated Muslim nation, they must find a balance between their individual desires as parents and what society can afford.

One of the basic foundations of the Qur'an, which determine the fundamental policies of Islam as a religion and as a code of life, is the 'easiness of the faith'. Muslims are repeatedly told by interpreters of the Qur'an and the custodians of religion that the religion is easy; there is no hardship in it. In all its institutions and regulations, Islam claims to address itself to reason and keep in harmony with human's natural character (*fīrat*). It never fails to demonstrate its great compassion for its people, nor does it ever seek to impose undue burdens or intolerable restrictions upon them (Omran, 1992: 59). The Qur'an states this principle very succinctly: "Allah desires for you ease (*yusr*); He desires not hardship (*usr*) for you" (Qur'an, II: 185).

The same basic law is expressed in different words found in some other verses of the Qur'an. Of course, these verses are found in the Qur'an in the immediate context of particular matters. However, as basic laws of the Qur'an they have a wide connotation and their application cannot be restricted to their immediate context. This is a general ruling that is invoked by jurists in religious judgements particularly in the absence of a categorical text of prohibition. Thus if excessive fertility leads to proven health risks to mothers and children, and/or if it leads to economic hardship or embarrassment to the father, or if it results in the inability of parents to raise their children religiously, educationally and socially, then Muslims would be allowed to regulate their fertility in such a way that these hardships would be warded off or reduced. The Qur'an says: "Allah tasks not a soul beyond its capacity or limits" (Qur'an, II: 286). The aforementioned basic law of the Qur'an finds more specific expression in those verses which make it clear that, as a general policy, Islam does not overburden any of its followers. In the second chapter of the Qur'an, God says: "Allah does not burden anybody except in accordance with one's capacity" (Qur'an, II: 286). Thus, God prefers a balance between the capacity and the obligation of Muslims. Capacity would, of course, cover all aspects of the term; physical, mental, economic etc., and obligation would cover one's religious and temporal, worldly duties.

One of the basic laws of the Qur'an says that quality, not quantity, should be the governing principle of all our plans. The Qur'an laid down a general law that number is no virtue in itself; it is merit that is of value. "Say the evil and the good could not be equal, even though multitude of evil may dazzle you" (Qur'an, V: 100). "How oft, by Allah's will, has a small host vanquished a large host" (Qur'an, II: 240). The Qur'an emphasises that quantity without quality can be dangerous to the nation.

In the light of the above, we can conclude that nobody is bound to allow nature to take its course in regard to reproduction. God has given humans the benefits of married life and a man-woman partnership. He would not, however, insist on forcing on anyone parentage of an unlimited number of children, which may put an end to the ease with which he has blessed human beings, disturb the balance between their capacities and obligations which he prefers, and lead to the domination of the bad over the good, which He dislikes. Therefore, if efforts are made to match their parental obligations with the various aspects of their capacity, these efforts will, in principle, have the approval of the Qur'anic doctrine of ease, of the divine tradition of fairness, of the capacity-obligation balance and of God's dislike for excess of the bad. In other words, if a couple is convinced that if they have a large number of children they will, because of their inability to bring them up with perfection, become an unbearable burden on them and also might turn out to be bad, they can lawfully endeavour to have fewer children, as many as could be supported by them satisfactorily. Their action will have the sanction of the various basic laws of the Qur'an.

4.3.1.2. Verses regarding children

Islam endorses the 'natural' child-parent relationship by specifying the rights and obligations of one to the other. Parents are to command tender, loving care and respect through their lives, and should receive special care in old age. Children have rights to life, legitimacy and good name, breast-feeding, shelter and maintenance, independent sleeping arrangements, future security, religious training, education, equitable treatment, and a wholesome source for their care. The ability to fulfil these rights should be considered in planning a family. In the eyes of Islamic law, maintenance includes education and training in consonance with the mental condition, intelligence and receptivity of every child. The Prophet of Islam laid great emphasis on education. He declared that: "to receive education is an obligation on every

Muslim, man and woman". The ability to fulfil these rights should be considered in planning a family.

Islam considers the family as the basic social unit of Islamic society and emphasises that the family is a grave responsibility of couples. Children are also considered a joy, an adornment, as well as a way to continue one's line of descent. Children are also considered a joy, an adornment, as well as a way to continue one's line of descent.

Family relations are specified in Islamic jurisprudence to achieve the welfare and useful life of its members. The rights of children in particular have been stressed in the Islamic jurisprudence as the future builders of society and upholders of the faith.

Islam enjoins couples to have children, but it insists at the same time that they should be good and righteous, which requires an intensive effort to raise them correctly. The ability to raise children correctly is an inherent requirement of marriage in Islam. Some Qur'anic verses directly relate to human beings' offspring and tell them what we should desire in regard to our children. *Sura al-Furqan* in the Qur'an contains: "O our Lord! Bring us peace of heart from our spouses and children". It signifies that the presence of spouse and children should be a source of delight. One should be glad to see them. Worries faced outside the home should be forgotten at their sight, not reinforced because they force one to face obligations for which one does not have enough strength. It is notable that this Qur'anic verse is not contained in a single isolated verse. As a matter of fact the same verse with different words or expressions is repeated again and again in various *sura*¹⁶ (verses) of the Qur'an (see for instance, Qur'an, III: 38; XLVI: 15).

There is some indirect evidence from the Qur'an that in the issue of breast-feeding and weaning, the Qur'an believes in child spacing. The Qur'an says: "and mothers shall suckle their children two full years for those who wish to complete breast-feeding" (Qur'an, II: 233). If to the two years of weaning is added nine months length of a pregnancy, the result will be 33 months. This verse is taken to be a recommendation for child spacing to enable the mother to breast-feed her child (with supplementary food as the child grows). During this period, a new pregnancy is discouraged. Child spacing and breast-feeding are ways by which the Qur'an attempts

¹⁶ The Qur'an consists of 114 *sura*.

to ensure family welfare. By recommending that women nurse their infants for two full years and that lactating women not become pregnant, the Qur'an expresses concern for the health of both the mother and the infant by ensuring that enough time elapses between births and that infants receive adequate nutrition.

4.3.2. Family planning in the *sunnat*

The traditions of the Prophet Mohammed (*sunnat*) occupy a position next to the Qur'an among the sources of the Islamic code of life. *sunnat* includes the following:

- 1) Whatever the Prophet said.
- 2) Whatever he did.
- 3) Whatever was done in his presence and received his tacit approval.

The first kind of *sunnat* is called *sunnat-ul-qaul* or the *hadith*. The second and the third are known as the *sunnat-ul-fel* and *sunnat-ul-taqrir* respectively. The most important of these, from a juridical and theological point of view, is the first, *hadith* (sayings of the Prophet). Using the Prophet's *sunnat* which in this instance means to benefit from the *hadith* to interpret the verse or verses of the Qur'an is important. To distinguish the correct *hadith*, those which are the sayings of the prophet and his family, from the false, non-original and intentionally forged *hadith*, one must be familiar with *elm-ol rejal*¹⁷. In reporting a *hadith*, the names of reporters in successive generations are systematically listed back to the first person who actually heard and committed to memory what the prophet said or did. Each name is checked carefully against his/her reputation. This investigative process is called *narration*. Different chains of *narration* are compared and reconciled by experts.

The Qur'an explained that the Prophet said nothing about religion out of his own will; whatever he said on religious matters was divinely inspired. This Qur'anic explanation gave rise to the concept of *inspired traditions* (Allah's verdict through the Prophet's tongue). At the same time the sayings and doings of the Prophet in regard to worldly affairs were also greatly respected and followed, since his entire life was, for Muslims, the best example. In view of these inherent values of and the Qur'anic sanction for the *hadith*, it is only appropriate that Muslims regard the traditions of the

¹⁷ Science of dignitaries which looks at the life of the chain of *hadith*, or to use those *hadith* that have already been proved to be original and correct.

Prophet as the second most important source of guidance, after the holy Qur'an. However, not all sayings of the Prophet were addressed to future Muslims of every part of the world. Many things that the Prophet said were meant for local and transitory consumption which cause different interpretations by *mojtahedin*¹⁸.

If we search the *sunnat*, which ranks as the second source of Islamic law next to the Qur'an, we still fail to find any reliable *hadith* in which the Prophet prohibited his companions from practising coitus interruptus which was common at that time. While having children is encouraged, the responsibility of raising them has to be qualified. A number of *hadith* confirm the neutral position held by the Prophet on the question of birth control. The Prophet did not instruct his companions to desist from practising coitus interruptus on learning that they employed it as a form of contraception. At a time of economic hardship, the Prophet allowed Muslims to practise contraception (Hoodfar, 1996: 33).

4.3.2.1. Herdsman's answerability

In another *hadith*, the Prophet warned his followers: "each one of you is a herdsman and will on the Day of Judgement be answerable in regard to your herd". *Hadith* proceeds to specify as to who are regarded herdsman and for whom. Parents are herdsman for their children. Therefore, in the eyes of God, the parents shall be questioned about their children on the Day of Judgement. Family planning has many other aspects. For instance, family planning is advisable in the interest of the health of the children. It is also advisable in order to ensure that parents satisfactorily fulfil all their obligations towards each of their children and towards other relations.

The Qur'an assertion that the good and the bad can not be equal, finds a more specific expression in a *hadith*: "those few who are virtuous are superior to those many who are undesirable". This significant *hadith*, supported also directly by the Qur'an, can be reasonably applied to any aspect of life where the relative values of number and merit are to be adjudged. Applied to the subject of our study, this *hadith* could mean that a few children adequately supported, reasonably fed and clothed, and properly brought up, are better than a larger number of children, impoverished by their number, facing an inadequate upbringing and sharing an inadequate supply of the necessities of life. And planned parenthood is a measure essentially to assure the

¹⁸ *Ulama*

quality rather than the quantity of children. Planned parenthood has several beneficiaries; the mother, the father, the children and above all, society as a whole.

However, we do find in the Qur'an clear support for the small family norm. The *hadith* relating the Prophet's desire not to have too many children is an indirect endorsement of family planning. The Prophet is quoted as often praying to God: "O Lord, protect me from material deprivation and from excess of children" (quoted in Abedin, 1977: 112). Another *hadith* says, "a lesser number of children is a kind of affluence and their excess a kind of indigence". A similar *hadith* says: "small family is a blessing" (quoted in Mahmood, 1977: 45).

The Qur'anic preference for a small family is in perfect harmony with the Qur'anic doctrine of ease, the capacity-obligation balance and the verdict of the holy Qur'an in respect of the quality-quantity correlation. Ayatollah Sanei, a prominent Ayatollah in Iran, speaking at a conference on population control and family planning in Isfahan supported the official policy on smaller families and strongly condemned Muslim men who consider it Islamic to marry three or four women and have seven or eight children from each. He talked about the disastrous consequences of ill-treated and badly brought up youngsters for the future prosperity of the Islamic nation. He encouraged Muslim men and women to have fewer children and instead to concentrate on providing a quality Islamic training for them (1990: 2).

4.4. Authority of *mojtahedin (ulama)* in Islam

Muslim scholars, and jurists have attempted to remove the *prima facie* differences and apparent contradictions in the rulings, and have tried to fit them into a consistent system. Distinct schools of Islamic jurisprudence evolved over time, each bearing the name of the leading jurist, Imam or founder. These schools are called *madhahib* which means literally paths or ways. The schools represent different ways of interpretation and are not different religions or denominations. All schools of jurisprudence consider the Qur'an and the *sunnat* as their primary sources. Where they differ is in relation to some interpretations, the validity of other sources of jurisprudence and the methodology of formulating a ruling.

In deriving *shari'at*, the various schools of jurisprudence differ in the extent to which they allow *ijtihad*, and in the bases upon which such judgement can be developed (Obermeyer, 1994: 42). In Islam, unlike in Christianity, there is no hierarchically organised clergy, nor a central authority that dispenses a single

interpretation of the faith. This decentralisation means that the various schools of law and religious sects follow codes that are sometimes dissimilar.

Everywhere in Islamic countries, the *mojtahedin* are consulted in regard to matters of religion. We can refer to the effective changes in Islamic Law by the role played by *ijtihad* as a 'living source' of Islamic legislation. Muslims attach extraordinary importance to the views of their *mojtahedin*. The Qur'an directs Muslims to obey Allah, His Prophet and 'people of authority'; and in religious matters only the learned *mojtahedin* are regarded as the people of authority. Thus, *mojtahedin* are instrumental in the formation of norms and the shaping of attitudes in Muslim communities. The twentieth century has witnessed a continuation of the juristic activity concerning family planning with new challenges and fresh approaches. Jurists have found themselves facing problems of food shortage and insufficiency of economic resources. They have certainly made in recent years a liberal use of the permissive laws of Islam regarding family planning. Communal programmes and population policies are spreading in Muslim countries; new contraceptive methods are periodically introduced and their suitability for use by Muslims is evaluated; public debate ensues on the issue in mass media, in specialised articles and books, as well as in conferences and committees. *Mojtahedin* issue official *fatwas* from time to time and their opinions are influenced not only by juristic considerations, but by other factors as well.

It is true that early scholars of Islamic law did not mention other methods of birth control. This was because withdrawal was the method known to them at the time and before their time. Modern legal opinion supports measures to prevent conception, and in several Muslim countries religious leaders have endorsed family planning programmes by declaring them to be sanctioned by Islamic doctrine. All four *sunni* schools, as well as *shi'ie* schools in Islam, regard birth control as permissible and lawful. Mahmood (1977: 50) states that: "under the various schools of religious thought and jurisprudence, there is hardly any scope for the legal prohibition of birth control".

It seems, therefore, that the principle of child spacing is agreed by jurists to have support from the Qur'an. This was the understanding of Sheikh Shaltout, the former Grand Imam of Al-Azhar in Egypt. He said in his *fatwa* of 1959: "family planning is not forbidden by the *shari'at* if not prescribed by it and sought after. The Qur'an fixed the period of lactation at two full years, and the Prophet warned against

feeding a baby from the milk of a pregnant mother. This argues in favour of allowing steps to be taken to prevent pregnancy during the period of breast-feeding” (quoted in Omran, 1992: 97). In considering the lawfulness of birth control and its methods Sheikh Mohammed Mahdi Shamsuddin, one of the leaders of the *shi'ie* in Lebanon stated in 1974: “it is allowed by *shari'at* law for the couple to restrict their offspring by contraception” (ibid: 166).

4.4.1. Opponents of family planning

In the Muslim world, there are some jurists who are considered as opponents of family planning. However, in the case of Iran, none of the *mojtahedin* are against family planning. Those who are opponents are not found in Iran and are few. They regard family planning as an entirely un-Islamic measure. The main grounds on the basis of which the aforesaid jurists regard family planning as a “twentieth century concept wholly repugnant to the Islamic code of life” are firstly that family planning stands for infanticide and secondly, that family planning or the use of contraception to control one's progeny is in opposition to predestination, i.e. a mistrust in the ability of Allah to provide for children or simply a negation of basic reliance on Allah. They cite numerous verses from the Qur'an to support their opinion that family planning stands on the foundation of disbelief in the providence and in the divine responsibility of Allah to take care of each of His creatures. Thirdly, family planning would mean overlooking the Prophet's desire that the Muslims should increase their number and fourthly, it is argued that family planning is a fraud being perpetuated by the imperialist West on the developing East.

4.4.1.1. Is family planning infanticide?

There are two chapters in the Qur'an [*sura* VI: 151 and *sura* XVII: 31] relating to killing of children, but the reference is to the slaying of a person or a being that has a soul. These verses can not be taken to forbid family planning for the simple reason that family planning is not designed to destroy the foetus which is already animated; it simply prevents pregnancy. In several verses, the Qur'an prohibits infanticide and warns that it is a great sin in the sight of Allah. In one place the Qur'an says: “astray have gone those who stupidly kill their children and deny to themselves what Allah has blessed them with” (Qur'an, VI: 140).

In another verse it ordains: “and do not kill your children for fear of destitution. We provide for them as also for you, verily their murder is a big mistake” (Qur’an, XVII: 31; also VI: 151).

A study of Arab history reveals that in pre-Islamic Arabia, infanticide was practised and it was confined, generally, to female infants. A female child, in those days, was supposed to be a curse. In *jahiliyat*¹⁹, the Arabs had a concept of self-respect which was tarnished by giving his daughter in marriage into a different family. Moreover, since the daughter did not earn, she was a burden on her father’s purse. Also enslavement of girls frequently used to follow wars and conquests, and every father wanted to be sure that he did not face the disgrace of seeing his daughter as somebody’s slave (Malik Ram Baveja, 1981: 1). These were the various reasons, dominant among those being apprehension of destitution, for one or more of which an Arab would kill his daughter or bury her alive the moment she was born. Watt (1954) and Faiez (1980) refer to the pagan Arab custom of killing their daughters (quoted in Abuelayan, 1987: 60). This is what is referred to in the books of Islam as infanticide. With the advent of Islam, as one of the first social reforms, Allah decided to put an end to this inhuman custom and it was for this purpose that the aforesaid verses were revealed.

As Iwai (1985: 14) explained and argued:

at the time of the Prophet Mohammed, Islam completely denied the traditional Arab values and the existing social order of those days, and aimed at establishing a new religious, ethical and social order in the sixth century.

Some opponents of family planning equate family planning with infanticide.

They argue that withdrawal (*azl*) or any practice that prevents pregnancy is infanticide, something that has been repeatedly condemned and prohibited in the Qur’an.
(Omran, 1992: 86)

However, family planning advocates take issue with those who equate contraception with infanticide. To them infanticide occurs when a live born child is slain or buried alive. They maintain that contraception merely prevents pregnancy and involves no killing. In the era preceding Islam, many pagans believed that infanticide was

¹⁹ The word *jahiliyat* comes from ‘*jahl*’ or ignorance. Thus the age of *jahiliyat* refers to an age of ignorance existing in the pre-Islamic Arab peninsula.

sanctioned by their Gods. On the whole, the infant girl was an unwelcome intrusion into the family. The Qur'an, speaking of the *jahiliyat*, says that on hearing of the birth of a female, a father's face grew black and he choked with rage, Qur'an, XVI: 60. The Qur'an warned pagan Arabs of the awful consequences of this action. Describing the Day of Judgement, it says: "and when the female child buried alive, is asked on the Day of Judgement for what crime she was killed" (Qur'an, I: 8-9). Islam prohibited female infanticide, and it was proclaimed by the Qur'an: "kill not your children on a plea of want; we provide sustenance for them as well as for you. Verily the killing of them is a great sin" (Qur'an, XVII: 31). The Qur'an put an end to this practice.

4.4.1.2. Predestination, provision and reliance on Allah

One of the fundamental attributes of God, according to Islam, is providence. It is mentioned in the Qur'an that God has undertaken the liability to take care of each of His creatures in the universe. Opponents of family planning affirm that, if Allah wants a child to be conceived, family planning should not prevent it, because all hinges upon the will of Allah: "but you shall not will except as Allah wills, Master of the Universe" (Qur'an, LXXXI: 29). Opponents of family planning also believe that Allah grants provision for all His creatures including any children conceived: "there is not a creature on earth, but its sustenance depends on Allah. He knows its habitation and its depository. All is in a clear record" (Qur'an, II: 6). It is a basic concept that the Muslim should rely on Allah: [They prayed]: "our Allah! On you we rely, and to you we turn in repentance, and to you is our final journey" (Qur'an, LX: 4).

Muslim family planning proponents have the same beliefs in predestination, i.e. Allah's ability to provide and reliance on Allah. They are simply abiding by the rule that "to have recourse to expedients is no negation of reliance on Allah" (Omran, 1992: 89). Proponents of family planning argue that for the human race to exist there must be children, and that children will be or should be the joy of their parents. But this does not translate necessarily into huge numbers of children who can not be afforded or brought up in the way of Islam.

Ayatollah Mousavi Ardebily (one of the most respected Ayatollahs in Iran) argues that:

parents are responsible for the proper education of their children. Children have rights that should make parents think of adjusting their procreation patterns to their 'religious' obligations to their children.

(personal interview, 1995)

Opponents of family planning believe that procreation is the principal purpose of marriage. They quote the Qur'an, *sura* 16: 72:

and Allah has given you wives from yourselves and has given you, from your wives, children and grandchildren and has made provision of good things for you.

But proponents of family planning infer that procreation is not the exclusive purpose of marriage from the following verse:

and one of Allah's signs is that God has created for you mates from yourselves, that you may dwell in tranquillity with them. And has ordained between you love and mercy.
(Qur'an, 30: 21)

Some opponents (such as Maulana Madodi in India) try to accumulate additional support for their opinion by referring to children as gifts or provisions of God (quoted in Omran, 1992: 96). They argue that begetting them is permissible (*halal*); preventing them is therefore a way of forbidding what God has allowed.

4.4.1.3. Multitude as a source of power and development of nations

It is common sense, the opponents say, that multitude is desired by all nations. It is the source of the work force, of military strength, and of those who help in the process of social, spiritual and economic development. To its advocates, the concept of multitude is also the source of genius and philosophers - the wider the population base, the greater the probability of finding people of excellence. Some of them (for example Ayatollah Ahmadi) in Iran refer to a *hadith* to claim that large Muslim nations are desirable in Islam.

There are also those who think that the family planning movement is a conspiracy to reduce the number and power of Muslims. The views of Sheikh Abu Zahra and Maulana Maudodi in India are that support for family planning is a malicious conspiracy against Islam. These are well known (quoted in Omran, 1992: 102). In Iran, for the first few years of the Revolution, some religious leaders considered family planning as a Western conspiracy against Islam. However, as time passed, they changed their attitudes.

4.4.2. The *mojtahedin* (*ulama*) in Iran

The *shi'ie* branch of Islam which is dominant in Iran interposes the *mojtahedin* (religious leaders), between the Qur'an and the people. The *mojtahedin*, being considered as wise and learned men, have the authority to explain the teaching of Islam to *shi'ie* Muslims (Afshar, 1985: 256). Attitudes to birth planning swings from one extreme to the other, taking various positions to conform with changing circumstances. At certain times planning may take the form of reduction or control of the number of offspring. At other times and in other places, it may be directed towards increasing progeny and giving child bearing free rein. But any new ruling has to be developed by qualified *mojtahed*. The door of *ijtihad* is open but only for those who satisfy the qualifications of a *mojtahed*.

In March 1979, a few months after the Revolution, the Minister of Health, Dr. Sami, sought guidance from Ayatollah Shariatmadari about the compatibility of family planning with the *shari'at*. The reply was that contraception is allowed in Islam providing it does not result in the impairment or destruction of the foetus (Iranshahr, 16 March 1979). The majority position of jurists (almost a consensus) is in agreement with the position that contraception is permissible but subject to a wife's consent. *Shi'ie* jurists add, however, that consent can be obtained at the time of the marriage contract, once and for all.

The presence of a valid reason for preventing pregnancy invalidates the objections to contraception and removes the shadow of disfavour from it. Justifications acceptable to jurists include reasons of health, economic and cultural responsibilities, all of which come under the rule of averting hardship to the child, the mother and the husband, individually or as a family. Under certain circumstances, avoiding pregnancy becomes valid. For instance, some religious leaders have warned women that having too many children will age them prematurely (Hoodfar, 1995: 34).

In Iran, once the issue of population growth was identified as a threat to the welfare of the family and the country, Ayatollah Khomeini issued a *fatwa* in 1980 that approved of birth control as long as the mother and child were not harmed and abortion was excluded. By 1988, the question of over-population and its danger, on a national and international scale, had found its way into the political speeches of various leaders. Ayatollah Khamene'i (Iran's leader) discussed the necessity of introducing family planning in a Friday Sermon, and the government issued a national birth control policy, which Ayatollah Khomeini ratified shortly before his death in

1989 (Hoodfar, 1994: 12). The *fatwa* of 1980 was reiterated by the Minister of Health in 1988 to support the family planning programme. The reiteration of the *fatwa* at various times and by various members of the government since 1988 has provided a boost for family planning in Iran. The government has also supported research and publications on the question of population and Islamic family planning, including a compilation of medieval writings which demonstrate that family planning has long been a concern of Islamic societies. An important aspect of medieval family planning was the tradition of herbal prescriptions, recorded by celebrated Muslim doctors (such as Ibn Sina and Razi) who were also respected for their religious knowledge (Hoodfar, 1995: 111). The *fatwa* made population and family planning a concern of all social classes, not just an issue for a select group of urban educated women, as was the case in the pre-Revolutionary era.

By the end of 1989 the Islamic Republic's policy on birth control had developed to such a degree that it was now considered by *ulama* to be the Islamic duty of Muslims not to sacrifice the quality of the Islamic nation for the sake of having large families (Zan-e Ruz, 25 Feb. 1990). Aghajanian argues:

the power of Iranian religious leaders to legitimise family planning has significant implications for other Muslim countries dealing with similar population issues. In countries where *shi'ie* Islam predominates, *fatwas* can be easily adopted and supported by the religious leadership, as have other political views and issues (1994: 69).

Even though a large number of Islamic countries belong to the main branch of Islam, *fatwas* still play an important role in these countries in forming the views, attitudes and practices of common people. The main reason is that many Muslims in the world consider Iran to have a leading role among Muslim countries and many *fatwas* can be accepted by jurists in other Muslim countries than Iran.

In Iran, Ayatollah Youssef Sanei spoke at a population control seminar in Isfahan (a large city in Iran) and said that he had come to the conclusion that none of the wise and learned people has ever said that it is good and desirable to have lots of children (Zan-e Ruz, 3 April 1990). Ayatollah Sanei argued that family planning is among the most legitimate things a Muslim can do. The claim that Islam is one of the few world religions which has permitted contraception while sanctioning sexual pleasure is sometimes used to show that it is a superior and timeless faith.

However, some other *mojtahedin* like Ayatollah Ahmadi believes that Islam is in favour of large families and has said that Islam encourages couples to have many children. However, he is not against the use of contraceptives in general as long as they are harmless (personal interview, Qum, Oct. 1998). He also referred to a *hadith* from the Prophet: “marry and multiply, so I shall be proud of the Muslim people on the Day of Judgement, even the one who has been aborted”. This highlights that contraception use does not necessarily have to be linked to small families and it can be used to plan and space quite large families.

It should be mentioned that in Iran family planning outside marriage is not approved by *mojtahedin* as a consensus. Also, their attitudes are not in favour of preventing any children being born at all to a couple.

4.4.2.1. More problematic issues

Abortion is one of the most controversial and problematic issues, charged with emotions and sensitivities related to the unborn foetus, the mother and the society, religion and law.

In *shi'ism*, it is unanimously agreed that abortion after the ‘quickening of the embryo’ is forbidden by religion and legally punishable; if the foetus emerges alive, the offender shall pay a full bloodwit; otherwise, a lesser fine is imposed. In this regard Ayatollah Mousavi Zanjani states that:

for the first forty days of pregnancy, blood money (*dieh*) is 20 *dinars* (nearly 5 grams of gold). For the next forty days, *dieh* will be 40 *dinars* and it goes up 20 *dinars* for every 40 days until the end of the fourth months which will be 100 *dinars*. After the time of ‘ensoulment’²⁰, abortion is equivalent to murder and punishable by a higher blood price of 1000 *dinars*”
(personal interview, Zanjan, 1995).

Any abortion carried out illegally after ensoulment, however, also subjects the doctor or midwife to three years imprisonment in Iran (Zan-e Ruz, 7 Dec. 1992: 4). The quickening of the embryo is definitely established by the end of the fourth month after conception. Ayatollah Sanei argues that:

comparison between the *dieh* in these two stages (before and after ensoulment) shows that Islam does not evaluate them the same.
(1990: 3)

²⁰ There is a consensus among jurists in Islam about the time of ensoulment which is considered to be at 120 days of pregnancy.

In 1992 the courts decided to reconsider the abortion laws in Iran. It remains illegal to have an abortion or to carry out an abortion at all except under certain circumstances. Article 91 of the Criminal Code imposes the penalty, according to the Islamic laws, for anyone murdering an unborn child 'if that child possess a soul'. But 'before the soul enters the body of a being', if a doctor is of the opinion that it is dangerous to continue with the pregnancy and issues a certificate to that effect, then the pregnancy can be terminated (Kayhan, 1 August 1992). However, it must be performed within the first 120 days, after which the foetus is considered viable, or 'ensouled', and then only with judicial permission, the consultation of a physician, and approval of the mother. Approval of the father is not necessary.

Among the *ulama* in Iran, Ayatollah Sanei holds a different view. He revived the Islamic argument in favour of abortion in the early stages of pregnancy and linked it to the interest of the Islamic state by saying that:

if the birth of a child causes a problem for the Islamic state or the family, the Islamic state can decide whether to allow abortion before the foetus reaches twenty or forty days.
(1990: 2)

Ayatollah Beheshti who was the head of the *majlis* in Iran in 1980 and was killed in a bomb explosion, was instrumental among the *ulama* in legalising abortion in 1973. His action was based on the notion of ensoulment, that is, animation after the 120th.

Tubal ligation and vasectomy are controversial, as they make an individual *aghim* (unable to bear children). Some *ulama* in Iran (among them, Ayatollah Khomeini) considered sterilisation or vasectomy equivalent to an impairment in the first decade of the Revolution and did not give support to couples to do it. However, some of them changed their views later on. A number of *ulama* in Iran argue that if reversal of the operation is possible, then there is no Islamic barrier (among them Ayatollah Ahmadi). But most of them claim that a person who already has children can not be considered *aghim*, for instance Ayatollah Mousavi Ardebily gave a *fatwa* that:

by mutual consent of the spouses, birth control could be adopted in all cases for lawful purposes and either of the spouses could lawfully adopt a birth control device, even a permanent one such as sterilisation, but those couples who do not have any children should not choose these methods

(personal interview, Qum, 1995).

Ayatollah Khamene'i (the leader) issued a *fatwa* in 1995 that sterilisation is allowed in Islam as long as is not harmful to the wife's health as well as vasectomy. But he asserted that approval of the husband is necessary for undergoing sterilisation.

The Grand Mufti of Egypt, Sheikh Jadel Haq (March 1980) takes a different view and gave the following opinion:

sterilisation is not permissible if it causes permanent loss of fertility, through surgery or through drugs. Sterilisation may be used when it is established that a hereditary disease may pass to children or cause pain.

(quoted in Omran, 1992: 188)

Among *sunni ulama* as Bowen, (1991) and Obermeyer, (1992; 1994) assert, the finality of the method is seen as interfering with divine will, and therefore they have not condoned its use.

Conclusion

There is hardly any scope for the prohibition of birth control in Islam. Neither the Qur'an nor the *hadith* contains anything unfavourable to population control. There are some *mojtaheds* all over the Muslim World including Iran who are not in favour of family planning but their number is small. None of them in Iran, however, regard birth control as prohibited in Islam.

The official discourse asserts that all temporary means of contraception accord with Islamic practice, and backs this opinion with references to various *shi'ie* and *sunni* (other schools of Islam) texts and *fatwas*. Modern legal opinions support measures to prevent conception, and in several Muslim countries religious leaders have endorsed family planning programmes by declaring them to be sanctioned.

By introducing laws to eliminate some traditions, the Islamic states are not in contradiction with the Qur'an and the teachings of the Prophet. In Iran, the *ulama* are consulted in regard to worldly matters including family planning and they, for their part, have been fully aware of the responsibilities of the position which, they, in the course of time, have come to occupy. Thus, religious reinterpretation can lead to adaptations to the realities of modern life.

The state can, of course, help people take correct decisions by providing them with opportunities to act on these decisions and also by creating conditions which

abolish the need for a large family, especially if social, economic and political climate changes.

In Islam, the family is considered to be the basic unit of society and the foundation of all nations. For this reason, marriage is placed at the first order of duties to be fulfilled by every Muslim, because without marriage there could be no Muslim nation. Children are viewed as among the richest blessings granted by God, but as accepted in Islam, family planning or the spacing of births enhances the family's well-being. Furthermore, family planning is seen in Islam as desirable from the viewpoint of protecting the rights of children and sheltering them from poverty, ignorance and sickness, and attending to their physical, moral and religious education.

Ijtihad plays an important role in Islam in the light of contemporary circumstances. Muslims follow their *mojtahedin* and ask them for guidance, therefore their opinions greatly affect people's attitudes.

Islamic law deals with matters that change with the changing conditions of human beings or with time and place, it does not lay down a fixed, uniform rule or a rigid, definitive formula but rather leaves this to the opinion of the more discerning scholars of the community within the framework of Islamic jurisprudence.

It seems that, in Iran, the *mojtahedin* do not forbid temporary prevention of pregnancy by married partners, as long as the method of contraception used is legal, harmless and voluntary. Permanent prevention of pregnancy (sterilisation and vasectomy) is mostly allowed by theologians. Only abortion still meets with strong opposition from many religious authorities. But the views and verdicts of the *mojtahedin* in Iran who have expressed themselves to be in favour of the validity of birth control constitute the majority opinion. Views and *fatwas* expressed by *ulama* conform to the verdicts on family planning found in their books of jurisprudence (*resaleh*). The *ulama's fatwas* are sometimes publicised in the Friday Prayer Sermons, or in seminars held on the issue of family planning. On occasions, the *ulama* directly explain their views when asked by people in their public audience. Furthermore, the network of mosques throughout the country explain the nature of *fatwas* and the surrounding issues to the populace.

As Hoodfar (1994) and Aghajanian (1994) argue, one of the most important aspects of the family planning programme's success in Iran is the interest, support and guidance from religious leaders. As Aghajanian states, "this support grows from Islam's flexibility in dealing with social issues". In Iran, while adoption of family

planning has become necessary, the *ulama* have unanimously given their verdicts in favour of the religious validity of birth control. But the problem is that every *mojtahed* can assume the right to interpret the issues as he understands them. Individual definitions of the situation and variations in interpreting what may be acceptable practices in Islam could conceivably have a backlash on the implementation of a fertility control programme.

Chapter Five: Population Policies with Some References to Iran

Introduction

Nowadays, population issues are among the first ones that receive the attention of policy-makers, particularly in developing countries. Funds have been made available to promote family planning programmes so as to diminish the rate of population growth in recent decades in most developing countries. Many countries have formed official policies or initiated programmes specifically intended to solve their population ‘problems’ or to improve their demographic situations.

There are some common fertility characteristics among Muslim countries. First, all Muslim countries show high fertility, in spite of diversities in ethnic background, economic infrastructure, and political ideology. Second, Muslim fertility levels on all variables are higher than those of non-Muslim countries currently at comparable levels of economic development and modernisation (Youssef, 1978; Moghadam, 1991).

This chapter aims to discuss the arguments about the population and family planning policies envisaged by developing countries’ governments, including Iran. Also, this chapter will look at the dynamics of change and fertility transition in Iran in a theoretical framework.

5.1 Population Policies in Developing Countries

Governments have been pro-natalist and authoritarian for most of the history. Seemingly, birth-neutral policies had penalties associated with information and contraceptive dissemination. Whether to enlarge the labour force or army, governments encouraged births and established legal authority over fertility. Even information about birth control was censored. Staudt (1991: 251) points out that:

in the United States, key world promoter of population programmes, Connecticut’s ban on contraception for married couples was finally challenged successfully in 1964.

In 1974, contraceptives were banned in Argentina as part of a programme to double the population of the country as fast as possible; this was seen as a means of developing its economic and military strength.

(Giddens, 1989: 585)

There is an assertion that past conditions differed markedly from those the

latter part of the twentieth century, with the tremendous demand that high population growth meant for employment generation. A sharp, anti-natalist reversal took place in the 1970s.

The number of LDCs favouring lower population growth grew from 9 in 1965 to 31 in 1975 and 68 in 1988 (AID's Population Programme, 1990: 90).

The central issue in population policy is whether the number of children people may have should be decided by individuals and families or by politicians and national and international civil servants. The decision of how many children to have is an intimately personal one. Traditionally, it has been left to the choice of the couple involved, but all societies condition these individual decisions in many ways. Arguments for conscious policy intervention to limit population growth can depend either on the rationale that couples do not know how to achieve their desired family size or find it too expensive to do so, and thus must be helped to achieve it. Alternatively, it may depend on the belief that individual reproductive choices impose excessive social costs at the national or international levels.

Advocates of officially sponsored population policies often argue that they do not propose compulsion but intend only to extend the options of people by assisting the spread of knowledge about contraceptive methods. But official information, advice and persuasion in practice often shade into coercion.

China's one-child policies in 1982-83 backed by abortions have been especially offensive to many observers (as well as to some of the sterilised men or abortion-operated women).
(Pomfret, 1992: 178)

There are conflicting views which are discernible behind these assumptions and, indeed, behind debates on populations. One view envisages people as deliberate decision-making persons in matters of family size. The other view treats people as being under the sway of uncontrollable sexual urges, their numbers limited only by forces outside themselves, either Malthusian checks of nature or the power of superior authority.

It can be misleading to use the terms 'population control' and 'population planning', as synonymous for family planning programmes as they frequently are. Technically, they would mean deliberate influence over all attributes of a population, including its age-sex structure, geographical distribution, racial composition, genetic quality, and total size. No government attempts such full control. Current population

policies are concerned with the growth and size of population and the 'quality' of population.

The problem woman, from the standpoint of family planners in some developing countries, is the one who wants 'as many as come', or 'as many as God sends'. Her attitude is construed as due to ignorance and 'cultural values', and the policy deemed necessary to change it is 'education'. However, most family planners believe that no compulsion can be used, because the movement is committed to free choice, but films, posters, comic books, public lectures, interviews, and discussions can help (World Bank, 1990).

Governments can attempt to control fertility in number of ways: they can try to persuade people to have smaller families through the communications, media and the education process, both formal (school system) and informal (adult education). They can also establish family planning programmes to provide health and contraceptive services in order to encourage the desired behaviour. They can also deliberately manipulate economic incentives and disincentives to have children. This can be done, for example, through the elimination or reduction of maternity leave and benefits, the reduction or elimination and/or the imposition of financial penalties for having children beyond a certain number, the establishment of old age pension provisions and minimum age child labour laws, the raising of school fees and the elimination of heavy public subsidies for secondary and higher education, and finally, the subsidising of smaller families through direct money payments.

Legislative changes can be useful in promoting smaller families. First, they can affirm that basic human rights include the right of each couple to determine the spacing and number of their children and can recognise that the practical exercise of this right requires access to family planning services and information. Second, family planning can be extended by easing or removing unnecessary restrictions, by legalising contraceptives, widening the categories of people authorised to supply or receive them, and allowing commercial sale and advertising of approved methods.

Incentives to delay or limit child bearing or to encourage contraception can be extended to individuals, couples, or groups. Such incentives can involve cash, goods, or services (for example, more schooling or life insurance). In recent years, the incomes and prospects of many individuals have come to depend heavily on official favours and these have been linked to family planning. Bauer (1991: 37) cites India as an example and states that promotion in the civil service, allocation of driver and

vehicle licences, and access to subsidised credit, official housing, and other facilities in India have all been linked at times to restriction of family size. The transfer can be immediate or deferred, an example of the later being a pension scheme, the amount of which varies inversely with completed family size. In Bangladesh, food ration cards or saris have been exchanged for sterilisation (Hartmann, 1990: 201). Deferred incentive programmes exist for communities as well. In such programmes, communities receive projects such as irrigation, schools, low-interest loans, or other benefits if agreed-upon percentages of couples practice family planning or limit fertility to an average of 2-3 children. Thailand has utilised this approach (Jacobson, 1987: 21).

Administrators sometimes offer cash payments or bonuses to medical and family planning staffs to motivate them to increase caseloads. It seems that staff incentives have increased the number of new acceptors in various countries. Potential exists, however, for abuse. In a notorious example from Bangladesh, outreach workers recruited the aged or existing contraceptive users in order to inflate performance and bonuses. In Egypt, teams removed IUDs from women in one clinic and reinserted them in other clinics (Warwick, 1988: 48).

Disincentives such as withdrawal or limitation of social benefits can also be applied, for example, by restricting paid maternity leave to two or three births. For example, Singapore is limiting paid maternity leave to a maximum of two children, scaling the delivery fee according to child numbers, and reducing income tax relief from five to three children (Todaro, 1989: 206). Singapore's past disincentives for those having more than three children included a loss of housing, tax, and medical benefits (Palen, 1990: 167-178). In Taiwan there is an experiment in a rural township in which the local government is depositing funds into bank accounts for young couples to cover the costs of educating their first two children. However, if the couple has a third child, part of this money is forfeited and it is all forfeited at the birth of the fourth child. The Chinese Government in 1982-83 adopted a policy of one child per family. Couples were told that "only children are better children". Social and political pressures to limit family size to one child have included requiring women to appeal to the neighbourhood committee or commune for formal permission to become pregnant. Although first births are routinely approved, second births are usually approved only if the first child has a serious birth defect or if the woman has remarried. Given such rigid national policies and a strong preference for male

children, there have been reports of an alarming increase in female infanticide. Staudt (1991: 249) argues that China's one-child policy is far from supporting individual and couple reproductive choice.

For a while in the mid-1970s India also had a major vasectomy programme under way, in which men were given a direct cash payment, transistor radios, or even free tickets to championship soccer matches if they agreed to undergo 'voluntary' sterilisation.

But the programme had a negative political effect that set back governmental family-planning efforts for a number of years.
(Perkins et al, 1992: 180)

Todaro (1989: 208) argues that:

the defeat of Mrs Indira Gandhi's government in the Indian elections of 1977 was largely due to the popular backlash against the government's forced sterilisation programme, which raised political problems for the government. Her return to power in 1980 was accompanied by a commitment not to reintroduce coercive birth control policies.

Governments may try directly to coerce people into having smaller families through the power of state legislation and penalties. For obvious reasons, few governments would attempt to engage in such coercion, especially since it is not only morally questionable and often politically unacceptable, but also because it is almost always very difficult to administer.

Policies and measures pressing people to have fewer children can provoke acute anxiety and conflict, and they raise serious moral and political problems.

Demeny (1992: 326) argues that:

incentive schemes (for example, by providing rewards in cash or kind to individuals accepting family planning services) proved bureaucratically and politically inherently ill-conceived, hence, fortunately, short-lived.

Implementation of such policies, may leave people dejected and inert, uninterested in social and economic advance or incapable of achieving it. Such outcomes have often been observed when people have been forced to change their mores and conduct (Pomfret, 1992).

Much of the advocacy of state-sponsored birth control is predicated on the implicit assumption that people in high fertility LDCs do not know about

contraceptives and that, in any case, they do not take into account the long-term consequences of their actions. It is believed that through information dissemination and access to contraceptives, couples can be helped to realise their reproductive plans. The next issue is that of externalities. The first question under this issue is whether parents bear the full cost of having and raising their children. If they did not bear these costs fully, they may have more children than they would otherwise. It is often assumed that parents in LDCs do not bear the full cost of having children, in particular the cost of health care and education. Of course, in some rich countries, this is even more true.

The extended family provides a further example of the same negative externality. Parents may have more children if they know that part of the cost is borne by other members of their extended family. However, the burden falling on others is likely to be small. In developing countries, continuing urbanisation is loosening extended family ties and raising the private costs of children to couples who are less tied to extended family networks.

Many factors are associated with fertility decline, among them the demand for and supply of contraceptives. The 'supply sider' pushes for extensive supplies of various contraceptive devices and the 'demand sider', the developmentalist, seeks socio-economic growth and redistribution. As Staudt (1991: 254) argues that the supply siders ignore relevant contextual factors in income, income distribution, and other factors while the demand siders focus on the contextual side that highlights factors associated with higher demand for family planning, including economic growth and poverty alleviation. He concludes that research shows strong relationships between supportive socio-economic contexts and contraceptive prevalence.

One important issue in family planning programmes is the number of unwanted pregnancies.

Advocates of family planning programmes argue that: (i) there is substantial unwanted (and mistimed) fertility in most societies, and (ii) well-designed family planning programmes can effectively reduce unwanted child bearing.
(Bongaarts, 1994: 619)

Based on his research, Bongaarts claims that, approximately one in four births in developing countries (excluding China) is unwanted, a total of some 25 million per year. In addition, approximately 25 million abortions are performed annually in developing countries, often under unsafe conditions. Aside from the hazards

unwanted pregnancies pose to women, they contribute to population growth, which may be contrary to policy objectives. If unwanted fertility could be eliminated entirely, fertility in the developing world would drop by half from its current average of about 3.5 births per woman to the replacement level of just over two, and future population growth would be cut by nearly 2 billion (Bongaarts, 1994: 487-506). Many surveys, such as Weeks (1989: 23, 121) and the World Fertility Survey (WFS) in 1991 have shown that because of the unavailability of contraceptives many children born in developing countries, including Iran, are unwanted. Therefore, the actual size of the family is usually larger than the ideal one. There is found to be a wide gap between what couples perceive as the optimal number of children they would like and how many they actually have.

According to World Health Organisation (WHO) estimates, 300 million couples who want no more children still have no access to family planning services (quoted in Davidson et al, 1988: 134).

One study, based on the World Fertility Survey, which collected data from 29 developing countries between 1974 and 1984 and from interviews with some 150,000 women of reproductive years, suggested that spacing all pregnancies at a minimum of two years would prevent 500,000 infant deaths each year in those countries.

Dr. Fred Sai, Population Advisor to the World Bank, states that family planning alone could save at least five million children and 200,000 maternal lives each year by helping couples to space their children and avoid high-risk pregnancies (quoted in Davidson et al, 1988: 133).

Reproductive health programmes confront funding problems that generally mean smaller budgets for public programmes that return no profit, nor produce any short-term rate of return. As the 1990 World Development Report shows, in all but nine middle and low income countries, the defence percentage of total central government expenditures exceeds the percentage devoted to health (in occasionally glaring ways, as Pakistan's 29.5% for defence contrasts with 9% for health in 1988. And in more than half of countries, the percentage spent on health went down rather than up from 1972 to 1988. In only three developing countries does the percentage devoted to health exceed 10%; Costa Rica holds the world's record, at 19% (World Bank, 1990: 198).

Countries which strive to lessen the inequality in their distribution of income or, alternatively, attempt to spread the benefits of their economic growth to a wider

segment of the population, may be better able to begin to lower their birth rates than countries where the benefits of growth are more unevenly shared. Basically the reason why direct attacks on poverty and low levels of living are probably more effective measures to lower birth rates than simple growth maximisation is that higher levels of living provide the necessary motivations for families to choose to limit their size.

Pomfret (1992: 171) argues that as income level rise, nutrition, housing, sanitation and health care all improve.

5.2. Some Fertility Implications for Iran

In this section, some of the ideas and debates surrounding population policies and fertility will be considered in relation to Iran.

Population size is determined by the combination of births, deaths, and migration. Therefore, socio-cultural and other variables that affect population size must operate on one of these processes. Most socio-cultural factors affecting population growth are classifiable according to whether they (i) limit opportunity for sexual intercourse, (ii) decrease chances of conception, (iii) interrupt pregnancy, or (iv) increase infant or general mortality. However, some socio-cultural factors may have no effect or have a positive effect on population growth. Large numbers of children are desired in societies where familial and kinship ties play a central role in achieving socially valued goals. Where these ties are important and mortality is high, fertility will be especially high in order to ensure the survival of the desired number of children necessary. However, social norms about family size may be affected by non-familial aspects of the social organisation such as religious systems and other cultural and economic factors including education, employment of women, and the effect of infant and child mortality.

The process of development in Iran was accompanied by widening regional and ethnic polarisation (Aghajanian, 1983). The massive economic growth in the 1960s and 1970s benefited the central and northern regions of Iran and deprived the population living in the peripheral areas (Amirahmadi, 1987). Hence, despite remarkable improvement in the economy, ethnic, regional, and class inequalities were expanding in the 1970s.

The initial impact of Western culture started in Iran in the first half of the nineteenth century and developed to full scale Westernisation in the Iranian society in

the 1970s (Banani, 1961; Menashri, 1992). The first half of the twentieth century saw a sustained effort of modernisation and Westernisation by the government.

Along with the modernisation effort, the strong infiltration of Western culture and especially the components of Western culture which were at odds with the Iranian Islamic tradition, created another dividing line among the population of all areas.
(Aghajanian, et al, 1996: 64)

Hence, cultural, religious, economic, and social discontent accumulated over the years and culminated into the 1979 Islamic Revolution.

Since the Revolution, it became apparent that technological importation and the Westernisation of a few elite members had not affected the masses or the structure of the society (Touba, 1985: 131).

The Islamic Revolution was a turning point in the social and economic history of Iran. Iranian society, particularly, in the last 40 years has gone through remarkable macro-socio-demographic changes. The country has been transformed from a predominantly rural, illiterate and agricultural society to one that is predominantly urban, literate, and non-agricultural. A few statistical facts support the above statement. In 1956, 85 percent of the Iran's general population and 93 percent of the female population of 10 years or older were illiterate, 70 percent of the population lived in dispersed rural villages or tribal camps and 60 percent of the males were engaged in agricultural and related occupations. Forty years later, in 1996, illiteracy had fallen to 21 percent. In the same period the rural population decreased to 39 percent and only 23 percent of people were engaged in agricultural activities.

Family planning programmes after the Revolution were disregarded. The population growth rate increased from 2.7% in 1976 to 3.8% in 1986. One of the reasons for high fertility in Iran was that Iranian leaders considered family planning as a conspiracy against Muslims. Consequently, the family planning policy of the overthrown regime was denounced and abandoned by the Revolutionary government (Aghajanian, 1991). The government strongly endorsed early marriage and motherhood (Hoodfar, 1994; Aghajanian, 1994). Also, the distribution of land for housing in the first years of the Revolution was based on the number of people living in a household, which was a considerable incentive for people to have more children. Coupon rationing also contributed to encouraging people to have a large family because it was based on household size. In addition, during the first years of the Revolution, the upsurge in religious and revolutionary thinking is likely to have had

an effect. Many people wished to have a second set of children after the Revolution. Fertility rates rose fastest among older women, who may already have had a number of children in their twenties (Aghajanian et al, 1996).

However, Paydarfar et al (1995: 81) argues that the main reason was to do with a neglect of family planning and states:

this fertility increase was not a societal requirement to respond to an imbalance between demand and supply for children. Rather, it was a reflection of the absence of an effective fertility regulation programme.

In addition to the above suggestions, there was a substitution effect (lower 'household opportunity' cost of raising babies) and an income effect (due to receiving transfers from the government) in favour of more children.

A clear example of the problems faced in the introduction of family planning measures can be given by Iranian couples' motivations for childbearing. In many developing countries, including Iran, the reasons for having children are apparently both socio-economic and psychological (Sheykhi, 1995; Tabibian et al, 1997). In the studies on family sociology undertaken so far by researchers in Iran, and reports released through the mass media, a number of reasons are given. First of all children are seen by parents as a symbol of God's blessing and as gifts. They are also an indication of being 'normal', of having attained adult status and social identity, and offer assurance of security in their old age.

Traditionally speaking, 'a large family is a happy one', 'more children, more labour force potential', 'children are substitutes for material possessions in gauging the success of a marriage', and similar opinions, still represent overriding motivations in Iran.

Sheykhi (1995: 78) believes that in Iran, besides being seen as a natural outcome of marriage, childbearing has the multiple rewards of continuing the family lineage, providing economic assets and serving as a means to fulfil aspirations. It also creates strong marriage ties, ensures social status and provides stimulation, novelty and fun.

Since family planning essentially involves presenting alternatives to traditional values, it is necessary to be aware of such values, to know the reasons why they are upheld, and the degree of intensity with which they are adhered to.

Despite the lack of evidence that Islam opposes family planning discussed in chapter 4, public opinion was confused. Some view that the birth of a child is the will of God. Therefore, since God created the child, He will provide for it. In the first years of the Revolution, as discussed in chapter four, religious leaders encouraged marriage and motherhood and as Iran underwent an Islamic Revolution, the impact of Islam and religious leaders' opinions had a large impact on reproductive choices in Iran which resulted in a high fertility rate in Iran in 1986.

There were also several socio-economic and cultural reasons underlying the large family norm in Iran. The 'value of the child', a demographic term, helps explain why many people in Iran used to have four, five or even six children. Where wages in the families are low and the average family size is large, child labour is generally seen to compensate for the loss in the family income. Sheykhi (1995: 72) argues that:

in poor rural and tribal areas, in particular, children can be of great assistance. Iranian village boys and girls of around ten years of age in many cases work more than four hours a day, especially during school holidays, by looking after farm animals, engaging in carpet weaving, and similar tasks.

This setting provides household members with ample opportunities to function as a familial production unit, and in spite of the enactment of compulsory education and child labour laws, still requires children to perform productive work through helping with various farm activities and household chores. In agricultural areas, where agriculture still depends on manual labour, it is cheaper for the farmer to have his own children to help him, than to hire workers.

Moreover, the setting not only demands that children become producers when they are young, but also that when they reach adulthood they become providers of old-age support for their parents. However, in the last decade, many young men have moved from their villages to the large cities to find jobs which means they are no longer providers for their parents. As village men are illiterate or have only primary education, they mostly work in factories or in similar jobs. With the small salary they receive, they will only be able to support their own families and nothing will be left for parents.

The traditional familial and kinship orientation of families places a premium on a large family and clan, since social, economic and political power is significantly equated with the number of followers. Iran was a predominantly tribal and rural society before socio-economic modernisation began in the 1950s, and consequently

large families are deeply rooted in tribal and rural life. This value orientation favouring large families had not changed in traditional families, despite the extensive settlement of nomadic tribes and the growing urbanisation of rural people. For wealthier farmers, children represented opportunities for the family's occupational diversification, and hence for the expansion or consolidation of its local power. A large family also benefits in land disputes, and so on.

Socially speaking, parents' anticipation of future insecurity and their anxiety about who will take care of them when they are old and/or ill will induce them to have more children. Thus, better social conditions and social security are likely to be prerequisites for a widespread acceptance of family planning. Unfortunately, social security is almost non-existent in Iran and the government does not deal with it seriously.

It is easy to understand why cultural cues and rules were so pervasive in Iran. On the one hand, cultural and social values encouraged large families and on the other, more children meant an extra workforce and insurance for the future and old age support. All these contributed to strong preferences for as many children as possible. Children were perceived to fill emotional needs and care for ageing parents in later life.
(Sheykhi, 1995: 80)

Male children have been preferred under these circumstances. There are many reasons for the preference of the male child in rural areas of Iran. Sons are valued for many purposes: for continuity of the family line and land ownership; for contribution to agricultural labour; to strengthen family numbers in village rivalry and strife; for support in old age; for religious intervention at and after death and the male children can defend property. Sex preference is also a decisive factor in inducing couples to produce more children. The high value placed upon and therefore preference for sons at least in rural areas in the family is derived from psychological and economic motives. In spite of all the changes that modernisation has brought in Iranian society over the past four decades, the sons still have the upper hand in the family. Son preference is still highly prevalent, and repeated childbearing is seen to be necessary to ensure that the desired number of sons is born. While the psychological motivation is the continuation of the family lineage through sons, they also perform a vital economic role, particularly in rural areas, in farm production, cattle raising, domestic production, and so on. However, among nomads and semi-nomads, the situation is

different. People need daughters to build and maintain social ties within the community.

Sheykhi (1995: 79) claims that the studies carried out in Iran to date have shown that families without sons or with a high number of daughters generally tend to have more children, while the fertility of families with a high number of sons tends to be lower. This finding corresponds to survey results of other countries, such as China, Japan, South Korea, and so on, as reflected in the respective country population monographs (ibid: 80).

Interestingly, in a 1987 sample survey of child bearing women carried out by the Statistical Centre of Iran, over half of the women questioned reported that they did not mind whether they had a son or a daughter; 14 percent actually preferred to have a daughter and only 31 percent had a marked preference for a son (reported in Kayhan, 26 February, 1987). Hoodfar (1996: 36) argues that this preference for sons did not stem from lack of love and affection for their daughters. When women were asked by Hoodfar in her 1993 interviews whether sons or daughters were more caring and attached, 80 percent of respondents thought that daughters were more caring toward their parents. Rather it is daughters' expected gender role and marriage partnership that would prevent them from helping their parents financially.

The predominantly patriarchal and authoritarian character of the Iranian family quite rigidly prescribes the role of each family member. While discipline and decision-making in all but a minority of cases are the husband's prerogative, the role of the Iranian wife is confined to raising children and housekeeping as it is in many other parts of Asia and the Middle East (Hoodfar, 1994; Afshar, et al, 1998).

Sheykhi (1995: 76) has identified the following indicator of important value orientations that prevent the acceptance and practice of family planning:

the importance of family solidarity in the form of smooth interfamilial relations among family members result in the frowning upon any ideas that may weaken or even endanger family harmony. The ideas and values underpinning family solidarity in Iran supported the large family size.

In Iranian folk culture, a wife with many children improved her family position by solidifying her relationship with her husband.

High infant mortality in Iran was further motivation for having more children (88 per 1,000 in 1980 falling to 68 in 1986). We should bear in mind that changes in

fertility patterns reflect a micro-level response to social and economic transformations in the wider society.

After almost a decade of increasing fertility levels in Iran (1979-89), there was strong support for a fertility control policy by the government. Aghajanian (1988: 165) argues that economic growth of the Islamic Republic of Iran was not consistent with such a high rate of population growth. This growing population needed to be fed, educated, and provided with jobs. A family planning programme was established in 1989, and subsequently grew rapidly (Aghajanian, 1991: Assadpoor, 1993). During 1990s, fertility rates in Iran have declined steadily. Fertility trends in Iran will be discussed in detail in chapter 6.

The reasons provided in the country for the recent drop in fertility are diversified. The government's officials tend to give the credit to their provision of health care services and to the extension of contraceptive prevalence. There are others who argue that a drop in housing and food coupon privileges are responsible. The provision of these privileges mainly started at the beginning of the Iran-Iraq war in 1980. Also, as a consequence of war, the economy was plunged into depression. During the war, real family consumption was more or less sustained by a comprehensive scheme of rationing that was financed by government oil revenue. Tabibian et al (1998: 2) argue that:

unlike some other experiences of wartime rationing, this one led to a higher level of consumption of most foodstuffs. In economic terms, this means that while income from labour dropped due to economic slowdown and unemployment, (based on official statistics, unemployment rate increased from 10.17% in 1976 to 14.19% in 1986) real per capita consumption was compensated by government transfers.

On the other hand after the end of the war, the disastrous effects of the economic embargo, the falling price of oil, the flight of capital, and poor management (Amirahmadi, 1988) resulted in worsening economic conditions. However, during the First Five-Year Development Plan (FFYDP) (1989-94), the employment rate increased, the real value of coupon transfers decreased and most welfare privileges of big family size were eliminated. This amounts to a substitution and income effect in favour of fewer children. Amirahmadi (1996: 124) argues that an uncontrolled population growth rate in Iran had led to an increase in consumer demand and unmanageable expansion of the labour force. He states that by controlling population

growth, the plan sought to reduce the gap between supply and demand in goods and resources, with direct bearing on living standards and expanding investments in productive activities.

Also the impact of education on family roles and reproductive behaviour is widely accepted. Illiteracy was high in Iran until recently. In 1979, around 45.2 percent of the total population, 7 years and above were illiterate (33.8 percent of males were illiterate while 57.3 percent of females were illiterate). As a result of Iranian government policies illiteracy reduced from 45.5 per cent in 1979 to 38.4 percent of the total population in 1986. Men formed 71.1 percent and women 51.7 percent of total number of literate (Statistical Yearbook of Iran, 1986: 2-14). Illiteracy reduced from 38.4 percent in 1986 to 21 percent in 1996. The proportion of literate age 6 and above in 1996 was evaluated at 79 percent, with 84 percent men and 74 percent women (Statistical Yearbook of Iran, 1996-97).

President Rafsanjani (1994: 3) announced that by the end of the First Five-Year Socio-Economic Plan (1993), 96 percent of over 6 year olds (eligible pupils) were enrolled in elementary schools. He added that the number of university students increased seven folds by 1993 as compared to 1978, the year before the Revolution.

There is an assumption that a high illiteracy rate limits the capabilities of couples to be exposed to ideas beyond their immediate environment. Studies in Iran show that couples with a higher level of education have a smaller family than couples with a lower level of education. Studies in some other developing countries indicate this fact too, and have shown that a high proportion of literate females in a society affects the fertility rate considerably. A study from Baghdad showed that women with no education have the largest number of children and increased levels of education correspond directly with a decrease in family size (Al-Kadhi, 1985: 145-147).

Education is one of the most widely used variables in explaining fertility (Cochrane, 1979, 1983; Aghajanian, et al, 1996). Education is considered as a factor shaping tastes for a higher quality of children and hence less desire for quantity. The effect of education is also apparent through premarital work experience and postponement of family formation. In fact, the most recent statistics show significant improvement in educational attainment of women and a high rate of participation of women in college education (Aghajanian, 1994).

In Iran, the conversion of the single role of wives (reproduction) into a dual role (reproduction plus production) in the last decade, especially in urban areas, has

led to the emancipation of some women. Women have thus gained some decision-making powers, and the patriarchal influence of husbands has consequently diminished to some extent. This movement has also had a considerable influence on women's fertility behaviour. Knowledge and attitude studies have shown the role of education in the efficient use of modern contraceptives. It is expected that the wife's education will have a negative effect on fertility.

A study done by Aghajanian et al (1996) show that the husband's education also has a negative effect on the fertility level of the couples in Iran. It is suggested that a higher level of education increase the probability of communication between husband and wife regarding family size. The husband's education shows a systematic negative effect on the number of children ever born after controlling all other variables. Women married to illiterate husbands have .72 more children than women married to men with at least a high school diploma.

Iran has had compulsory education laws since the late 1940s. The laws, however, were not enforced for lack of facilities. Since 1950, efforts have been made to increase the literacy rate of the country as a necessary step towards economic and political development for the nation. Apparently these efforts have so far been successful. The increase in literacy, 15.4 percent in 1956 versus 79 percent in 1996, shows the degree of this success. In September 1994, 17 million pupils were enrolled in primary, secondary and high schools (Kayhan, 14 Sep. 1994). Such a huge young population (almost 33.5 percent of Iran's population), due to high rates of population growth, has brought many difficulties for government. One of them was providing enough schools and teachers for the pupils.

As already discussed, education has been considered as a social development indicator. In this respect, in Iran, in 1986 when population growth rate was at its peak (3.8%), such a growth rate was argued to be inconsistent with the socio-economic development of the country because of the extremely high demands. The socio-economic consequences of rapid population growth can be illustrated by showing the effects of two rates of growth as an example. In Iran, with an estimated primary school age population of 4.468 million in 1975, rapid population growth led to a primary school population of 8.262 million by 1988 (United Nations, 1992). Moderate growth could provide a projected size of 7.227 million, a difference of 1.236 million primary school children by 1988. The difference of 1.236 million children means an additional requirement for 34,533 classrooms and a proportionate number of teachers.

These figures have obvious implications in terms of educational investment and manpower development.

Another important factor resulting in fertility decline in Iran has been urbanisation. Urbanisation has significantly redistributed the percentage of people engaged in agriculture and as living conditions in urban areas are different from rural ones, people are less likely to depend on children's labour, and a decline in the value of children and the subsequent impacts on role-related behaviour have occurred in the last decade (Mehryar et al, 1997). Also concepts of self-identity among Iranian women have shifted. In urban areas, women do not look at having many children as high prestige in the society. In chapter three, the influence of the education and employment of women on fertility behaviour discussed.

Rising levels of individual expectations and of parental aspirations, together with new systems of economic production that reduce drastically the opportunities for unskilled workers and for child labour, have effected a significant re-evaluation of values and attitudes related to childbearing. Supportive of this shift has been the demographic revolution, which will increasingly guarantee the survival of most births.

The economic costs and liabilities of children is one of the most significant factors underlying low fertility motives in Iran in the last decade (Mehryar et al, 1997; Tabibian et al, 1998). Expressions of the financial difficulties which parents encounter in maintaining a large family are very important. People are aware of the increased costs of food, clothing, medical care, and education which they are providing for their children, particularly in recent years now that private schools are more prevalent in cities and require a large amount of money. They even frequently compare how little it used to cost their own parents to feed and clothe them with what it costs today. They also compare how limited and simple their needs were and how diverse and complicated their children's needs are now. They realise that everyday general expenses are much higher year after year. In short, they are sensitive to the economic costs of rearing children, aware that a large family costs more to support and maintain than a small one, and expect to encounter much more economic difficulty in raising their families than did their parents and grandparents.

Another factor in shaping low fertility motives in Iran is the health of mother and children. Having a small number of children preserves children's health and the mother's health. As a result, quality of children tends to be more important than quantity. This is true mostly in urban areas where the cost of improving children's

quality is mostly met by restricting their quantity. However, in rural areas the more dominant convictions of the productive value of children, which rationalise the demand for their quantity, stem primarily from the villages' traditional agricultural setting which forces most of them to depend on their farm and household production as their main sources of livelihood.

In Paydarfar et al's (1995: 71) study, the relationship between modernisation forces and marital fertility patterns of the Iranian population has been examined. The modernisation process, as expressed and measured by industrialisation, urbanisation and universal education, has been a dynamic social force transforming and reshaping the structure and functions of human societies. The results have been that modernisation increases the cost of children, encourages substitution of quality for quantity of children and results in the recalculation of the socio-economic values of children, in which the parents' ambitions for children to have a higher education and higher quality of living are elevated. All of these have led to fertility decline in Iran.

Paydarfar (1995: 214) has a hypothesis of the relationship between housing types and fertility, which was originally developed and tested in a housing study in Bogota, Colombia, which is re-examined using Iranian data on urban married women of reproductive age.

Paydarfar's findings in Iran (1995: 224) show that housing has a significant effect on the fertility decision-making of couples regardless of their socio-demographic differences. Couples residing in multi-family housing, such as an apartment, a duplex, etc., have significantly lower fertility than couples living in single family housing. He argues that scarce and expensive housing (renting and buying) in Iran, particularly in the large cities, has limited couples' choices. Consequently, people have adjusted their fertility (actual and desired) to their dwelling environments.

Scarce and expensive housing is a significant urban problem in Iran today. In response to the housing shortage, a large number of single-family houses are being demolished and replaced by expensive, but smaller unit apartment complexes. It is anticipated that this development will cause further fertility reduction in the urban population of Iran.

An increase in the social, economic, and psychological costs of child bearing and child raising, and a reduction of child benefits have motivated Iranian parents to desire fewer children (ibid: 83).

Conclusion

The problem of population is not simply one of numbers but of the qualities of human life and its material well-being. Nevertheless, rapid population growth is perceived by many writers and many governments to intensify problems of 'underdevelopment' and make prospects for 'development' that much more remote. It could be argued that population growth is at least partially the result of social conditions and economic incentives. Population growth is not solely determined by economic conditions and therefore, family planning programmes are likely to have some effect quite independently of other development progress. Thus, policy makers can respond both directly by promoting family planning programmes and indirectly by altering the incentives for couples to have children.

And rapid population growth exacerbates certain development problems, particularly those of educating the young and providing sufficient employment opportunities. In short, it can complicate the development process and generate political problems.

Research on family planning has been largely confined to the implementation and evaluation of programmes, delivery of services and contraceptive prevalence. It has been recognised that the acceptability of family planning methods depends on cultural and in Muslim countries on religious factors (Sheykhi, 1995). Equally important in determining contraceptive use is the demand for such methods based on family-size preferences, social institutions, and cultural and religious constraints. Population control is one element of a complex web of radical decisions that are required to bring about sustainable development.

Some believe that only by changing economic conditions, not family planning, will population growth be reduced. Such arguments, sometimes buttressed by appeals to Marx, are both critical and false. They are critical because the basic indicators, like women's education (as in Iran), is so crucial for fertility reduction, which has not been considered in the arguments. Many studies done by Sathar et al, 1988; and in Iran by Mehryar et al, 1997; and Tabibian et al, 1998 indicate that women's education in developing countries has had a negative effect on fertility levels.

They are false because, there is considerable evidence that the availability of family planning exerts an independent, negative pressure on fertility rates (Aghajanian et al, 1996; Mehryar et al, 1997). Well-conceived and well-executed family planning and other direct population programmes can then play an important

and useful role. But their widespread success can occur only within the context of a successful poverty-focused strategy of national and regional development.

Aghajanian (1992: 371) argues that:

one of the long standing explanations of fertility decline is the impact of family planning programmes, development on reducing fertility through income effect and taste for non-child services and goods, reduction of child mortality, reduction of the economic value of children and increasing their costs and finally through improvement in the status of women.

In most countries, women bear most of the time, health and energy burdens of bearing and raising children. When this burden is increased by unwanted children, there is probably a greater welfare loss for women than for men. Programmes to improve contraception are thus likely to raise the welfare of women relative to men; in most societies, such a change would produce a reduction in sexual inequality.

There are some factors or influences associated with and sometimes thought to be causes of fertility decline during the course of economic development. The factors or causes of fertility decline can be through decline in traditional values attached to high fertility, i.e. break-up of the extended family systems, which result to reduction on children for old-age security. Accelerating urbanisation increase the relative cost of child rearing and raising. Improving social security system, education and socio-economic status of women are important factors. Introduction and improvements in the means of mechanical and chemical contraception are also amongst important factors.

Despite all the evidence of the importance of socio-economic and cultural factors in influencing fertility, family planning programmes have been considered as an important factor in fertility decline and have some independent effect. The focus of next chapter will be on family planning programmes in Iran.

Chapter Six: Family Planning Programme in the First Five-Year Development Plan of Iran (1989-1994)

Introduction

As has been demonstrated, Iran like other Muslim countries had a high birth rate in the 1980s. This chapter will review the Iranian government's deliberate efforts to curb population growth rate in the First Five-Year Plan (1989-94) which has resulted in a family planning programme, which appears to have been successful. It is also necessary to look at what has so far been achieved before discussing future directions in the light of the findings of this study.

The chapter then proceeds to depict the current policy and the actors in the field focusing on the period of the FFYDP. Its purpose is to identify and explain those factors, which are responsible for the successful development and implementation of a national family planning policy and programme. It also identifies several problems limiting the current performance of the programme.

The population growth rate in Iran was among the highest in the world in the 1980s. Iran is also one of the youngest countries as far as population structure is concerned. One characteristic of rapidly increasing populations is their youthful age structures. Age structure is important because it indicates the ratio of dependent groups to active population, and it is also a major determinant of future population rates. In 1986, the high rate of population growth attracted the attention of the officials and national planners to the need for planning for economic, social and cultural development. They felt that there was a pressing need to control the population and to lower its growth rate. Iran was facing a high rate of population growth on the one hand and had plans for social, economic and cultural development on the other.

6.1. The Background of Family Planning in Iran

In Iran, policies which could indirectly, and perhaps unintentionally, influence population components and growth had existed in the socio-economic plans since the 1950s. The Iranian government had indirect pro-natalist policies in the 1950s and even after. For example, in 1963 the Mother of the Year was Mrs Sarah Khatun with 18 children, the runner up Mrs Effat Morshedzade with 16 children (Echo of Iran, 1966; Iran Almanac, 1967). Programmes and activities toward improved sanitation,

Malaria eradication, safe water supply and other social development policies, along with the expansion of educational programmes, have had an influence on population. The first introduction to contraceptive education was given by maternal and child health clinics set up in the 1950s, though they did not provide contraceptives. In 1957, the International Planned Parenthood Federation began to encourage family planning among families and supplied a number of Iranian volunteers with contraceptives (Aghajanian, 1989: 229).

The first official Iranian government interest in population matters dates from 1960 when the results of Iran's first Census in 1956 showed the existence of a rapidly increasing population. This was at a time when Iranian life expectancy was 48.3 years for males and 47.7 years for females, respectively (Aghajanian, 1988: 162).

Modern contraceptive methods were introduced in 1967, when the pill was first allowed to be imported and sold commercially (Moore et al, 1974, 28: 396-408).

6.1.1. Family planning in the pre-Revolutionary era (1967-1979)

In 1966, after receiving the first result of the second Census, a preparatory committee, comprising representatives of certain ministries, of Tehran University and of non-governmental organisations was formed within the Plan and Budget Organisation of Iran (Amani, 1995: 32). This committee was responsible for drawing up a population policy and for submitting to the government a proposal concerning the setting up of a Supreme Council for population issues.

The Ministry of Health of Iran established the Family Planning Council of Iran in 1967. The programme's stated goals were to improve and promote the physical, mental and socio-economic welfare of the family, and to decrease the annual population growth rate (Aghajanian, 1994: 66).

In 1970 the government announced the ambitious goal of reducing the population growth rate to one percent within 20 years. The results of the 1966 National Population Census was seen by government officials to signal the need for a national family planning programme.

Although both traditional and modern means of fertility regulation had been known and practised by the Iranian population for many years, the delivery services for modern fertility regulation techniques on a national scale started in 1967. The task of planning and co-ordinating the various agencies involved in family planning activities had been assigned to the Ministry of Health under-secretary for population

and family planning. The principal co-ordinating body at the centre of all major organisations engaged in family planning was the High Council for the co-ordination of family planning. This Council's mandate was to establish clinics and offices in the provinces, districts, and local communities, and deliver family planning services. Because of the importance of the family planning programme as a response to the high rate of population growth many governmental, semi-governmental, and private agencies with health and medical capabilities also became involved in providing family planning services. In March 1972 there were more than 30 agencies, which assisted the Ministry of Health in providing services. Through a network of family planning clinics, the Ministry of Health made contraceptives available. Devices and techniques such as the IUDs, tubal ligation and vasectomy were introduced but, given the overall lack of resources, the pill became by default the contraceptive of choice. The pill was the method preferred by about 95 percent of all new programme acceptors (Family Planning Department, 1971: 14).

The pill was most widely circulated because it was very easy to handle and did not require a gynaecological examination. Eventually it became so common that family planning clinics relied almost exclusively on the pill.

However, there was little effort to extend family planning to the rural population (Aghajanian, 1991: 708). The urban public proved to be very receptive to the use of contraceptives, as there was already considerable demand, particularly among the middle-income groups, who wished to limit the size of their families but were dissatisfied with traditional methods. Obermeyer (1994: 46) argues that:

most of the changes in Iran occurred in urban centres and among the privileged segments of the population. As was typical of the imperial approach of the Shah to development, the emphasis was on changing society to make it conform more closely to Western models, and the population policy showed little sensitivity to local traditions or to the prevalent notions about women, reproduction, and health.

Sterilisation, especially male vasectomy, did not receive much attention. The main reason was that Iranian men refused to consider vasectomy as a means of fertility control (Moore, et al, 1974: 209).

No information is available as to the numbers of women who were using the pill or other modern methods when the national family planning programme began in April 1967. However approximately 10,000 women had obtained a method through

the programme by December 1967. One year later, the number of acceptors had risen to 124,000 and 1977 served a total of 621,000 Iranian women (11% of married women aged 15-44) by the programme (Nortman & Hofstatter, 1980: 40).

In June 1973, the Iranian parliament repealed the country's abortion and sterilisation laws by passing a new penal code, which was specifically about abortion and sterilisation. The new law, which did not go into effect until November 1976, allowed:

any type of medical or surgical procedure to be performed by a recognised physician with the agreement of those who have the right to consent to the procedure in accordance with rules and regulations approved by the government.
(Saney, 1975: 45)

While research indicates that induced abortions were practised (Friesen, 1969: 4), other research indicates that some medical personnel felt that facilities were not well enough equipped to handle abortions (Touba, 1978).

The approach taken to the distribution of family planning services was to make contraceptives, especially the pill, available free of charge through a network of clinics and health centres run by the Ministry of Health (Lieberman, 1979: 308). The government constructed a large number of new clinics, hospitals, health centres, and related facilities in the 1970s, and the clinic-based family planning strategy succeeded in attracting increasing numbers of new acceptors each year.

The aim of the country's development plan spanning the period 1973-1978 was to reduce the population growth rate from 3.1 percent in 1971 to 2.0 percent by 1978 to facilitate socio-economic development (Plan and Budget Organisation, 1973). Aghajanian (1994: 68) states that other changes included the approval of family planning and population education for high school and university curricula. Also a media campaign to promote family planning was initiated in the mid-1970s, as concern over the effects of population growth on national economic growth heightened. In terms of programme budgeting, the budget had been expanded considerably every year. While the yearly budget for 1968 was approximately half a million dollars, in 1974 it was close to 15 million dollars (Plan and Budget Organisation, 1975).

6.1.1.1. Surveys

In 1976 the Statistical Centre of Iran launched a project to collect nationally representative data about fertility and family planning within the framework of the World Fertility Survey (WFS) programme. The Iran Fertility Survey (hereafter referred to as IFS) is the first nationally representative study which provides fertility and socio-economic data for a sample of ever-married women in Iran. The survey was implemented in the period 1976-77 and consisted of two separate surveys, a household survey and a survey of individual ever-married women. The household survey focused on baseline household data and identified eligible respondents, defined as ever-married ages 15-50. The individual survey consisted of interviews with ever-married women at ages 15-50, as identified in the household survey.

According to the survey, the pill was by far the most commonly used method, accounting for nearly half of all contraceptive use (48%), while withdrawal was responsible for a little more than one-quarter of all use (28%), followed by the condom (11%), the IUD (4%) and other methods (10%).

According to the IFS, contraceptive use in 1976-1977 varied greatly by users' socio-economic and demographic characteristics. Women born in rural areas as opposed to urban areas were especially unlikely to have been practising contraception at the time of the survey.

Aghajanian (1994: 67) asserts that based on the survey in 1976-77, levels of contraceptive use increased with increasing levels of education among both women and their husbands. While 28 percent of women with no schooling were practising contraception, the comparable proportion among women with 1-5 years of schooling was 53 percent, and that among women with at least a high school diploma reached 77 percent. Similarly, women whose husbands were uneducated were considerably less likely to be using a contraceptive than those whose husbands had graduated from high school (26 percent versus 72 percent).

Contraceptive prevalence among Iranian women also varied greatly according to women's age and their number of living children. A larger proportion of women older than 35 were contraceptive users (39-45 percent of those aged 35-44), as were women who had more than four living children (43 percent).

6.1.1.2. Programme effectiveness

Despite the programmes described above, at the dawn of the Islamic Revolution in Iran, fertility levels were still relatively high in comparison to the industrialised and semi-industrialised nations, or even in comparison to some Asian countries such as Sri Lanka or Malaysia (Economic and Social Committee on Asia and Pacific, 1977: 13). In 1976, the crude birth rate was estimated to be 41.5 per 1,000 people (Aghajanian, 1988: 160). The government's attitude toward family planning changed from one of availability of contraceptives through the commercial sector in the early 1960s, to active government concern with the distribution of contraceptives through public clinics in the late 1960s and early 1970s and with mass education.

The positive outcome of population control policy is women's access to birth control; there are, however, some probable drawbacks. Considering the unethical practices of pharmaceutical industries in developing countries, bombarding women with old contraceptive devices is an alarming possibility. The lack of supervision and safety of the purchased products were a problem never seriously tackled in the pre-Revolutionary era (Sansarian, 1992: 7). There is evidence that women who used the pill, especially in rural areas, suffered from varying ailments, but doctors and health practitioners showed little interest.

Clinics were so eager to distribute the pills that they failed to properly instruct and prepare the users, thereby leaving them with ill-conceived notions and an incorrect sense of how to utilise the contraception.

(ibid: 8)

Mossavar-Rahmani (1983: 255) argues that:

unlike many other forms of modern technology that poured into the country, these devices were not put to proper, intelligent, or effective use.

Lieberman (1979: 308) drew attention to another point and argues that family planning programme in pre-Revolutionary era suffered from the overall neglect of rural areas in the allocation of development expenditures.

Nortman (1972: 9) argues that the geographic and climatic conditions in Iran, its lack of roads and communications, and the difficulties of delivery of health services in remote areas did much to explain the problems, which hindered the programme.

However, the principal impediment to inter-agency co-ordination in Iran was that no single organisation was equipped with adequate rewards and/or sanctions to overcome the strong inter-ministerial autonomy and rivalry which is so often the norm. In the meantime, each agency was moving ahead on its own, giving a pluralistic aspect to the national family planning effort which could, paradoxically, be a source of certain strength and vigour, in the short run (Moore et al, 1974: 402). The programme's stated goal in the Fifth Five-Year Socio-economic Plan (1973-1978, before the Revolution) was to decrease the annual population growth rate to 1 percent within a twenty year period (Plan and Budget Organisation of Iran, 1973). This goal proved too ambitious. Moreover, the continued pattern of uneven development, centred in Tehran and in a few other provincial capitals, did not provide the complementary conditions for efficiency in the family planning programme (Aghajanian, 1988: 155). This problem was much more serious in the neglected rural areas.

Despite considerable improvement in the GNP and per capita income in 1970s, infant mortality remained very high at least partly due to the inequitable distribution of public services (Hoodfar, 1994: 12).

6.1.2. Family planning programme in Iran (1979-1988)

The Iranian Islamic Revolution, which deposed the Shah in 1979, was a turning point in the social and economic history of Iran. One year later, Iran became involved in an imposed war with Iraq, which drained a significant portion of the country's social and economic resources, at the expense of infrastructure development and the provision of social programmes. Furthermore, the new Iranian government did not formulate an explicit population policy, and on some occasions, the family planning programme was charged with representing imperialistic sabotage (Aghajanian, 1989: 230). The Iranian leaders believed that this imperialist conspiracy would violate the rights of the Islamic nation and impair its growth and prosperity. This view was put forward by the Iranian delegation at the international conference on population and development which took place in China in 1981 (Kayhan, 31 Oct. 1981).

Some leaders, including Prime Minister Mousavi, considered a high population the sign of a strong nation (Obermeyer, 1994: 41). The government therefore officially encouraged early and universal marriage, and further lowered the

minimum marriage age (Kian, 1995; Afshar, 1997). Several important factors contributed to the increase in the fertility level and consequently in enhancing in the population growth rate during the decade 1976-1986 especially during the years 1979-1983. These included the enactment of laws and regulations encouraging women to have more children. Aghajanian (1988: 161) argues that women were encouraged to have additional children so as to contribute to the victory of Islam and later, to increase the number of soldiers of Islam. The Revolutionary beliefs of people themselves encouraged them to have more children. Among other reasons are the promotion of hopes for the future such as allocations of ration coupons on the basis of family size and expectations from the government to provide for health, food and education and finally the economic depression resulting from the Iran-Iraq war. Although this was not a deliberately pro-natalist policy, it operated as an incentive for having more children. What actually occurred after the Revolution was the disintegration of the existing family planning programme and a lack of interest in promoting small families. Also, when contraceptive supplies ran out, they were not replaced, and shortages resulted. Hoodfar (1995: 108) asserts that within a few months of the Revolution, the price of the contraceptive pill shot up from 50-100 *rials* to a minimum of 1,000 *rials*, and even at that price they were sometimes impossible to find.

Then supplies became erratic and prices skyrocketed. This post-Revolutionary climate created significant demographic changes. The population grew at an average annual rate of 3.8% during 1976-1986 (Statistical Yearbook of Iran, 1989). The influx of 1.8 million Afghan refugees between 1980 and 1986 undoubtedly contributed to this high rate, but other factors were also important.

Declines in infant and child mortality, especially during the 1980s, also contributed to population growth. The rate of infant mortality was about 112 infant deaths per 1,000 live births in 1973-1976 (Iran Statistical Centre, 1990). Estimates from the 1986 Census place the rate at 88 infant deaths per 1,000 live births in 1980, and at 68 per 1,000 in 1986 (United Nations Population Division, 1992), indicating a decline during the 1980s. (By 1992, the infant mortality rate had dropped to 43 deaths per 1,000 live births and 26 in 1996, an overall decline of almost 75% from 1976) (Population Reference Bureau, 1997). This rate (43 in 1992) is low compared to some countries like Turkey whose infant mortality rate is 58, but still high compared to

some developed countries like the United States and Japan with infant mortality rates of 9 and 7 respectively (World Bank, 1993).

The decline of infant mortality has been very significant in reducing the birth rate in Iran. Based on research conducted by Aghajanian et al (1996) in 1976, women in the 15-19 age group reported only 76 percent of children born live alive at the time of research. In 1987, 93 percent of children ever born to women in the 15-19 age group were alive. A similar trend in the rate of child survival is apparent from other age groups. But since most of the decline happened in recent years, it is more evident for the women in the 15-19 age group. This increase in the survival rate of children was one of the factors involved in the high growth rate of population in Iran during the 1980s. A linear relationship is found in Aghajanian's survey of age of marriage and number of children ever born. Women married at age 14 or less have on average 5.5 live births. Women married at age 25 and older have 1.6 live births less than women married at age 14 and younger.

The crude birth rate increased markedly over the period (1976-1986), rising from 43 per 1,000 population in 1976 to 48 per 1,000 in 1986, while the total fertility rate (TFR) increased again from 6.3 lifetime births per woman in 1976 to 7.0 in 1986. This jump in the TFR occurred, largely because of increases in age-specific fertility rates (ASFRs) among older women. For example, the ASFR among those 30-34 years old rose from 242 births per 1,000 women in 1976 to 274 births per 1,000 in 1986. The ASFR among 35-39 year olds rose from 169 to 211; and the rate among 40-44 year olds increased from 85 to 112 during the same period (Aghajanian, 1991: 703-710).

By 1986, the high birth rate and increase in population, together with the depressed economy and massive migration from the war zones to Tehran and other major cities, placed considerable demands on the government. The 1986 Census indicated that Iran's population had reached 50 million. However, by 1988, the government started to perceive long-term problems, in that such a large, fast-growing population would place high demand on food, health, education and employment. In February 1988, therefore, Prime Minister Mousavi issued a statement to cabinet members that reinstated population as a policy issue. The following month, a conference committee was formed within the Iranian Plan and Budget Organisation, made up mainly of government economists along with several demography professors, to organise a population seminar for later that year. To facilitate the

committee's work, Prime Minister Mousavi issued a memorandum to all government ministries officially announcing the government's reconsideration of 'the issue of population growth'. One of the key outcomes of the three-day conference in 1988 was a consensus statement on the negative effects of Iran's high rate of population growth. The conference participants strongly urged the Islamic government to institute a national family planning programme and policy (Plan and Budget Organisation, 1990).

In a press conference, the Secretary of Health announced the Islamic government's intention to create a family planning programme and reiterated Ayatollah Khomeini's *fatwa*²¹ on family planning. He publicly asked women interested in preventing unwanted births to seek care in government health clinics and centres around the country (Marandi, 1988: 4). The announcement, justified in theological terms, paved the way for the reformulating of population policies over the next few years. By 1988, the subject of over-population and its dangers, on the national and international scale, had found its way into the political speeches of various leaders.

In 1988, during a common assembly, Medical School directors and representatives of religious leaders acknowledged the uncontrolled rate of population growth and argued that it had harmful effects on social and economic development. The result of this assembly was their suggestion to the government to devise and effectuate a comprehensive programme of family planning.

Amani (1995: 33) states that in 1988, after the ratification and promulgation of the Ministerial Decree authorising birth control, the Islamic Republic of Iran undertook an intensive programme of family planning which was even more rigorous than that seen before the Islamic Revolution. Information campaigns for the general public and for responsible offices were undertaken by all available means.

In 1988, the Islamic government introduced a bill for population control and a year later a five-year programme was announced to curb the explosion. A sharp, anti-natalist reversal took place in 1988.

Despite the announcement of an official commitment to a national programme, the programme could not get started until after a December 1988 ruling

²¹ Ayatollah Khomeini had issued a *fatwa* (an Islamic directive) in 1980 that approved of birth control as long as the mother was not harmed and abortion was excluded.

by the country's High Council. This cleared the way by affirming that "Islam does not pose any barriers to family planning" (Speaker of the High Judicial Council, 1988: 4).

6.2. The Family Planning Programme in the First Five-Year Socio-Economic Development Plan of Iran (1989-1994)

After the war with Iraq, a National Seminar on Population and Development was held in 1989. As a result of a general amelioration of the economic conditions, the question of population and the economic and social bottlenecks arising from disproportionate growth of population once again became the prime concern of the discussion about economic and social development. The first turbulent decade after the Islamic Revolution had seen policies of controlling the rapid growth of population abandoned. This led to an unprecedented acceleration of population growth, therefore the government and the executive organs and planners took up the issue of population seriously from 1988 in the framework of socio-economic development plans of the country.

In 1988, the family planning programme, after almost a decade-long hiatus, was reactivated and had become an integral part of a comprehensive health programme called the Primary Health Care (PHC) network. The development of Iran's PHC is characterised as a silent, but visible revolution in the health care delivery system (UNICEF, 1990). This programme has been supported and well appraised by such international agencies as WHO, UNICEF, and UNDP.

The seriousness of the government's commitment was evident in April 1989. In a speech by Prime Minister Mousavi, he stressed that:

none of the government programmes [for development and social welfare] work without a serious family planning programme, explicitly referring to the need to solve the population problem and characterising the numbers as 'alarming for the future.
(Mousavi, 1989: 4)

Hoodfar (1994: 12) argues that:

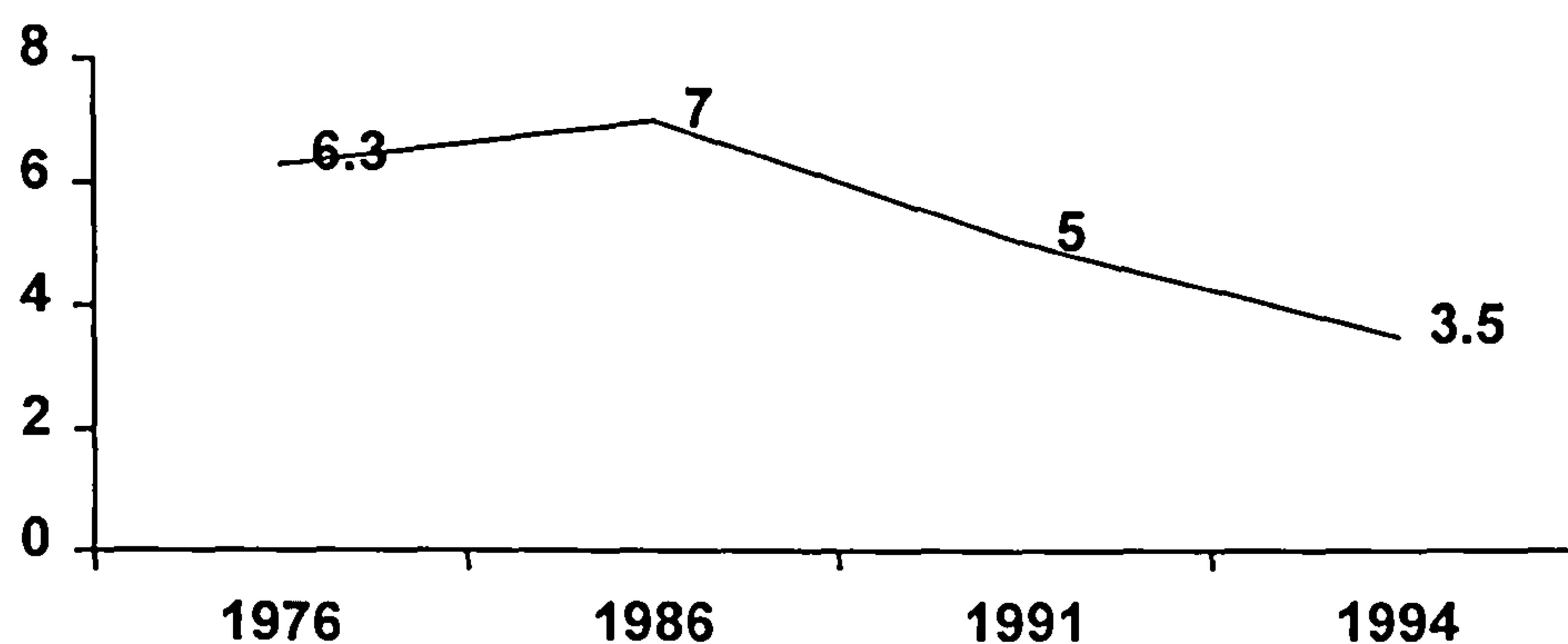
religious leaders and experts used accessible language to show the importance of self-sufficiency for an independent nation, so that it would not become a slave to the whims of imperialist powers.

The national family planning programme that was eventually started in December 1989 had three primary goals: to encourage birth spacing intervals of 3-4

years; to discourage pregnancies among women younger than age 18 and older than 35; and to limit family size to three children (Kalantary, 1992: 1).

The results of a sample survey conducted by the Ministry of Health showed that during the years 1988-1993, the total fertility rate had a downward trend, dropping from 5.2 children per woman in 1988 to 3.6 children in 1993. (Diagram 6.1 shows a downward trend of total fertility rate of 5.6 in 1985 to 3.5 in 1994 (end of the FFYDP).

Diagram 6.1: Total Fertility Rate (1976-1994)
Islamic Republic of Iran



Source: Family Planning Department of Iran, 1995

Political and financial commitment has increased since 1989, and population size is now viewed as a serious obstacle to development by all levels and branches of government. The ideal of limiting family size to two or three children, and thereby increasing the 'quality' of each child, has been widely publicised. Government officials, religious leaders and special religious television programmes have reinforced and promoted family planning and its effects on the quality of life.

In an attempt to prevent the kind of criticism directed at the pre-Revolution family planning programme, the Islamic government had paid the utmost attention to defining family planning as the prevention of unwanted pregnancies in order to improve families' and society's physical and social health. Hoodfar (1994: 12) argues that:

the population policy of the Islamic Republic differs from the pre-Revolution programme in many important ways. The Islamic Republic has achieved considerable success in convincing the population to accept and practice family planning through a

powerful consensus-building campaign by establishing an effective network to provide affordable and reliable contraceptive means.

With considerable co-ordination, political and religious leaders frequently discuss the importance of the population question and family planning in public. Major social issues are discussed and the government's political and ideological lines are publicly defined in nationally televised speeches, particularly in the Friday Sermons. Using accessible examples, public speeches communicate that in Muslim society, individual decisions have always been taken with much concern for the public interest and, moreover, that the community tries to respect the rights of individuals. The attention paid to all sectors of society is another difference from the pre Revolutionary programme. It is argued that just as no government can legitimately demand that its citizens not have any children at all, families cannot have as many children as they please since the government, and by implication the public, bears much of the expense from the time a child is conceived throughout his or her life. Therefore, if Iranians want to build an able, intelligent, educated Muslim nation they must find a balance between their individual desires as parents and what society can afford. All conclude that the way to make a happy family and a successful Islamic nation is to have few, but educated children.

In 1991, the government stated its 20 year goals as: reducing the annual crude birth rate to 28 per thousand; reducing the rate of population growth to 2.2 percent; and increasing the proportion of married women using contraceptives to 44 percent (Malek Afzali, 1992: 62). In this way, population-related policies and in particular the policy of adjusting the population growth rate through reducing the level of fertility gained a particular status in the First Five-Year Development Plan (1989-1994).

Since 1989, the Islamic Republic of Iran has adopted and implemented a range of population policies. These include general education and refresher courses for physicians, experts and health personnel and the integration of family planning services into overall health/medical services. All were given the full support of the parliament (*majlis*) and the government. The implementation of the above policies, along with free and expanded provision of various contraceptives has led to significant achievements.

To achieve more effective implementation of the family planning programmes in FFYDP (89-94), a new department was established in the Ministry of Health

entitled the General Department for Population and Family Planning. This department is responsible for the implementation of policies pertaining to family planning and fertility regulation in the country.

At the present time, population policies have been integrated into the First and Second Development Plans of the country and are being implemented in all sectors by ministries and related organisations. The Plan and Budget Organisation is in charge of preparing the development plans and through consultation and exchange of views with different organisations and ministries aims to integrate the population policies and objectives into the development plans of the country.

In 1990, the Council of Ministers approved the creation of the Department for Population and Family Planning and its implementation. This decree requested the participation of the following ministries and departments: the Ministries of Health, Labour and Social Affairs, Education, Culture and Higher Education, Culture and Islamic Guidance, Plan and Budget Organisation, the Department of Registry and the Islamic Republic of Iran Broadcasting. This led to the organising of educational programmes for the general public, increasing the access of the population to free contraceptives, and conducting research.

Other aspects of the 1990 Decree mandate various ministries and government organisations to increase public awareness of Iran's population problems. This is done by, for example, incorporating material on population and maternal and child health into textbooks (Ministry of Education); making a one credit course, 'Population and Family Planning course', is a general requirement for graduation in all higher education institutions (Ministry of Education); creating information materials, including films, to inform the public about these issues (Ministry of Culture and Islamic Guidance); and producing radio and television programmes to increase knowledge on the topic (Iran Radio and Television Organisation).

Tackling the problem of the accelerated growth of the country's population required the co-ordinated collaboration of a variety of organisations and institutions, both governmental and non-governmental, in effecting a comprehensive population control programme. The support of the Council of Ministers and the parliament of the Islamic Council are therefore essential in this context. Consequently, the Population Control and Family Planning draft resolution was prepared by the government and presented to Parliament. On May 17, 1990, the project was ratified by parliament and

later approved by the High Council of Guardians. This demonstrated a clear political commitment on the part of the government to engage in family planning activities.

6.2.1. Laws pertaining to family planning

Because of the perceived problems associated with high rate of population growth in Iran, the Iranian government changed its population policy in 1988. After that, initiatives in population policy included disincentives to having families of more than three children. On April 22, 1993, the Iranian parliament (*majlis*) approved a law proposed by the executive branch of the government of the Islamic Republic of Iran (Malekzadeh, 1991: 4). The specifications of this law, which came into effect one year later, included: no paid maternity leave for the fourth or higher order births; no government-subsidised day care for female employees for the fourth or subsequent children, no ration coupons and no government subsidies for health insurance premiums for fourth or higher order children. Any family that chose to have a fourth child would have to share out its resources and spread them more thinly, with no help from the state.

Iranian government has introduced measures, which are potentially very coercive. In Iran, at the birth of a third child, parents sign a commitment not to demand any services from the Registry Office which issues an identity card to the new born child. If the new-born child is the fourth in the family, the Registry Office in theory does not issue the child an identity card. A person who does not have identity card cannot travel or enter a job and is not entitled to civil and political rights. However, this has not been carried into practice, i.e., they do get cards. Incentives can help transfer to parents more of what society gains if the parents limit family size. But incentives and disincentives, particularly long-term or deferred incentives, can be costly and difficult to administer. Badly designed schemes may exert undue influence on the poor or uneducated and may penalise children, who have no control over parental decisions. Children will suffer because of their parents' decisions. For example, levying higher charges for the medical care and schooling of fourth and subsequent children may cause parents to have fewer children, but it may also result in lower quality care for children who, through no fault of their own, are born late into large families. The complete Population Control and Family Planning Act (1993) is provided in Appendix I. In practice, it is not known how far the Act is enforced by the government and needs more investigation.

6.2.2. Family planning networks in the FFYDP (1989-1994)

The family planning board is now a major division of the Ministry of Health, directly under the control of the minister. Structurally, it is divided into three subdivisions: a centre for research on family planning, a centre for studying the legal and ethical aspects of health regulation in relation to family planning and population control, and the family planning service, which is the largest and most important section.

In 1990, the Iranian Deputy Health Minister announced plans to import large quantities of contraceptives for free distribution to women in health centres, and promised that hospitals and health centres would sterilise women free of charge (FBIS-NES, April 1990: 41).

In the autumn of 1991, Mohammed Hosain Badaksh, director-general of health services for the Province of Tehran, announced a plan to establish an extra 90 health houses and 50 new hospitals in the capital city of Tehran (Ramazani, 1993: 415). The health clinics inform and counsel families in birth control methods and present them with choices of contraception, including the pill, condoms, IUDs, tubal ligation, and vasectomy. By April 1992, throughout the country, there were 400 clinics providing and distributing family planning services (Assadpoor, 1992: 4). The Iranian Ministry of Health is in charge of the revitalised family planning programme. The family planning programme is offered along with other health care services through the public and private sectors.

6.2.4. Budget

The government's financial commitment to family planning has increased steadily since the programme started in 1989, when no specific budget was appropriated for family planning activities. By March 20, 1991, a total of 1,200,000,000 *rials* (about US \$ 17,142,857) had been spent on the programme (Khazi, 1991: 4). In January 1992, the President of Iran designated an extra 50,000,000 *rials* to the budget (about \$714,286). By 1993 the Ministry of Health had its own population control bureau, with a 20 billion *rials* budget which was 300 per cent higher than that of the previous year. It was mainly spent on the purchase of contraceptives, educational programmes, sterilisation and purchase of technical equipment and facilities (Family Planning Department, 1994: 27). In 1994, the government allocated a 28 billion *rials* budget to the family planning programme,

which was 40% more than the previous year. Moreover, an additional \$30 million loan from World Bank has financed the construction of 623 rural health centres that will add to the number of places offering family planning and primary health care services (Namaki, 1994: 4). The annual budget allocated for the programmes has been increased regularly. In 1996, nearly \$10 million were added to this budget line (Family Planning Department, 1996: 24).

6.2.3. Public and private sector provision

At the core of the health services network lies the Health House through which two thirds of the rural population is covered. Health Houses integrate family planning services with the delivery of comprehensive primary health care and cover 1500 people on average (UNFPA, 1990: 6). Health Houses are staffed by two local health workers (*behvarz*), one male and one female, who provide these services and are recruited and trained locally and are under the supervision of the physician and other personnel from the Rural Health Centre. With the creation of household files for all the villagers, they actively follow up on all cases. Data is recorded in log-books (daily activities). Every Health House covers one or more villages. A village lying along the route of the villagers and being accessible to a larger population is usually chosen as the main village and the site for the establishment of the Health House. Health House, usually being located at a maximum of one-hour walking distance covers other villages known as satellite villages. Motorcycles are provided for Health Houses to be used by the *behvarz* to follow up those clients who do not come. *Behvarz* are selected from young and interested villagers. Their training lasts two years in which theoretical issues are taught in *behvarz* training centres and practical education in Health Houses under the supervision of trainers from the centres (personal interviews with the doctors, 1997). Also, in recent years there have been some Rural Midwives who act as family planning advocates and provide family planning information to the villagers. This programme has proved to be extremely effective in reducing maternal and child mortality and increasing the contraception prevalence rate in rural areas (Family Planning Department, 1996: 20) (figures referring to the research conducted by Aghajanian et al, 1996: 59-70). At the beginning of each year, a sample survey of contraceptive users is carried out through the main and satellite villages by the *behvarz*. The surveys give some information about number of contraceptive users and also the number of new acceptors. Pills and condoms are distributed through the

Health House where women of reproductive age are provided with family planning education as well as contraception. In rural areas and smaller communities, information and discussion sessions on population and birth control methods are held in Health Houses or in local mosques (usually because there is no clinic or its space is limited).

The number of centres has fallen short of the government's goals. In the early 1990s, the 16,654 existing health centres provided for only 63 percent of estimated need, and about 21 percent of rural centres were not yet served (Malek Afzali, 1992: 19-20). However, a World Bank loan financed the construction of 623 Rural Health Centres that will add to the number of sites offering family planning and primary health care services (Namaki, 1993: 2).

In addition to monitoring the activities of Health Houses, Rural Health Centres take on cases referred by Health Houses and at present are responsible for IUD insertion and injectable contraceptives. Individuals requesting sterilisation or implants are referred to hospitals. Each Rural Health Centre (RHC) is village-based, covering one to five Health Houses under its supervision and serving approximately 7500 people. It is staffed by a physician, several health technicians, and administrative personnel who function under the physician's supervision. Programmes are currently under way to enable Rural Health Centres to perform sterilisation and implants.

Urban Health Centres are responsible for providing the family planning activities performed in rural areas at the Health House and the Rural Health Centre. The urban inhabitants can receive primary health care facilities through Urban Health Centres, which have the same personnel as Rural Health Centres and cover approximately 12,000 people. The District Health Centre is a managerial, planning and supervising centre, which supports the preventive and curative health care system in the district. The directors of the centres are responsible for co-ordinating curative care. Each District Hospital acts as a general hospital, which also accepts referral cases from rural and urban health centres. Tubal ligation, vasectomy and implants take place in hospital. There is also a mobile team for sterilisation of rural inhabitants, which performs operations in the Rural Health Centres periodically.

Nurses play a key role in providing family planning medical services in public centres. They are expected to (i) maintain medical records on all clients, (ii) perform initial medical examinations for new clients, (iii) supply clients with the contraceptive methods and explain proper use and side effects, (iv) conduct the necessary medical

follow up and periodic re-examinations of clients and (v) and providing family planning information (personal interviews with the nurses, 1997).

The private sector plays an important role in providing contraception, especially in urban areas. It comprises private practices and private hospitals. With the aim of encouraging sterilisation, a portion of the expenses incurred by this procedure is reimbursed by the government. However, there are no other subsidies to the private sector associated with family planning. Mostly, well-to-do families use the private sector, even though they have to pay for the facilities they receive whereas, in the public sector, people do not pay. The reason behind this is that they think that better contraceptive devices and good attention can be provided for them in the private sector, which is usually the case. Hoodfar (1995: 115) argues that both the family planning campaign and its public services are directed primarily at the low-income segment of the population. The unstated assumption is that the more affluent couples can afford private services, and in any case, their children are considered less of a public burden and thus family planning for these couples is not such a public concern.

According to a survey conducted in 1992, 50 percent of pill, condom and IUD users in urban areas obtain their contraception from the public sector, whereas in rural areas, the corresponding rate for the pill and condoms was 80 percent and for IUDs 60 percent. Seventy percent of the urban population and 85 percent of the rural population used a public health facility for sterilisation (Family Planning Department, 1993: 10).

6.2.4. Contraceptive prevalence in the family planning programme during the FFYDP

The technology and methods of birth control play a vital role in family planning programmes. While these methods are not widely available nor adequately subsidised, fertility cannot be controlled. As the year 1989 was declared 'Birth Control Year' in Iran, the United Nations Fund for Population Activities (UNFPA) was asked to assist Iran with its birth control projects and large quantities of birth control devices (mostly pills and IUDs) were purchased. However, other methods were not available to all women. As Malekzadeh (1991: 4) states new methods such as implants and injectables were available by the early 1990s on a trial basis in some urban clinics. According to the World Bank's report, in 1990, 7.1 million cycles of pills and 20.5 million condoms were distributed; in 1991, these numbers increased to

8.5 million cycles of pills and 32.3 million condoms. In 1990, 122,000 IUDs were inserted and this number rose to 204,000 in 1991. Finally, in 1990, 93,000 cases and in 1991, 188,000 cases of sterilisation were reported (Paydarfar et al, 1995: 82-83).

The programme has encouraged both male and female sterilisation, with publicity emphasising vasectomy's safety and lack of physiological or psychological side effects, and the programme has trained general physicians to perform vasectomies (personal interview with Dr. Asaee, Head of the Family Planning Department in Iran, 1995). In July 1991, the Minister of Health, Dr Reza Malekzadeh suggested to husbands that they should choose to have a vasectomy (1991: 4). The major complaint is that there are not sufficient specialists, particularly women, to perform female sterilisation, and consequently there is a long waiting list for the procedures. In Iran, most women are unwilling to expose themselves to a male gynaecologist. One nurse pointed out that they send forms to factories asking working men to come to the clinics for a vasectomy. However, most of the nurses mentioned that many men are reluctant to undergo vasectomy because they think that it will endanger their authority in the family (personal interviews, 1997).

In the case of sterilisation, Iranian specialists evaluate vasectomy to be easier and cheaper than tubal ligation, since men can be released from the hospital just hours after the procedure, and the possibility of successful reversal is relatively high. Yet men demonstrate a stronger resistance to vasectomy, even at higher ages and after having fathered several children. Research in Tehran Province has estimated that the ratio of male to female sterilisation (vasectomy versus tubal ligation) is less than 1: 5 (Ministry of Health, 1992). The newspapers published the list of fifty hospitals in the country offering free vasectomy and female sterilisation.

Figures show that the contraceptive prevalence rate increased remarkably from 21 percent for rural and 31 percent for urban in 1989 to 49 percent for rural and 53 percent for urban in 1994 (by the end of the FFYDP) (Paydarfar et al, 1995: 84).

Hospitals are in charge of cases requiring sterilisation or implants. Family planning clients receive routine check-ups and advice on contraceptive methods. Due to a lack of trained personnel, the adoption of IUDs in small communities is often problematic. The majority of clients chooses the pill and is provided with a monthly supply of pills or condoms. They are expected to return every month for a check-up and to renew their supply. Apparently, this procedure is aiming to monitor women's fertility, but as their supply and budget are limited, officials use this strategy to ensure

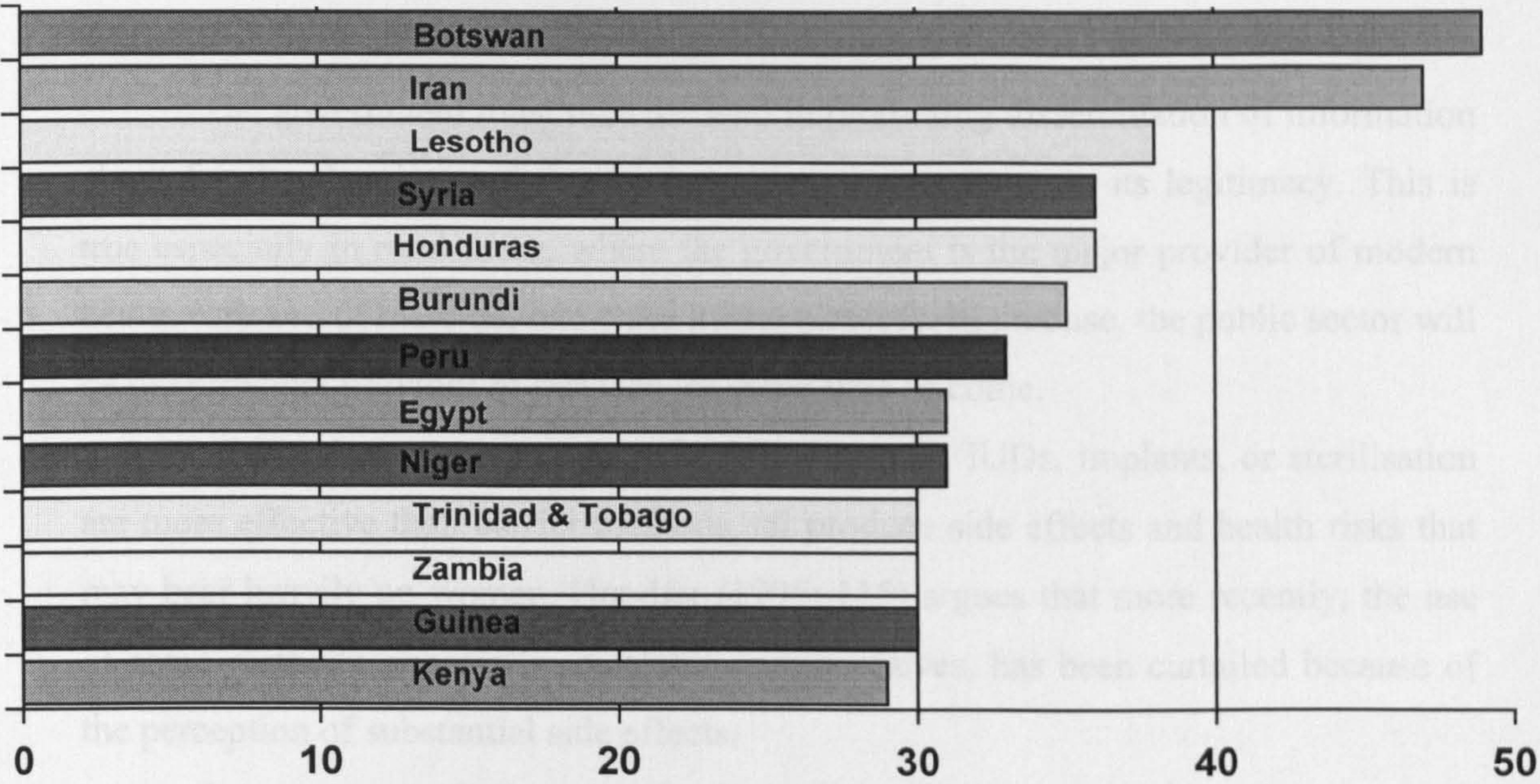
that only those who are committed receive supplies. Transportation and communication problems, however, mean that women can not always return to the clinics on time. Since irregular use decreases reliability, it may be more effective to shift to a two-month supply and return approach.

Efforts have also been made to strengthen the technical capability of the existing clinics. Apart from family planning services, other components of reproductive health care, such as prevention and treatment of reproductive infections, treatment of infertility, and provision of routine screening for cervical and breast cancers have been added to the national family planning programme (Family Planning Department, 1996: 19). A manual on reproductive health services has been prepared by the Ministry of Health indicating the responsibilities of various health care personnel. The main objective of the manual is to facilitate the delivery of comprehensive reproductive health services.

The necessary technology and methods of birth control play a vital role in implementing effective family planning programmes. If these methods are not widely available or fully subsidised, fertility is much less likely to be controlled.

Based on a research done by Population Action International (CQ Researcher, 1993: 604), between 1987 and 1992, Botswana and Iran made the most progress in providing access to birth control, according to a study of 124 countries. Each country was scored on a scale from 0 to 100, measuring such factors as the availability of condoms, IUDs, etc. and the quality of birth control information availability. (see Diagram 6.2)

Diagram 6.2: Providing Access to Birth Control



Source: CQ Researcher, 1993

Sinding et al (1997: 3) argue that a rise in 15 percentage points in contraceptive prevalence is associated with a decline of around one point in the total fertility.

Despite much effort in disseminating information, reliable and efficient use of contraceptives (particularly the pill) has not yet reached its optimum level. One 1991 study covering 1,000 urban and 1,000 rural households in Tehran province, where the public is assumed to have easier access to information than in many parts of Iran. The study indicated that over 25 percent of participants, both rural and urban, and a considerable number of literate women, took the pill either every other night or only before intercourse. This was one of the issues raised by Dr. Asaee in my personal interview. The figure is as high as 50% for those receiving pills from the private sector (Family Planning Department, 1996: 28). Surprisingly, correct use among those who receive their pills from rural setting is slightly higher than those who receive them from urban facilities (71.8 and 67.2 respectively) which suggest the efficiency of the rural settings, namely the Health House. As well as a lack of information, other reasons for such behaviour varied from hoping to reduce possible side effects to trying to stretch their supply of pills.

Coitus interruptus or *azl* is still one of the most common methods of contraception in Iran, although there is no effort at all by the government to promote this method.

The government must take the lead in promoting dissemination of information about family planning and developing a social consensus on its legitimacy. This is true especially in rural areas, where the government is the major provider of modern health care and of maternal and child health services. In practise, the public sector will be the principal provider of services for some time to come.

Although modern contraceptives like the pill, IUDs, implants, or sterilisation are more effective than barrier methods, all produce side effects and health risks that may bear heavily on women. Hoodfar (1995: 115) argues that more recently, the use of some methods, especially injectable contraceptives, has been curtailed because of the perception of substantial side effects.

In some cases, IUDs are in conflict with religious beliefs. Three of the nurses interviewed pointed out that IUDs often increase menstrual flow, stretching period duration and causing interval bleeding which causes problems for women wishing to perform prayers or fast (personal interviews, 1997). For families that have completed child bearing, sterilisation is a virtually permanent way to halt fertility. For governments, it represents a one-time cost, without need for follow-up procedures and associated administrative costs.

Kaufmann (1991: 265-292) argues that one cultural constraint for implementing family planning programmes is the attitude of men. In Iran, both technical literature and government statistics show that men continue to play a major role in preventing pregnancies.

Continuing male authoritarianism and anxiety over losing control over women may account for the plateau that plagues some family planning efforts. In a Mexico study done by Staudt (1991: 250), using 44 same-sex focus groups, that included attention to sex-role attitudes, men's and women's views reveal some striking cultural props that favour male authoritarianism. For example, women expressed concerns that husbands' sexual gratification would diminish with contraception and that their self-esteem would be damaged. Men were concerned with loss of authority over wives and family, with women freed from submissive, traditional maternal roles, and fears of unfaithfulness were also expressed.

Hoodfar (1995: 118) asserts that some of her Iranian women informants expressed outright hostility to the selfish attitude of men who expect women to have a tubal ligation after two or three children, so the male can have worry-free sexual pleasure. In explaining why they thought men were reluctant to consider vasectomy, women frequently said men were worried that the operation may render them impotent. A few said their husband would do it if he were not worried that other men would make fun of him and call him 'hen-pecked' (research carried out in 1993 with a core sample of 120 women).

Health Survey Research Project in Markazi Province in 1992 indicated that only 12.1 percent of men in the Province used condoms or had had a vasectomy, compared with 49 percent of women who use the pill, or IUD, or had had a tubal ligation (Family Planning Department, 1992: 29). Citing data from Africa from 1973 to 1983, Bruce shows that women's mortality rates for sterilisation are four times those of men, and debilitation and costs to the users more serious for women than men (Bruce, 1987: 359-383). Yet world rates of female sterilisation are several times that of male vasectomy.

Implants that release hormones require medically based insertion and removals, leaving users dependent on a few, possibly inexperienced staff (Hartmann quoted in Staudt, 1991: 262).

Implants are not common contraceptives in Iran. In my personal interview, some of the nurses said that they could not remove implants easily and consequently demands for this method has been decreasing. In an Indonesian example, many Jakarta clinics did insertions, but only one clinic did removals, leaving users dependent on few, possibly uncooperative staff (Hartmann, 1990: 198).

Although there is insufficient information to assess the efficacy of the hospitals and health centres, or their monitoring of the proper use and side effects of various contraceptive devices, women's access to information and the means to control their fertility has increased considerably.

In Iran in 1993, there were still quite a high number of families who do not use any contraceptive methods: 48 per cent of the rural and 26 per cent of the urban population of reproductive age (pregnant excluded) (Family Planning Department, 1996: 28). It is important to note that deputy Minister of Health, Malek-Afzali estimates that 30 percent of pregnancies for urban women and 25 percent for rural women in Iran in 1993 were unwanted.

What seems undeniable is that there is widespread support for family planning among themselves. In the largest health survey in Tehran in 1993, 92 percent of women said they agreed with family planning as defined by government (Family Planning Department, 1993). Hoodfar (1996: 33) asserts that “less than five percent of the 340 women we interviewed disagreed or were not sure that family planning was good for women”. However, as mentioned earlier, many users do not use contraceptives (particularly the pill) properly.

6.2.5. Family planning educational activities

Information and education about population issues and family planning can help influence attitudes toward favouring smaller families. A lack of information, due to undeveloped communication networks, is an important factor contributing to population growth. Sheykhi (1995: 72) states that during the FFYDP (1989-94), there has been a significant improvement in the availability of contraceptive technology and information in Iran.

Information can come as part of family planning programmes or through broader channels - public speeches, group discussions, the press and radio, theatre, films, schools. Information programmes can explain the benefits to the nation, family, and individual of having fewer children. Many information programmes emphasise that modern contraception builds on the tradition of child spacing. Such programmes help establish family planning as a normal aspect of development that respects the past, but responds to today's circumstances.

Since the beginning of the programme, there has been a proliferation of printed materials such as posters, leaflets and pamphlets, many of them aimed at a general audience. Training courses and workshops for programme managers, doctors, midwives and health workers have been conducted. Religious leaders have also been exposed to population and family planning issues through a number of seminars. Articles have appeared in magazines and newspapers, promoting family planning. TV and radio have broadcast population and family planning features, news and documentaries. At first these programmes were based on the assumption that there was considerable latent demand for contraception, so that if supplies and advice were made available at family planning clinics, people would flock to them. This assumption proved in many cases to be exaggerated, especially in outlying rural areas, and it became necessary to stimulate demand by ‘information, education and

communication' campaigns and to use 'outreach' methods to bring services to people outside the reach of clinics.

In soliciting community support, the nurses' responsibility is to create general awareness, understanding, and acceptance of the family planning programme. In some interviews, mostly in deprived areas, it seemed that nurses are not very enthusiastic toward their clients (interview with the nurses, 1997).

Some of the nurses interviewed pointed out that on the whole this process has not been successful, mainly because women's decisions are highly influenced by their family network, especially mothers and mother-in laws and in some cases even by neighbours in rural areas and small cities (personal interviews with nurses, 1997). The extent of such influence is clearly demonstrated in Table 6.1, where kin and neighbours are the most important sources of information on contraceptives, after husbands, in both rural and urban settings. Some of these may not support small families. Hoodfar (1996: 118) argues that:

many of their informants expressed their desire to have only two or three children, but said their mothers and in-laws had pressured them to have more children.

Fear of gossip and community disapproval, particularly in small communities, are strong deterrents against contraceptive use. Table 6.1 shows the primary information source of family planning among women in Markazi Province.

Table 6.1: Primary Information Source of Family Planning among Women Aged 15-49 in Markazi Province, 1995

	Urban n=69	Rural n=59
Health Professionals	3	19
Husband	35	30
Relatives	29	17
Public media	17	19
Others	16	15

Source: Reproductive Information in Markazi Province, Health Survey Research, Ministry of Health, 1995.

Considering the importance of women's kin relationships and the central role that older women play in the lives of young women, the effectiveness of the family planning programme would be enhanced by addressing older women and securing their support. Most of the nurses emphasised that creating the proper atmosphere for

developing favourable attitudes toward small families and toward use of contraception through using various communication channels, group meetings, and special events in the community to disseminate general knowledge and information about family planning is important. The nurses claimed that they try to eliminate any fear and misconception the clients may have about the use of the services, for example, some women think that birth control pills make them nervous or make them gain weight (personal interviews with the nurses, 1997). Also, as the nurses pointed out, there is a general unwillingness among people to discuss sexual matters openly in the family and among friends because it is still considered a very private subject. It is therefore much more difficult to provide sexual guidance and advice in Iran than it is in the West. This tradition leaves many problems unsolved, and harbours the potential for numerous mistakes being made.

To be effective, information programmes must be tailored to specific groups and social settings. Building a consensus means that information should be directed not only at family planning acceptors, actual and potential, but also at political and community leaders (including tribal chiefs), senior family members, and physicians, nurses, and other health workers. If political and community leaders, or the medical profession are not convinced of the need for family planning, they will discourage ordinary people and may even block the distribution of contraceptives²².

Another important issue is the decision-making process with regard to fertility behaviour, which is not well understood up to now in Iran. Many family programmes have assumed that the wife is the natural target audience, so that measures to gain family planning acceptance have been aimed at her. However, there is increasing evidence based on research on patterns of communication between husband and wife that appears to warrant a reassessment of this assumption. Studies done in Iran show the dominant role of the husband in family planning decision-making. It has been found that the husband's support for family planning, as perceived by his wife, is significantly interrelated with her contraceptive practice, as is communication about family planning matters between the couple. Sheykhi (1995: 83) argues that in Iran women whose husbands were more supportive of family planning were found to be

²² For example, in my meeting with the head of the Family Planning Department in Zanjan (1997), he believed in large family size and asserted that Islam is in favour of big families. It is a good example of how 'family planning' does not necessarily imply small families. In Mexico, 13% of mid-level clinic directors were opposed to any type of birth control (Staudt, 1991: 263).

more likely to have contraceptive experience and favourable attitudes towards family planning.

As previously indicated, the desire for children is not purely economically based, but could also stem from socio-psychological considerations, such as male dominance, the image of manhood and the prestige that it provides for the husband. In many surveys conducted in Iran, the percentage of husbands favouring family planning is generally lower than that of the wives. In Iran as in other developing countries it has been found that more females than males approved of family planning.

In the case of the Philippines, the ratio has been 85 percent for women and 63 percent for men (Weeks, 1989: 100). One of the most puzzling aspects of family planning programmes in developing countries to date is the high level of favourable reactions to family planning itself, and at the same time the low level of acceptance of its practice.

It seems that the Iranian government intends not only to meet demand, but also to create it through activities designed to accelerate social change. One of the tools for this task is the family planning programme's information and educational activities. The information and education area is probably the weaker feature of most family planning programmes, however, and for a good reason. The task of modifying people's attitudes and behaviour in such an important and complex area of their lives, especially without supportive socio-economic conditions, seems almost impossible to achieve. At the simplest level, for example, what does one say to what people, when, and how often, to influence their attitude and practice of contraception?

The broad scope of these activities focuses on providing information and raising the awareness of the public toward the advantages of diverse contraceptive methods. Given the high potential of fertility among young couples, efforts are directed especially at newly married couples, young workers, and junior and senior level high school students, in advocating from an early stage small families and the benefits of families with two children. However, targeting older people is also important.

6.2.5.1. Information to the general public through mass media

In Iran, family planning information is distributed through lectures, short communications, films and slides through radio and television programmes. There are

also panels on the sides of buses, permanent posters at the entrance and exit to cities, in streets with a high circulation, near cinemas, theatres, in parks, sport stadiums, railway stations, transportation terminals and so on.

The interviews with the nurses indicate that media campaigns can have a significant impact on attitude, contraceptive acceptance levels, and family size ideals on men. Press campaigns are active in discussing family planning issues, for example, women's magazines discuss methods of birth control extensively and recommend a wide variety of contraception including withdrawal, child spacing, breast feeding, condoms, pills, IUDs and injections. The family planning policy has become a subject for cartoons and jokes in newspapers and journals. For example, Sara asks Maryam: "you have 19 children. Why do not you make the number even and have another child?" Maryam answers: "less children, better life" (one of the main messages of family planning programme enacted by the Iranian government) (Ettela'at, March 4, 1996).

Information about population issues and family planning has also been given through showing short films and movie spots in theatres. Exhibitions concerning population and family planning activities are also taken place. To influence attitudes towards smaller families, educational information has even come through posters and car stickers; compact messages on articles such as calendars, pens, key chains, bags, etc. (Family Planning Department, 1993: 11).

In an attempt to prevent the kind of criticism directed at the pre Revolution family planning programme, the Islamic government has paid the utmost attention to defining family planning as the prevention of unwanted pregnancies in order to improve families' and society's physical and social health.

6.2.5.2. Information to target groups

One of the ways to give information to women is by instituting postpartum programmes, which have been very important. These are associated with the government requirement to provide all women referred to health centres after delivery, who have just delivered in a maternity facility, or who have undergone a legal abortion, with family planning education (personal interviews with nurses, 1997).

The government has established pre-marriage family planning counselling centres throughout the country in order to advise the public on the advantages of

family planning and the availability of different contraceptive methods through the health services network. Attendance of pre-marriage counselling courses by young couples planning to marry has been compulsory in recent years (Family Planning Department, 1996: 22). There are family planning sessions for girls in the last years of high school. More than 400 pre-marriage counselling classes to increase young couples' knowledge about family planning have been established which reach some of those who are getting married (Family Planning Department, 1996: 2).

Family planning education to workers have being provided through workers' health houses. There are also sessions for male and female workers in larger industrial establishments. Developing programmes for administrators, directors and policy-makers concerning family planning are important. There have been many sessions held for them.

Also, materials related to family planning have been integrated into school textbooks in order to increase the awareness of schoolchildren. This is the responsibility of the Ministry of Education in Iran. These materials include population-related information, description of the advantages of family planning for the health of mothers and children, and the relationship of family planning to social, economic and cultural development. Population and the history of Islamic family planning are included in the national curriculum at all levels. Many of the textbooks used in public junior and senior high schools now contain population education material, although it is not known what, if any, influence this may have on the actual attitudes and knowledge of Iran's youth about population matters. There are plans to include information on family planning in adult literacy classes, many of which are held in local mosques. Although not all the attempts made by government have been realised, their existence indicates a comprehensive and sophisticated approach. There have been also some attempts by Ministry of Culture and Islamic Guidance to direct the activities of journalists, artists and media directors in providing a co-ordinated framework for the advocacy of family planning.

6.2.6. Scientific and technical programmes

Educational programmes addressing directors, health officers and workers in the health services network are in operation across the country. These programmes aim to upgrade the scale of family planning services offered.

There are other programmes which include establishing educational workshops concerning contraceptive methods, programme management, and data collection and analysis; and organising continuing education courses for physicians throughout the country on the latest contraceptive technology, in particular surgical methods and capsule implantation.

Providing family planning education in the framework of public health courses for students in the medical and paramedical fields is also important. There have been also some attempts to integrate family planning education in the curriculum of all university fields of study, in accordance with the decree issued by the Parliament of the Islamic Council.

They also organise international workshops with the participation of university professors within the country as well as internationally, in order to exchange information and viewpoints on the subject. Arrange travelling to other countries for professors, physicians and health centre directors and officers in expanding their knowledge with regard to family planning and the experience of different countries on the subject have also been of great concern.

Also government has worked hard to create a broad consensus on family planning at the national level, hosting several widely publicised national and international conferences on population in Tehran (Family Planning Department, 1995: 14). The policy of birth control also received a positive response from the Islamic women's movement. The proceedings of the conference on family planning which took place on the occasion of International Health Day in 1995, was reported extensively in women's magazines. The conference recommended that pregnancies outside the age of 18-35 should be avoided, that there should be at least three years gap between pregnancies and the number of pregnancies should be limited to a maximum of four for each woman (Zan-e Ruz, April 22, 1995).

6.2.7. Data collection, information feedback and research

Nation-wide demographic information is a public good that governments need as an input to a wide range of political, social, and resource allocation issues (World Bank, 1990: 60). Governments in virtually all countries take the leading role in sponsoring censuses, periodic sample surveys, and vital registration schemes. In particular, in the early stages of developing population policies and programmes, data collection and analysis are vital. Reliable data on population size and growth is

critical for generating public commitment to slower growth and for monitoring trends and effects of policies over time. Without accurate information policy makers will be willing to act only slowly and cautiously (ibid: 61). Information programmes need to be backed up by two types of research: collection and analysis of demographic data to provide the factual basis for information programmes, and analysis of alternative ways of getting population messages across. In order to provide quality services in an effective manner and to obtain a through coverage of the population, there is a need for continuous feedback through research. Data is required on the development of family planning services, the coverage of the population, and the limitations of existing programmes, which could lead to their ineffectiveness. Furthermore, the quality, advantages, drawbacks and the prevalence and extent of correct use of the different contraceptive methods must be assessed in the population. Since 1989, three sample surveys have been carried out on the attitudes of the population toward family planning services available, the prevalence and extent of correct use of the different contraceptive methods as well as birth and death rates. Details of these surveys are provided in the following section.

In addition to annual research on the progress of family planning programmes, data regarding contraceptive prevalence of the different methods and the population under coverage are collected and forwarded to the central headquarters of the health services network. This data is subsequently evaluated and the results sent back to the respective provincial organisations for feedback (Family Planning Department, 1994: 34).

Using the processed data, efforts are directed at strengthening the areas in which obstacles are encountered and limitations observed. Research findings can guide the design, monitoring, and evaluation of population programmes. High priority should be given to research on how to improve service delivery. Of equal importance is support for the evolution and adaptation of contraceptive technology that is suited to rural communities with minimal health infrastructure. Cultural values and attitudes that determine desired family size require sympathetic analysis if the aim is to help families to choose the small family size.

6.3. Surveys

One important aspect of the revitalisation of a national family planning programme in Iran has been an emphasis on data collection and analysis by the

Ministry of Health. From the onset of active implementation of the family planning programme in the country, the Ministry of Health was concerned with assessing couples' attitudes toward the family planning programme, evaluating existing programmes and establishing goals and strategies, based on sample surveys. Two principal country-wide surveys have been conducted up to the present day.

A. Survey of 1989

This survey was carried out among 4897 married women between 15 and 49 years of age in urban areas and 3979 in rural areas. This KAP (Knowledge, Attitudes and Practices) survey was important in that it established baseline data with regard to family planning issues. At the time of the survey, the principal contraceptive methods utilised were the pill, condom and IUD. According to the results, 73% of the women interviewed agreed with family planning and 49% were currently using contraception (Malekzadeh, 1991: 4).

B. Survey of 1992

This survey included 36,940 urban and rural married females between 15 and 45 years of age and attempted to measure contraceptive prevalence and practices by area (urban vs. rural). The significance of the survey was that it took into account sterilisation, which was added to the previously existing birth control methods. The result of the survey indicated that the programme had accomplished a great deal in its first few years. Slightly more than 65% of the sample were using a contraceptive method at the time of the survey, a proportion nearly double that recorded in the 1976-1977 IFS (36%) and about 16% higher than the proportion in 1989. The proportion of urban women who were current users was much greater than that of rural women (74% vs. 52%), although this rural-urban differential had narrowed somewhat, compared with that from the IFS (22 percentage points vs. 34). Contraceptive prevalence was especially high among women with four or more children. Nearly three-quarter (73%) of such women were using a method, with some variation by urban or rural residence (81% vs. 61%).

As in the past, the pill was the most popular method used by Iranian women in 1992, accounting for more than one-third (35%) of all use. Withdrawal (which despite its ineffectiveness, has been historically popular among urban Iranian women) is the next most commonly used method (31%). The remaining third of contraceptive use is

roughly equally divided between female sterilisation (12%)²³, the IUD (11%) and the condom (10%), with vasectomy accounting for just 1% of all contraception (Iranian Ministry of Health, 1993).

As mentioned earlier, the 1991 sample population survey revealed a population of 55.8 million, which indicates that the Iranian population grew at a rate of 2.5% from 1986 through 1991 (*ibid.*), a decline from the rate of 3.4% recorded for 1976-1986. While a postponement of marriage (mainly for economic reasons) probably contributed to this decline, the increase in contraceptive use resulting from the new programme seems to have played a part as well.

There is a lack of information on how many people favour or oppose family planning. These surveys almost totally neglected the socio-economic and psychological variables, which are crucial to family planning acceptance in Iran, since attitudinal change is difficult to achieve in societies like Iran where people adhere to values that undermine the practice of birth control.

6.4. Expanding the Family Planning Programme

The use of contraceptives can be considerably expanded by increasing their variety and decreasing restrictions on the use and provision of various methods. Younger women typically favour pills or barrier methods; older ones may prefer methods such as IUDs that are long-term, but not permanent. Sterilisation requires physicians and medical facilities, although it can be done through mobile clinics (World Bank, 1986: 55). In Iran, it is recent government policy that sterilisation can be done through mobile clinics in rural areas.

Rapid expansion of family planning will require constant reassessment of conventional approaches to family planning programmes in the light of Iran's needs. Information and services need to go not only to married women who already have a few children but also to men, unmarried and newly married couples, and older women who wish to cease child bearing altogether. Community-based distribution and other approaches that do not rely on highly trained staff in conventional clinic-based settings need to be expanded.

For fertility, the pace of decline probably depends primarily on each country's

²³Female sterilisation appears to be rapidly increasing in popularity. e.g, in just one year-from March 21, 1991, to March 20, 1992 - 200,000 women chose female sterilisation (see: Assadpoor, 1992: 4).

social and economic circumstances that affect demand for children, but also on the country's administrative capacity to supply family planning information and services. Indicators of demand include education, urbanisation, infant mortality, and per capita income (UNFPA, 1990). Indicators of supply include educational levels, the number of health workers and facilities per thousand populations, and an index of the strength of current family planning programmes. Institutional capacity (staff and facilities), infrastructure, the capacity of the government or of private organisations to share costs and ultimately, client demand play important roles in institutionalising family planning programme.

It seems that the health and fertility regulation programmes have a reciprocal impact on each other. Once the parents feel their children will survive and the necessary information is given to them for family planning, they are likely to show more willingness to receive services provided by the plan. Also when children are born at the proper time and wanted by the parents, they are likely to fulfil the need for their physical and mental growth. In Iran, religious leaders have emphasised the damaging effects of numerous pregnancies on the health of mothers and children. They argue that closely-spaced children do not get the attention they deserve. Several high-ranking theologians have argued that the government's plans to control the population do not violate Islamic law and have suggested that smaller families make it easier for parents to meet their children's needs (Ramazani, 1993: 415).

To expand family planning more rapidly, programme planners in Iran can broaden the clients served, broaden the choice of contraceptive methods, and emphasise outreach to complement clinical services.

6.5. Success of the Family Planning Programme

Two indicators can measure the successful implementation of the programme. The first indicator is the total number of new acceptors of contraceptive methods each year in comparison with projected targets. The second indicator is the total decline in fertility and population growth rates each year (Krannich & Krannich, 1980: 24).

Iran's population policy has been to some extent successful thus far in trying to reduce the extremely high rate of population growth. Infant mortality and life expectancy, despite the Iran-Iraq war and general state of the economy, have also improved considerably. Infant mortality fell to 34 per thousand live births in 1993, compared to the target figure of 35 per thousand (Family Planning Department, 1995:

25). This is due to some improvements in public health in Iran. In the Human Development Report 1997, of the UNDP, 88 percent of the population is recorded as having access to health services, 90 percent to safe water and 81 percent to sanitation.

A number of factors account for the relative success of the new family planning programme in Iran, which is demonstrated by increase in contraceptive knowledge and use revealed in surveys conducted since the programme began. Coverage of family planning services for the target female population (aged 15-44) increased to 46.0 percent in 1993. Also Rural Health Houses and rehabilitation centres increased from 1,565 units in 1989 to 2,146 units in 1993, while the number of such centres in urban areas rose from 1,402 to 1,710 in the same period (Family Planning Department, 1995).

At the same time, families have been faced with increasing economic pressures caused by Iran's high rates of inflation and unemployment. At the societal level, the government not only restarted delivery of contraceptive supplies and services, but also intensified its political and financial commitment to the programme and its goals. Government officials at many levels and in many departments have shared concern over the negative impact of population growth. Also, the education of women has increased considerably.

All these measures, combined with economic pressures, appear to be having an impact because more couples in Iran are limiting the number of children they have to two (Wright, 1992: 74). In Hoodfar's study (1996: 34-36) out of 190 women respondents, 82 thought the ideal number of children was three, 93 thought that two children was the best number, and 17 thought one child was ideal. Women in Iran appear to be sensing that having smaller families might enable them to take advantage of increasing opportunities. The Iranian Registry Office announced in June 1992 that a 25 percent drop had occurred in registered births over the previous four years, resulting in a reduction of half a million births per year (Ghazi, 1993: 5). This is to do with fertility reduction or other changes (e.g. to do with war, postponing births and so on). The head of the Family Planning Department of the Health Ministry, Mohammad Asaee, said that based on a Census conducted in June 1994, the birth rate stood at 21.8 per 1,000 population, indicating a 5.2 per 1,000 decrease as compared to the previous year (personal interview, 1995).

Despite the relative success achieved by population and family planning programmes during the First Development Plan of Iran (1989-94), the rate of

population growth in the country is still high. If there is a continued objective to reduce it, the need for consistency and reinforcement of population adjustment policies in the framework of development plans in the coming years is inevitable. This is especially true in view of the fact that the young structure of population resulting from high fertility in the past will affect the rate of population growth for some decades. The number of Iranian women of reproductive age - approximately 12 million in 1991 - and a growth in their numbers of 3.4% annually pose a considerable demographic challenge (Iran Statistical Centre, 1992).

In Iran, the ongoing support from the highest Islamic authorities, the continuing political and financial commitment from the government, and the increasing demand for contraception among families should further the success of the national family planning programme (Aghajanian, 1994: 69). In spite of pessimistic claims by scholars (i.e. Aghajanian, 1994) that the goal of the government's Second Development Plan to reduce the annual population growth rate to 1.8% in 1999 seemed very ambitious, Iran had achieved such a rate by the end of the First Development Plan for the reasons shown above. The adoption of appropriate policies and provision of effective means aimed at controlling population growth substantially slowed down that growth during the First Plan.

6.6. Assessing the Family Planning Programme

However, in assessing the family planning programme in Iran, some important aspects need to be considered. The government has primarily used persuasion in encouraging people to have smaller families, through media campaigns and educational programmes. However, the Iranian family planning programme, which has been implemented since 1989 also, includes some coercive measures (see Population Control and Family Planning Act in Appendix I). It is unclear how far these have been implemented. But manipulating economic incentives and disincentives to have children, for example, through the reduction of maternity leaves, the imposition of financial penalties for having more than three, and not issuing an identity card for the fourth child and after by the Iranian Registry Office, penalise the children and are not morally acceptable.

Another weakness of the family planning programme in Iran is that the women of child-bearing age have been considered by the government as the primary target group of family planning programme. While the common message is that family

planning should be a joint decision made by a woman and her husband, clinics, publicity, information sessions, and radio and television programmes are aimed at women and it is the women who it is assumed should implement the appropriate measures. Vasectomy is not often mentioned as an alternative. As Hoodfar (1995: 122) argues that:

the common message of these media is that while family planning should be a joint decision made by a woman and her husband, the woman should implement the appropriate measures.

It also ignores the evidence that many husbands (and older female relatives) are very influential in decisions about contraception (Hoodfar, 1994, 1995).

Another problem is that despite the severe budget constraints on the government since the beginning of the family planning programme in Iran, it has not actively promoted the provision of family planning services by non-state agencies. The private sector must be encouraged to develop, particularly in urban areas where some people can afford to pay for family planning services. In this way, the government will be able to secure wider contraceptive choices for the people, and target its own efforts on the less advantaged groups in the population.

One of the major factors militating against the success of family planning programme in Iran is a lack of understanding of the target clientele. Sheykhi (1995: 73) argues that:

the urgency of coming up with immediate solutions to curb population growth rate has led many campaigners, planners and experts to take too much for granted and to rely on the experience of more economically advanced countries rather than planning their own fertility control programmes in the country effectively.

The greatest drawback of clinic-based health and family planning in Iran is that clinics are passive, they offer services only to those who seek them out. They work reasonably well for curative health care, for which demand is strong, but less well for preventive health care, including family planning.

In addition, in family planning programmes, as well as initiating appropriate policies, the way that the policies are put into practice is also extremely important. Thus, the success of the family planning programme not only depends on managers but also on field staffs. My limited experience from talking to and observing some of the clinic doctors and nurses in two urban centres suggests that there is scope for

improvement in the training attitudes and commitment of some of the service providers.

Another important barrier to the effectiveness of the family planning programme in Iran is that they face special difficulties for they address highly personal, intimate, and family relationships that form the essence of cultural traditions in Iran mainly in rural areas and small cities. If family planning is to be successful, contraceptive technology has to be acceptable to users (Bruce, 1987).

Challenging negative attitudes towards family planning is thus very important. Some of these attitudes stem from misconceptions about birth control, such as health hazards, reduced sexual drive, impotency, and so on. In Iran, as in many developing countries, the use of contraceptives is still seen by some to carry negative connotations. Superstitions, the belief in omens and suchlike, prevent some people from using birth control methods (Sheykhi, 1995). A fatalistic attitude towards life has also hampered family planning efforts. The belief that all events are naturally or supernaturally predetermined significantly reduces people's willingness to regulate fertility through birth control. In addition, many people are afraid of vasectomy and other forms of sterilisation, and such operations, especially those performed on the male, can carry a social stigma.

The subordination of individual and even family norms and values to group norms creates strong pressures to conform in matters of family size and its sex composition in Iran. Such norms, originating in traditional beliefs, inhibit the practice of family planning and support a large family size. This can be seen particularly in developing countries such as Iran among people of rural origin. In the case of Iran, it seems that educating people is one way of influencing norms and traditional thinking of people.

Another problem related to programme effectiveness is that the average new contraceptive acceptor in Iran seems to be between 25-30 years of age, has 4-5 children, and wants no more. What this means is that women typically do not begin using contraception seriously until they have reached (or probably exceeded) the number of children they want (Family Planning Department, 1995). One of the nurses said that some clients with 8 or 9 children still rely on less effective birth control methods and are resistant to the idea of more realistic methods such as female sterilisation or vasectomy (personal interview with a nurse, 1997). If the fertility rate is to fall meaningfully it will be necessary for women to begin contraception at a

much younger age. Dr. Asaee tackled this issue and asserted that the experience of the government programme to date indicates the need to place far more emphasis on information and educational activities. He asserts that the current evidence suggests that a major reason for low contraceptive continuation rates, clinic under-utilisation, and other factors which mitigate clinic effectiveness, may be the general lack of information about, and low confidence in the idea of changing fertility behaviour among people with low-income and low literacy (personal interview, 1995). These ideas have grown out of ingrained patterns of behaviour that have evolved for a decade since the Revolution and partly during the pre-Revolutionary era. The change in behavioural patterns needs social change. Social change is much more difficult to bring about than technological change and takes much more time. Low contraceptive usage constitutes one of the most serious gaps between policy and practice. The opening up of family planning clinics, and even the wide availability of contraceptive techniques in principle have much less impact if they are not accompanied by educational programmes. Efficient use requires good knowledge, which is something that many couples lack. The majority of Iranian women learn about contraception from friends and relatives, themselves ill-informed, and what they learn is often incorrect. It is knowledge, or lack of knowledge, that influences the women's choices. The women's lack of knowledge is not only the result of poor education, but is also exacerbated by gender relations, which encourage the maintenance of female sexual ignorance and unempowered dependence.

However, family planning is a multifaceted problem and couples, in taking a decision on whether or not to adopt family planning, are affected by a multiplicity of socio-economic, educational and health factors. These factors can not be divorced from each other. Badran (1984: 39) argues that in order to convince a couple, changes are needed to effect all or most factors simultaneously. Bringing about this change can not be done via one agency.

One of the important issues in this regard is that although Iran has a family planning policy, it lacks an overall population planning policy. Other population-related policies concern migration, immigration, labour, education, and social welfare. Several of these policies are either weak or conflict with one another. For example, after the Revolution around 2 million Afghans have moved into Iran. While political and humanitarian factors made it important for Iran to accept these refugees, in effect, their numbers negate the population reductions attributed to the National Family

Planning Programme. Another example relates to the phenomenon of rural to urban migration. Government policies in these areas are not clear.

One of the most important questions with respect to contraceptive use and its continuation is the question of whether it is used to terminate fertility or to space children (Aghajanian, 1989: 241). When used for the purpose of termination, it is only when the family is assured of the number of children desired. When used for the purpose of spacing, it is accepted at the early stages of child-bearing.

Some of the problems which face the decision-makers in Iranian family planning are associated with the fragile nature of contraceptive technology²⁴, the insecure place of preventive medical programmes in health delivery systems already overburdened with clinical work, and the attitudes and sense of social consciousness of medical and paramedical personnel towards their jobs and the clients who use their facilities. No doubt a partial solution to the lack of medical manpower and difficulties of establishing a useful dialogue between medical personnel and clients would be the increased use of medical auxiliaries (particularly women) to deliver certain types of services. Using safer means for fertility control, such as the low-dosage pill, are also important.

The manner of implementing the programme has given it a strong 'clinic' orientation. That is, family planning clients who are using the oral pill are expected to come to the family planning clinic every month for a cycle of pills. Pill cycles are rarely delivered to homes, or anywhere outside the clinics and patient follow-up and motivation activities need to be more aggressively practised. The foregoing also highlights another problem. While the oral pill is a good method for birth spacing purposes, it is not an effective long-term method for those women 30-34 years of age who want no more children. Over a 14-year period (i.e. a conservative estimate of the time until menopause) such women would have to make 182 trips to a family planning clinic and consume a total of over 3,800 pills, until the end of their reproductive life. Other methods such as IUDs, and sterilisation, are more realistic methods for such women.

²⁴ Davidson et al (1988: 134) argued that there is continued evidence of iniquitous practices in the distribution of unsafe and inappropriate contraceptives, with Third World women being used as 'guinea pigs' for new product testing.

To be successful, programmes need significant investments of funds and staff, good logistics and management systems, effective and skilled motivation and organised outreach.

Another problem is associated with data collection. Massive amounts of data may be collected, consuming time, yet unutilised for planning and evaluation. During several visits I had to the Family Planning Department of Iran, it was obvious that there is a large amount of data, which had been collected without being utilised.

Besides management style difficulties, family planning and health are frequently centralised, top-down elitist administrative structures, with little input and consequently little support from the community. Successful programmes have used existing or created new community-based groups as means to educate, deliver, and monitor contraceptive use. As Staudt, K (1991: 263) argues:

success and failure in family planning rests heavily on the implementers. In family planning, it is not just the policy, but the practice, and not just the managers, but the field staff.

In order for the programme to succeed, therefore, all those involved in implementing it, from managers right down to the nurses dealing with the public, must be trained to the highest standard. In this regard, the Iranian government should direct incentives and disincentives to sensitise the clinic staffs, especially in urban areas, for implementing the family planning programme more effectively. Incentives and disincentives may offer the opportunities to accelerate the demographic transition in Iran.

6.7. Second Development Plan of Iran (1995-2000)

The first plan ended in mid 1994, but 1994 did not mark the beginning of the second one. Policy makers devoted 1994 to evaluating the first plan, understanding its full ramifications and considering their alternatives. The Parliament also decided to spend 1994 gathering data, increasing legislative input in drawing up the second plan and overseeing the executive branch. The Second Plan, therefore, covers the five-year period from 1995 to 1999 (Plan and Budget Organisation of Iran, 1994). In essence, the Second Plan is not much different from the first; it is a centralised, sectoral plan that includes social and cultural policies. As Mas'ud Rowghani Zanjani, former director of Iran's Plan and Budget Organisation, pointed out in 1994, the Second Plan is a 'continuation' of the first. However, experiences gained in implementing the first

plan, have led to some modifications in the second plan. In my interview with Dr. Asaee (1995), he asserted that the government population policies in the SFYDP is the continuation of FFYDP of Iran, with more emphasis on quality rather than the quantity of the family planning programme of Iran.

Objectives of the population policy programme in the SFYDP were: (i) decrease in the population birth rate from 23 per thousand in 1993 to 19 per thousand in 1998. (ii) decrease in the population growth rate from 1.8 in 1993 to 1.5 in 1998. (iii) increase in the rate of contraceptive prevalence among married women between 15-49 years of age from 46.0 in 1993 to 75 percent in 1998. (iv) decrease in the total fertility rate from 2.8 in 1993 to 2.1 in 1998 (Family Planning Department, 1994: 10).

Conclusion

When Iran started an official family planning programme in April 1967, the ultimate goal was to reduce annual population growth to 1% within 20 years. Although the programme was successful to some extent, that goal was not reached and was clearly unrealistic. By 1977, when that programme was at its peak, only 11% of women of reproductive age were being served by it.

With the Islamic Revolution in 1979, however, the programme slowed down and came to a complete halt for about eight years, indeed it virtually collapsed. Some factors played a major role in the high birth rate in Iran during the 1980s. These include economic optimism and hopeful prospects, promotion of procreation and the dismissal of a family planning policy. In 1989, the results of the 1986 Census, which were well publicised in 1988, stimulated the government to create another family planning programme. The programme has been growing in political, ideological and economic support ever since (Aghajanian, 1994: 68).

A number of factors account for the relative success of the new family planning programme in Iran, which is demonstrated by increase in contraceptive knowledge and use revealed in surveys conducted since the programme began. These factors, related to the family, society and religious ideology, have implications for other Islamic countries. At the societal level, the government not only resumed delivery of contraceptive supplies and services, but also intensified its political and financial commitment to the programme and its goals. Concern over the negative impact of population growth has been shared by government officials at many levels and in many departments. Of course, the role of government in promoting family

planning should be facilitative and permissive, and in no degree forceful. A family planning programme should confine itself to informing people of the advantages of spacing births and of limiting the total number of their children, together with making it easier for those who wish to plan their families to do so. The family planning programme in Iran, however, seems to have some coercive aspects such as not issuing an identity card to the fourth child born. Also a family planning programme should be viewed as an integral part of rather than as an alternative to efforts toward social and economic development of the country. However, in Iran, family planning programmes have been integrated into development plans since 1989. While government contraceptive supplies and services were stalled for several years, demand for family planning undoubtedly rose among individual families during this period, mainly because of the continuous increase in child survival rates during the 1980s. At the same time, families have been faced with increasing economic pressures caused by Iran's high rates of inflation and unemployment, and also families have substituted quality of children for quantity.

Despite relative success achieved by population and family planning programmes during the First Development Plan of the Islamic Republic of Iran, it should be accepted that the rate of population growth in the country is still high. The consistency and reinforcement of population adjustment policies in the framework of development plan in coming years is inevitable specially in view of the fact that the young population structure resulting from high fertility in the past will affect the rate of population growth for some decades

With the prospects of accelerating developmental aspects that create conditions conducive to low fertility, improving and intensifying existing family planning services, and implementing innovative approaches for making contraceptive supplies and information directly available to the people, there is the likelihood that Iran's birth rate will decline faster than has been the case to date.

Since studies show that in the less developed regions and among low income households and families active in traditional sections of the economy, there is a higher fertility rates as compared to others due to a complex of economic and social factors, it is necessary to make utmost effort to remove deprivation and improve living conditions and elevate the social knowledge of these strata. For example, despite considerable slowing down of population growth rate in many parts of Iran which

resulted in an overall 1.8 population growth rate in 1993, in deprived provinces, this rate exceeds 3 percent (Ministry of Health, 1993: 21).

Iran had achieved a lower birth rate by the end of the First Plan (1994) with a relatively low per capita income level (compared with the 1970s) through political controls and incentives coupled with an adequate family planning infrastructure. These fertility transitions demonstrate that population policy does matter, and that a high level of economic development is not a necessary condition for it to work.

There have been other factors affecting fertility rates in Iran in recent decade. Among them is raising education of women which has affected fertility rates in Iran. Also, continuing urbanisation has loosened extended family ties and raising the private costs of children to couples who are less tied to extended family networks, which mostly exist in rural areas. Also, economic difficulties have forced couples to reduce their demands for children and also parents are willing to substitute quality of children for quantity.

If Iran wants to develop family planning programmes, it is essential to improve the quality and also quantity²⁵ of family planning services to support the desires of Iranian couples for smaller families. Also, inter-agency collaboration involving in family planning programmes should continue so that these ideas can be implemented at the country level.

²⁵ According to Family Planning Department's statistics, there are still quite a large amount of couples who are not served by the programme.

Conclusion

The conclusion is going to outline the main factors which seem to influence fertility decline in Iran, summarise the main findings of the study and suggest some measures that can help to improve family planning programmes in Iran.

During the 1970s, some developing countries experienced acceleration in their transition to lower fertility. However, pre-Revolutionary Iran, like many other Middle Eastern countries, only experienced a modest reduction.

Although fertility decline at the national level was moderate, a major drop in fertility occurred in urban areas. During the decade 1966-76 the population of Iran increased rapidly, but the rate of growth began to slow owing to the decline in fertility (from 3.1 percent to 2.7 per cent). Family planning programmes started in 1967 and although the programme was successful to some extent, by 1977, when the programme was at its peak, only 11% of women of reproductive age were being served by it.

Despite considerable improvement in the GNP and per capita income, the infant mortality rate in the 1970s remained very high, even in comparison with poorer countries in the region such as Egypt and Turkey. The inequitable distribution of public services is likely to have contributed to this.

During the next ten years, from 1976 to 1986, the rate of population growth once again accelerated dramatically. The size of the population rose from 33.7 million in 1976 to 49.4 million in 1986. This implies an average annual rate of growth of 3.8 percent during the decade, one of the world's highest rates for a national population.

One component of this huge population increase was the influx of refugees from Afghanistan. An estimated 1.8 million refugees were included in the 1986 Iranian Census. If the refugee population is excluded, the average annual population growth rate during the decade drops to 3.4 percent which was still a far higher rate of growth than the figure of 2.7 percent estimated for 1966-76.

Two demographic factors may explain the arithmetic of this reversal of the downward trend in the rate of natural increase: a decline in the crude death rate, particularly in the infant mortality rate, and an increase in the crude birth rate. After the Revolution, infant mortality rates and life expectancy, contrary to the general expectation that the Iran-Iraq war and the weak economy would result in a worsening of an already dismal record, have improved considerably. Also, the crude birth rate

rose to 47.6 per thousand in 1986, which in comparison with 1976, increased by nearly 12 percent. This partly reflected a reversal of the downward trend in fertility.

The total fertility rate increased by 0.7 of a child per woman (or 11 percent) over the period, from 6.3 births in 1976 to 7.0 in 1986. This increase is entirely due to the significant rise in age-specific fertility rates for women aged 25 and older. For women 35-39 and 40-44 the increase was especially sharp: about 25 and 32 percent, respectively.

One of the reasons for this high birth rate was that in the early years following the Islamic Revolution (1979), population issues and family planning programmes were not considered significant matters for the Revolutionary leadership. On the contrary, there were pro-natalist attitudes among some leaders, arguing that the idea of fertility regulation was incompatible with Islamic ideology and Revolutionary values and claiming that family planning programmes represented a project inspired by foreign culture and therefore, must be abandoned. Some religious leaders argued that contraceptive devices had been developed by Western powers in order to subjugate oppressed nations and to limit the number of Muslims.

The principle of family planning was never actually rejected by the government, but in practice the programme was inactivated for several years. The family planning council of Iran was dissolved immediately after the Revolution, and many family planning clinics were closed. Clinic personnel were transferred to other departments, and family planning services became a small component of the activities of a limited number of family and health clinics. As supplies of contraceptives ran out, they were not replaced. This raises the issue of how far the lack of family planning services was one of the important factors in the increased fertility rate at this time. In Iran, however, there had been other factors at work that may have had some bearing on the fertility behaviour of the population. Leaders of the Islamic Revolution focused attention on the importance of marriage, motherhood and reproduction in post-Revolutionary Iran. In the first years of the Revolution, women were praised above all for being good mothers and wives. In public speeches by religious and political leaders, Islamic Republic officials stated that women's first priority is marriage, children, and the home.

Moreover, the government adopted a policy of encouraging early and universal marriage and enacted a law to lower the minimum age of marriage. The

encouragement of early marriage and procreation resulted in a significant increase in the marriage rate and contributed to a pro-natalist social environment.

After the Revolution, the government started to distribute land for house construction purposes. One factor that was of importance in gaining enough points for eligibility was household size. This could have been a definite and considerable incentive for households to have more children. Furthermore, after the outbreak of the Iran-Iraq war in 1980, the government embarked on a universal scheme of coupon rationing. In this case, again, the coupon entitlement was based on household size and each child received a ration equal to an adult. Given the fact that the coupon rations were of considerable value, this scheme provided further incentives, although this was not a deliberately pro-natalist policy. There was a popular saying that 'new babies are born with coupons in their hands'. After the war, the rations and their transfer values gradually declined. Given all these factors, therefore, it is not surprising that the fertility level increased immediately after the Revolution.

The information obtained from Iran's 1986 national Census caused a strong turning point in the thinking and decision making of the top policy makers of the Islamic Republic of Iran in regard to population matters. Data obtained revealed an extremely high rate of population growth (3.8%), and one of the highest fertility rates in the world.

The most important practical impact of this high rate was to persuade Iranian policy makers of the need for a national family planning programme that could help bring down the fertility and population growth rates to a level consistent with the war-shattered, dwindling economic resources of the nation and the government's ambitious post-war Reconstruction Period priorities.

Eight years of war with Iraq drained a significant portion of the country's social and economic resources, at the expense of infrastructure development and the provision of social programmes. Iran's leadership soon considered that the high rate of population growth created a strong barrier to the achievement of the socio-economic objectives of the Islamic Revolution, that high population growth rates were creating several problems relating to the shortage of housing, schools, and public services and that these problems had adverse effects on the country's developmental efforts.

Thus, in 1989, under these circumstances, Iranian leaders had to revise pro-natalist policies and as a result family planning programmes became part of the socio-

economic development plans of Iran. There have been attempts to expand the family planning network by educating and motivating people, alongside utilising existing services in the country.

The government's policy approach was aimed directly at promoting fertility control, reflecting the government's commitment to a population control policy. The policy was implemented by the government-backed increase in the availability of contraceptive services, a programme supported by corresponding educational and promotional campaigns. The results of the 1996 Census indicate a total population size of 60.05 millions and an annual growth rate of 1.47 percent. The contraceptive prevalence rate has risen from 27.5 percent of all eligible couples in 1989 to 47 percent in 1996. It seems that the family planning mission has been defined in such a way that its most important function is to empower families/parents to create the kind of family they wish to have. However, there are considerable efforts to persuade parents that they want small families, including some coercion.

The backbone of this policy is to prevent unwanted pregnancies and enable parents to space their children, as well as to prevent the negative impact on women's health of too frequent pregnancies, to treat infertility, and to improve the general health of society by promoting the psychological and physical development of children and families. Contraception is offered only to married couples and is targeted at achieving small families rather than facilitating couples in remaining childless.

The experience of the government programme to date indicates the need to place far more emphasis on information and educational activities. The current evidence suggests that a major reason for low contraceptive continuation rates, clinic under-utilisation, and other factors which reduce clinic effectiveness, may be misinformation, or the general lack of information about, and low confidence in the idea of changing fertility behaviour.

However, evidence from the literature suggests that, except for the most coercive programmes, family planning results in fertility decline only if it fits with economic, cultural, social and political circumstances. Wider factors need to be considered in any assessment of the 'success' of family planning programmes in reducing fertility.

A consideration of the decline of fertility in Iran provides evidence to support some of the micro-economic theories of fertility discussed in chapter one. For

example, demand theory suggests that actual fertility is influenced by the demand for children, the supply of children and the cost of regulating family size.

Urbanisation and industrialisation has been taking place in Iran at a rapid rate. Urbanisation has significantly reduced the percentage of people who engage in agriculture. By 1996, only 23 percent of the Iranian population were engaged in agricultural employment and 61 percent of people lived in urban areas (compared to 47 percent in 1976). This shift, resulting in living conditions in urban areas which are different from rural areas, has meant that people are less likely to depend on children's labour. One of the direct effects of economic development is the raising economic burden of rearing children. The economic value of children has declined and the costs have increased, and the subsequent impacts on role-related behaviour occurs as has happened in the case of Iran.

One of the important factors in explaining reducing fertility rates in Iran have been changes occurring in the economic circumstances of the families. It seems that in Iran, urban people have adopted urban life styles. Continuing urbanisation in Iran is loosening extended family ties and raising the private costs of children to couples who are less tied to extended family networks. Also, there are more signs of fertility reduction in Iran in the large urban population, where the single-family housing units are being replaced by multi-family housing (e.g. apartments) mainly because of the high cost of land, material, and labour, and the shortage of housing units. Apartments tend to be smaller than single family units and we can anticipate that this will encourage further fertility reduction in the urban areas of Iran.

The social prestige attached to having a large family, the demand for child labour at family level, and dependence on children as the source of old age security, increase the incentives for having children. The disincentives are the economic and physical costs of child bearing and rearing. The incentive structure changes in favour of fewer children as the economic burden of child rearing increases, as it seems is happening in Iran.

The process of modernisation is often accompanied by economic and social development. Whereas economic development alters the mode of production, social development brings about new institutions such as social security, legal changes, and education and may bring about new social relations. These institutions take over some of the functions of the traditional kinship structure. The structure of the family in Iran has been going through many changes in the last decade.

Another explanation focuses on the culturally based processes, which have a bearing on fertility. 'Culture' refers to the set of values and beliefs which people use to order their material experiences in life. This set of values and ideologies may change over time as material conditions of life change. The values and prestige which people attach to children is a significant factor related to fertility levels and these may change over time.

As development proceeds, economies and cultures tend to evolve in ways that shift the calculus of private interest toward smaller families. Population policy is intended to speed up that change and it can do so in ways that guard private rights and help protect cultural values.

Demand theory says the supply of children is a function of child mortality. The infant mortality rate was about 112 per 1,000 live births in 1976, which declined to 68 per 1,000 in 1986. By 1996, it dropped to 26 per 1,000 live births, an overall decline of almost 75% from 1976. The decline of infant mortality in Iran has created increased demand for birth control at the household level in 1990s, as parents gain confidence that their children will survive.

In the case of Iran, it seems that a cost-benefit paradigm is necessary but not sufficient and should be complemented by an attempt to link the outcome of choice to alterations in ideational components as well. As official family planning programmes (increasing the availability of contraceptive devices and knowledge) have been influencing and accelerating fertility decline, it can lead us to postulate that fertility decline in the case of Iran has been produced by the availability of contraceptive methods and diffusion of new ideas and knowledge about fertility regulation (ideation theory) as well as changes in socio-economic factors (demand theory).

According to both demand and ideation theories, a higher status of women leads to reduced fertility. The higher the woman's status, the greater her weight in making decisions about family size and the greater the likelihood that she will want to limit family size. Ideation theory emphasises on diffusion of new ideas and knowledge about fertility regulation. In the case of Iran, religious and political ideologies seem to have been important in the pattern of post-1979 increase, then post 1990 decrease.

Under current economic conditions, children are still perceived in rural areas of Iran as economic assets, cheap labour and a form of social security for aged parents. However, successive increases in national productivity levels, particularly if

accompanied by a more equitable distribution of national income, will bring about a considerable range of structural changes. Rising levels of individual expectations and of parental aspirations, together with new systems of economic production that drastically reduce the opportunities for unskilled workers and demand for child labour and new social protection systems, will effect a significant reshuffling in and re-evaluation of values and attitudes related to child bearing. As fertility control and management should not be separated from general social development, expanding Iran's social security system would serve both social justice and demographic goals.

By increasing individuals' options, such policies may in fact do more to preserve these values than measures taken simply to maximise short-term economic growth. Improving child health is one of them. In the short run, improving child health accelerates population growth and thus appears to reduce per capita economic prosperity; however, in the longer run it slows down population growth. Without improvements in children's health it is difficult to reduce the birth rate significantly. Measures to improve health and reduce infant mortality range from programmes to educate mothers, to policies to extend basic health care to all, to broader public health and socio-economic programmes. Higher rates of child survival reduce the need for parents to replace children who have died or to have extra children to insure against possibility of future deaths. Evidence from a study of twenty-five developing countries suggests that a fall in mortality of one child per family result in a fertility decline of almost 0.5 births.

The Iranian government has also been aware that attaining such ambitious goals depends not only on careful planning and implementation of family planning programmes, but also on co-ordinating legal and social change in other areas of society. To this end, they have emphasised higher levels of education for women, improvement of the general level of health, and the enhancement of social and economic improvements for women.

Since the Revolution, there have been many attempts to eradicate illiteracy in Iran. Based on figures collected during the National Censuses of Iran, the literacy rate of the total population jumped from 47.5% to 61.8% between 1976 and 1986. It experienced an almost equal increase (from 61.8% to 79.5%) between 1986 and 1996.

The rise in the literacy rate is more marked in the case of women (by 16.6% between 1976-86 and by another 22.1% between 1986-96) than men (by 12.1% between 1976-86 and another 13.65% since 1986). The rural population as a whole

has also gained much more, in terms of literacy rates, between both 1976-86 (17.9%) and 1986-96 (21.24%) than its urban counterparts (7.6% and 12.6%).

Although the gap between male and female illiteracy remains considerable, women's literacy has improved at a much faster rate than during the pre Revolutionary era. The adult literacy campaign has been very successful in attracting women. In 1988, 74 percent of literacy students who completed their programmes were women.

Thus a close relationship between education and fertility rate has clearly emerged in recent empirical studies in Iran. Women in rural areas of Iran, it is argued, have high fertility norms and behaviour compared to urban areas, not only because of socialisation, but also because they have less access to education and non-agricultural work experience.

Female education in particular has been recognised to reduce desired family size for several reasons. First, education postpones family formation by increasing age at marriage and age at first birth. Both of these factors have strong negative effects on fertility. Age at marriage accounts for a significant portion of the effect of education on fertility. The indications are that women with higher education postpone marriage. Once married, the Iranian couple would have a hard time resisting family and social pressure to have the first child as soon as possible. Hence, age at marriage and age at first birth are closely related.

Second, educated women are more likely to voice resentment at the burden of repeated pregnancies and to take action to reduce that burden. This may occur because educated women have other sources of prestige and fulfilment besides reproductive performance, more control over household resources and personal behaviour, and greater involvement in reproductive decisions. Third, educated women are likely to be less dependent on their sons as a source of social status and old-age security, and this too may lead to a reduction in desired family size. Fourth, educated women often have higher aspirations for their children. Greater opportunities today to educate children may reduce current fertility, as parents become more willing to limit family size to ensure an education for each child. Among the urban people of Iran, desire to ensure education for their children is one of the prime causes cited for limiting family size. This may be combined with lower expectations from them in terms of labour services provided. This may reduce desired family size if there is a perceived trade-off between the number of children and their personal achievements.

Fifth, micro-economic theories suggest that educational attainment will increase the opportunity cost of child bearing and child rearing. The opportunity cost of time tends to be comparatively high for educated women, and this creates an incentive to minimise such time-intensive activities as child bearing and child rearing in Iran. Since children cost mothers more in time and energy than they do fathers, it is not surprising that education for women influences fertility more than does education for men. Female education also affects the relationship between desired family size and the planned number of births. Specifically, since better maternal education reduces infant and child mortality, educated mothers are able to plan fewer births in order to achieve a particular family size.

As women's status and their family planning decision-making are closely interrelated, it seems that these policies are implemented not only towards promoting the status of women, but also towards affecting patterns of family formation and levels of fertility. This improvement in educational attainment should facilitate the decline in fertility rate of Iranian women both through delay in age of marriage and also fertility control after marriage. Since a higher level of education has a strong negative effect on fertility, this would be an additional reason for the government to continue their support and encouragement of educational attainment of the female population.

However, the husband's education is an important independent variable in different studies in Iran. The husband's education has a negative relationship with the fertility level of the couple as it increases the probability of communication between husband and wife regarding family size. It is also important for its effect through shaping the tastes for alternatives to many children, including the higher quality of children. Also, in rural and urban areas of Iran, husbands have been the single most important providers of information for their wives about contraceptives, according to studies that have been carried out.

Contrary to many models of employment and fertility, the sharp reduction in fertility recently in Iran has occurred in the context of low levels of female waged labour. The effect of female labour force participation on fertility is generally predictable. It is expected that greater female labour force participation will have a negative impact on fertility, since the double burden of household work and gainful employment makes repeated child bearing particularly stressful. In Iran, women represented 11 percent of the labour force in 1976, only 9 percent in 1986. Although it

can be argued that social and economic factors contributed to lowering the participation of women in the labour market, the state's policy was crucial. Over the same period, fertility increased.

However, as has been shown, fertility dropped sharply over the period 1986-96. The female share of the labour force increased to 12.7 percent of the employed population in the labour market in 1996. However, this is only a modest rise and still reflects a very low level of participation. For many Iranian women, especially those who are better off, education seems to be an alternative to paid work, rather than a preparation for it. The situation of Iranian women in the labour market challenges the assertions in both demand and ideation theory that a higher status of women, in terms of increased participation in the paid labour market, and fertility decline are necessarily related.

One of the reasons for the modest increase in women's labour participation is that as the economic crisis of the post-war era in Iran has led to the decline in the real income of urban households, the majority of which relied on a single source of income, women's financial contribution proved essential, and they were thus compelled to participate in the labour force. Consequently, the representation of women in the labour force began to expand. This increasing involvement of women in the labour force has gradually led to a change in the political elite's ideological discourse. It is thus more moderate and more tolerant vis-à-vis working women, although the private sphere is still considered the most suitable place for women's activity.

Any improvement in women's employment opportunities in Iran depends to a large extent on the way the government handles the economic situation, and on its ability to formulate and implement a coherent economic development strategy. This will also depend on the extent to which policy-makers are sensitised to women's issues and made aware of the contributions women make to economic development in Iran. As long as women are not yet seen as breadwinners or as contributors to economic growth, the result will be that their pursuit of employment is not taken as seriously as it is for men, and creating jobs for the employment of women will not be an official objective for the government. Their unemployment rates will go up disproportionately as soon as employment opportunities worsen.

One of the problems working women in Iran have to face is the 'double burden' of household work and outside employment since men are typically reluctant

to share the domestic chores. As a result, many women prefer to stay at home. It would also be necessary to consider expanding maternity leaves and child-care centres, preferably through general taxation rather than as an additional burden on the employer and also for men to share the responsibilities of children and household cores and whether the Islamic principle that husband should support his family should be altered in this respect.

The role of women activists has been important in Iran. The end of the war and the start of the Reconstruction Period granted an opportunity for them to present a modern perspective on Islam and to ask for radical changes in women's status. They have developed and lobbied for their own visions of women's role and rights within a woman-centred interpretation of Islamic texts and in an Islamic framework and they have managed to attain some reforms and are asking for more.

They have responded to the demands raised by the female population who seek change in the civil code, better access for women to education and employment and the reform of laws to promote women's status in both the private and the public spheres.

Assuming that women's input into family planning decision-making is closely associated with women's socio-economic status in society and their autonomy and security within the family, women activists also have tried, with some success, to link their goals to the government's development objectives, including women's support for family planning and smaller families. They have directed their efforts towards improving the woman's position within the family. As the family is the cornerstone of the government's ideology, these issues have received much public attention.

Gradually, the government has introduced moderate reforms to the divorce law, a standard marriage contract stipulating conditions of divorce. Of course, it still remains to be seen whether the reforms will legally and socially redefine marriage to make it a more secure social institution for women.

The Iranian state has brought about some required structural and legal reforms, which improve women's access to social and economic resources. These reforms may be seen as indirect services provided by the state, which are likely to alter the fertility behaviour of target groups such as women of reproductive age. Furthermore, the state provides direct services such as the provision of birth control methods, through family planning clinics and mother and child health centres. The political will and

commitment to provide these services may have lasting influences on the onset and pace of fertility reduction.

The Iranian government should consider the benefits of investing in women's employment. It is well known that educated and employed women have lower fertility rates and that their knowledge and income contribute considerably to household well-being. Enhancing the status of women economically and politically, and thereby expanding their range of opportunities, is of critical importance in strengthening the demand for smaller families.

It seems the status of Iranian women in the family, education and workforce has undergone a change, mainly since 1989. This is evidenced by, among other things, official emphasis on family planning and the quality of family life; attempts to initiate a new development strategy; and the establishment of governmental and non-governmental organisations dealing with women's issues.

As an Islamic Revolution took place in Iran, Islam as a way of life has changed the beliefs and ideas of millions of people in Iran. In this regard, Islam as an important factor affecting fertility has been studied in this thesis. There are many examples, which point to the flexibility of the relationship between Islam and attitudes to family planning. Islam recommends marriage and procreation for those who are physically and economically able, and a generally positive attitude exists toward sex in marriage, as does a clear recognition of a woman's right to sexual enjoyment. However, great emphasis is placed on the family and its welfare. Child spacing and breast-feeding are the ways by which the Qur'an attempts to ensure family welfare. A number of statements in the Qur'an stress the idea that God does not wish to burden human beings beyond their limits and suggest that quality is more important than quantity. By recommending that women breast-feed for up to two years, the Qur'an expresses concern for the health of both the mother and the infant by ensuring that enough time elapses between the births and that infants receive adequate maternal nutrition. In this regard, the implication of some Qur'anic texts in the context of family planning has been examined.

Unlike Christianity, in Islam there is no hierarchically organised jurist, nor a central authority that expresses a single interpretation of Islam (although several key centres in different parts of the Islamic World do provide authoritative judgements). This decentralisation means that the various schools of law and religious sects follow codes that are not always similar. The *fatwas* made by religious authorities or *ulama*

in the light of modern conditions play an important role. The views expressed by these *ulama* conform to the verdicts on family planning found in the books of classical Islamic jurisprudence on the one hand, and to the *fatwas* issued by *mojtahedin*. One of the important factors accounting for the relative success of family planning in Iran is the support and guidance from religious leaders which comes from Islam's flexibility in dealing with social circumstances.

This study suggests a new demographic trend leading the Iranian population to a low fertility era. It seems that, contrary to the earlier post-Revolutionary period, Islamic Revolutionary values, ideas and leadership during the last decade have not blocked this new transition, but, on the contrary, have articulated modernisation forces discouraging high fertility norms and promoting the modern family planning programme. At this juncture, it is anticipated that the decline in the fertility rate in Iran will result in a low population growth rate if the current fertility regulation policy continues. Of course, this situation depends on the social, economic, political and religious conditions in the future.

As socio-economic developments have significant effects on, and are in turn affected by demographic factors such as population growth rate, a government wishing to reduce population growth must give priority to investment in human resource development in its population and development strategies and budgets. Programmes should seek to increase people's, especially women's access to education, employment, skill development and high-quality health services. Meeting the basic needs of a growing population is dependent on a sustainable development programme.

To conclude, it seems that the main factors responsible for fertility decline in Iran during the 1990s have been urbanisation and higher costs of living which impose certain costs on parents and influence their reproductive plans; the expansion of mass primary education particularly women's education in rural areas; and the support of *ulama* and their verdicts and *fatwas* which confirm the acceptability of family planning programmes in Iran. A strong family planning programme has also been important, both in supporting couples who because of these factors desire smaller families, and also, it has been suggested, having an independent effect of its own. A combination of demand theory and ideation theory seems to provide a persuasive explanation for the recent trends in fertility in Iran.

The recent history of fertility trends challenge some of the claims for a smooth, almost inexorable demographic transition. In particular, the increase and the decrease in the birth rate and fertility in the post-Revolutionary years lend support to the view that cultural values and ideological beliefs are important, as well as processes of modernisation and urbanisation, in influencing decisions on child bearing and child rearing and family size.

In Iran, there is a need to implement development projects that generate fertility decline. The Iranian family planning programmes have been carried out within the general climate of social and economic change, rather than preceding it. The government's other developmental activities are likely to have a significant influence on family fertility norms and the creation of motivation to obtain contraceptive services. If the Iranian government can implement successful socio-economic development plans, it is likely to be able to reduce fertility rate in the future. One of the impacts will be improved income distribution in the society resulting in wider preferences for non-child services and goods. It also will also reduce the economic value of children and increase their costs in the family.

In order to eliminate the coercive aspect of the family planning programme broader development objectives would have to be enacted. This could be achieved by strengthening communication, education and information about population, family planning and improving existing family planning services to cover all couples. According to government statistics not all couples are yet covered. Implementing new family planning service-delivery systems in rural areas is also essential.

In order for the family planning programme in Iran to be successful, mass schooling, dissemination of modern family planning methods, improving the standard of living, rural development and improving public and social services such as public sanitation and health care, have been identified as crucial.

Appendix I: Population Control and Family Planning Act (May 1993)

Article 1: The entire benefits set out in the legislation on the basis of the number of children, including benefits pertaining to the mother will not apply from the fourth child thereafter, born later than one year from the date of ratification of this Act. These benefits will pertain to children born before this period.

Note 1. The following describes the procedure according to which these benefits (stated in the Labour Act of November 20, 1990, ratified by the Advisory Council of the Islamic Republic of Iran and the Social Welfare Act of 1975) are applied:

A. The maternity leave of absence of female workers (Article 76 of the Labour Act of November 20, 1990, ratified by the Advisory Council of Iran) for the fourth child and thereafter, born later than one year from the date of ratification of this Act, will be subtracted from future vacation time of the worker.

B. For the female worker's fourth child and thereafter, born later than one year from the date of ratification of this Act, day care facility expenses (Article 78 of the Labour Act of November 20, 1990, ratified by the Advisory Council of Iran) will be assumed by the female worker.

C. With regard to children's rights to insurance (Article 58 of the Social Welfare Act of 1975), premiums pertaining to the fourth child and thereafter, born later than one year from the date of ratification of this Act, will be determined on a separate basis and collected from the insured according to social welfare tariffs.

Note 2. This Act also pertains to organisations and institutions, the names of which must be cited in order for the ruling to apply.

Article 2: The Ministries of Education, Culture and Higher Education, Health and Culture and Islamic Guidance are required to execute the following programmes:

A. The Ministry of Education is required to effectively incorporate educational material on population and the health of mothers and children into school textbooks.

B. The Ministry of Culture and Higher Education and the Ministry of Health are responsible for creating a course of study on the subject of population and family planning in all the educational disciplines.

C. The Ministry of Culture and Islamic Guidance is required to encourage the active participation of journalists, filmmakers and other artists, in order to increase the awareness of the public toward family programmes.

Article 3: The Islamic Republic of Iran Broadcasting is required to transmit educational programmes through radio and television, both directly and indirectly, in order to increase public knowledge about population and family health.

Article 4: The expenses generated as a result of Articles 2 and 3 are to be recompensed by a savings in spending as a result of the implementation of Article 1 of this Act.

Note: The aforementioned Act, comprising 4 Articles and 2 Notes, was ratified in an open session of the Parliament of the Islamic Republic on May 23, 1993 and was approved by the High Council of Guardians. The implementation of this Act in Iran needs further investigation.

Appendix II

Interviews:

I wanted to evaluate the effectiveness and implementation of the family planning programme in Iran, explore how the family planning programmes operate and how services are provided. As part of this exploration, I interviewed 20 nurses and 2 doctors in January 1997. The nurses were interviewed because they are involved in implementing the family planning programme in urban family planning centres. For practical reasons, the clinics were all in different parts of Tehran and Zanjan (the city where I lived). Clinics were selected in a range of areas, some serving a predominantly educated and higher income population, others with a high proportion of less educated and poorer clients²⁶. I made appointments with them to do the interviews by telephone. All the nurses and doctors I planned to interview accepted my request. I introduced myself as a researcher, not a government agent, to ensure confidentiality so that my interviewees would feel free to express their views. All of the nurses I interviewed were female, had bachelor degrees and were directly involved with the provision of family planning. Their ages were between 22 and 40 and except one, all were married. The doctors were 28 and 30 years old.

The interviews were with individuals. Some of the questions were structured, but most of them were open-ended questions. (see interview schedule on page 190-3). These questions were designed to be as clear and unambiguous as possible and not to 'lead' the respondents towards particular answers. They did not see them before hand. Each interview took about one hour.

As many of the questions were open-ended, a qualitative approach to analysis of the responses was under-taken. I coded the data, after having divided it into categories that allowed me compare what different nurses said, what themes were discussed, and how concepts were understood. Then, I tried to reassemble the information into themes and arguments.

The results of the fieldwork were disappointing. The doctors and nurses saw the provision of family planning services as a routine part of their job, not something to which they had a particular commitment or had given much thought. Thus, the material collected was used as background material with a summary of the data

²⁶ In common with most cities, the better-off and less well-off groups of the populations of Tehran and Zanjan tend to be concentrated in different areas.

obtained in this appendix.

The nurses' and doctors' experiences are different; some of them have worked in family planning centres for a short period, while others have about 20 years of experience. All of them work in public clinics and all centres provide services to urban people, although some of these clinics give services to rural people too.

Almost all of them believe that Iran has suffered from high population growth rate. However, they believe that family planning policies in Iran have been successful in recent years. They believe that population goals and policies are integral parts of socio-economic development.

Some of them believe that the reasons behind the population 'problem' is that prior to the FFYDP (1989) the government had not tried hard enough to raise public awareness of the consequences of population growth and was responsible for not providing family planning devices and contraceptives. All of them believe that high population growth places great strain on the demand for food, housing, health-care, education and employment.

In clinics, family planning implementers try to instruct women on the drawbacks of having many children and persuade them to use the clinics' facilities through advisory meetings (conducted by doctors), face to face conversation and brochures.

There are family planning centres in different parts of the cities to provide advice for young couples who are planning to marry and to provide them with information on birth control methods and present them with choices of contraception. Large quantities of contraceptive pills, IUDs, condoms and injection contraceptives have been distributed free of charge.

Doctors in the family planning centres perform sterilisation and vasectomy and construct educational programmes for young couples in the centres.

Most of the nurses believe that women are now more likely to acknowledge the penalties that continued child-birth and child-rearing exact on their own and their children's health. The free decision of couples themselves regarding how many children they raise is seen as important. However, the nurses point out that women have little say in the matter and men have a stronger voice in decisions about family planning, especially in deprived areas of cities in which women are illiterate or have only primary education and also are from low income families. In non-deprived parts,

on the other hand, women are more educated and have stronger voices in family planning decision-making.

The monitoring role of the family planning centre relating to the proper use and side effects of various contraceptive devices, women's access to information and the means to control their fertility has increased considerably. Women are the primary targets of family planning programmes. However, the nurses I interviewed believe that a shift is taking place and more men now take responsibility for family planning in the family. For example, the number of men having a vasectomy is increasing.

The nurses expressed their views that firstly television and secondly radio and newspapers have had the most effective impact on those coming to their centres. They believe that in rural areas, Health Houses, where resident nurses provide family planning services and information along with other services, have the most effective impact. This is because they have closer contact and more face to face communication with people than in urban areas.

All the nurses and doctors mentioned that the main problem in the family planning centres is the low contraceptive knowledge of people. All the answers sound quite sensible, however it seemed as if they had certain set answers for the questions.

The following questions were designed for the nurses and doctors.

Part One:

Basic information about the respondent.

General

- 1) Sex
- 2) Education
- 3) Occupation
- 4) Marital status
- 5) Number of children
male-----female----- age of children-----
- 6) Age of respondent

Work experience

- 7) Date of starting work
- 8) Duration of work in current position? Public or private clinics?
- 9) Is your work concentrated in rural or urban areas?

Part Two:

- 1) In your opinion how far does Iran suffer from a population problem? Please explain.
- 2) In your view, what is the reason(s) of this growth?
- 3) In your opinion, what is the effect(s) of this growth?
- 4) What do you see as the main features of the family planning policy?
- 5) In your opinion, to what extent does the present policy lead to a solution for the current population problem?
- 6) In your view and from your experience, what else could be done as an attempt to solve the problem?
- 7) Do you think that the family planning programme through providing contraceptive methods and free availability to contraception encourages people to adopt a small family size? How far? Explain? If not, please mention factors involved.

Part Three:

- 1) Could you tell me the role and responsibilities that you and your centres play in the field of family planning? How are these carried out?
- 2) What are the obstacles in your job? What about the deficiencies?
- 3) How do people get family planning education in your centre?
- 4) What are the problems you face in communicating with people and what do you suggest to improve that?
- 5) In your experience, what means of mass media and propaganda have had the most effective impact on the comers to your centre?
- 6) Based on your experience, who makes the ultimate decision about using contraceptives in the family? And what makes the differences? In case of tubectomy, is there any worry for the woman that her husband may changes his mind about not having any children or may take a second wife?
- 7) Do people who come to your centre have anything to worry about, for example using contraceptives? Is this related to their religious beliefs?
- 8) In your experience, how could the mass media and the religious bodies (i.e. mosque) work and collaborate to encourage people to use contraception?
- 9) In the rural areas of Iran, which means of mass media have been most effective?

Interview:

The respondent chosen was the head of the family planning department, Dr. Asaee, in the Ministry of Health in Iran. One of the main aims of the interview was to explore the government's efforts to curb the population growth. Identifying goals that executors actually and practically have pursued. I also asked about constraints and deficiencies of the programme.

1) What were your main goals in the FFYDP of Iran relating to reducing population growth? To what extent, did you achieve these goals?

2) What have been the main factors in reducing high rates of population growth in Iran?

Which ones were the most effective?

3) What were the problems and deficiencies in implementing the programme?

4) Have you followed the same goals of FFYDP in SFYDP? If not, what have been the changes?

Interviews:

I also interviewed three eminent Islamic jurists, Ayatollah Ahmadi, Ayatollah Mousavi Zanjani and Ayatollah Mousavi Ardebily, with different views on the family planning programme in Iran. I also examined Ayatollah Sanei's views and *fatwas* through the 1990 Conference in Isfahan (Conference Proceedings, 1990).

The questions asked in the interviews were:

- 1) What do you think about the preferred family size in Islam?
- 2) What is your opinion about birth control?
- 3) What is your view about different kinds of birth control devices?
- 4) What method of birth control is permitted in Islam?
- 5) What is your *fatwa* about abortion?

I interviewed these Ayatollahs because their attitudes and *fatwas* have been important in shaping government's policies on family planning programme, as well as in shaping people's attitudes. I tried to choose ones with a range of views: from conservative to more liberals. I made appointments to interview them by telephone. All the ones I planned to interview accepted my request. Some of the questions were structured, but most of them were open-ended questions. (see interview schedule on page 206) Each interview took about one hour. As many of the questions were open-ended, a qualitative approach to analysis of the responses was under-taken.

Their responses illustrated both the degrees of consensus and the variation in views of the jurists. They inform some of the discussion in Chapter Four. However, in this appendix, some of the main points are summarised.

Some variation is evident in the views of the jurists on Islam and preferred family size. Ayatollah Ahmadi believes that Islam is in favour of large families. However, Ayatollah Mousavi Zanjani believes that the ideal family size in Islam is dependent on socio-economic conditions of the society, while Ayatollahs Mousavi Ardebily and Sanei believe that Islam is in favour of a small family norm. Ayatollah Mousavi Ardebily said that Islam emphasises the quality of children rather than their quantity.

In relation to family planning, there is a high degree of consensus. All of them believe that birth control and using different kinds of contraceptive methods is permissible in Islam as long as it is harmless. In case of sterilisation, Ayatollah Ahmadi believes that if the reversal of the operation is not possible, it is not allowed in Islam. However, most of them believe that couples who have children can choose

this method. All of them oppose contraception for childless families and single people. They express their views by issuing *fatwas*.

On the issue of abortion, most of the *ulama* believe that Islam prohibits abortion at any stage of pregnancy. If abortion does take place, the Islamic punishment up to 120 days (the time of ensoulment agreed by a consensus of the *ulama*), is that the offender shall pay some blood money (*dieh*).

After the time of ensoulment, they believe that abortion is equivalent to murder and punishable by a higher blood price. The exception to this prohibition is if the pregnancy is judged detrimental to the psychological or physical well-being of the mother. Whether this is so is decided by the courts (which operate according to Islamic law) and whose interpretation is usually very strict. However, among the *ulama* in Iran, there are a few, including Ayatollah Sanei who adopt a more liberal interpretation and believe that in the early stages of pregnancy, abortion is allowed, if the birth of a child causes a problem for the Islamic state or the family.

In the interviews with the jurists, the adaptability of Islam to contemporary conditions became apparent. In Iran, the *ulama* by adopting new and creative interpretations have given new meaning to Islamic concepts. (Examples of this are discussed in Chapter 4) The main reason is that they believe these new interpretations to be in the interest of the government and society. For example, in the first years of the Revolution, sterilisation was forbidden by *ulama*. But after the Iranian government introduced family planning programme to curb the population growth, most of them changed their *fatwas* in favour of sterilisation and vasectomy for couples who already have children.

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