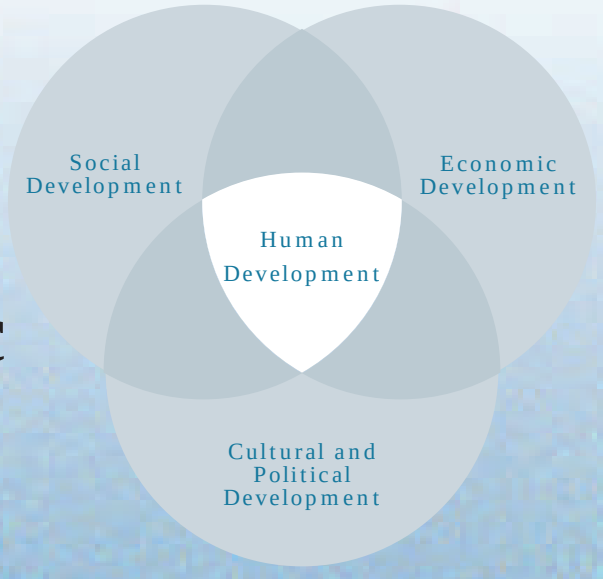
Human Development Report of the Islamic Republic of Iran, 1999



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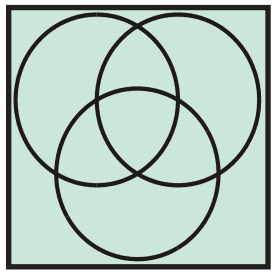

Human Development Report of the Islamic Republic of Iran, 1999

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The cover photograph by Siavash Laghai shows flamingoesin flight over the Gorgan Lagoon on the coast of the Caspian Sea.

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بسم الله الرحمن الرحیم

Foreword by the Head of the Plan and Budget Organization

Two decades of sustained effort involving cultural, social, political and economic transformation have wrought remarkable achievements in human development in the Islamic Republic of Iran, particularly in education and health. Realized despite the economically and developmentally draining Imposed War with Iraq in the Islamic Republic's early years, these achievements can be attributed in no small measure to the First and Second Development Plans which laid the groundwork for growth in GNP and improvement in human development indicators.

The Third Development Plan represents the pursuit and expansion of this reform-cultural, social and political-and should foster higher economic growth and a stronger social security system, all of which augurs well for further gains in human development.

This first Human Development Report of the Islamic Republic of Iran was compiled under the supervision of the Plan and Budget Organization using reports prepared by the directors and experts of various agencies and organizations. The United Nations Development Programme and the other UN agencies in the Islamic Republic of Iran, as well as their international consultants who reviewed the final draft, made an important contribution to this report.

It is my duty here to express my thanks to all those who had a share in the preparation of the report. I would particularly like to acknowledge Mr. Abdulhamid Moafian (National Project Director), Mr. Masoud Mohammadi Alamuti (Principal Coordinator and member of the Editorial Committee), Dr. Mohammad Reza Sharifazadeh and Dr. Mehdi Assali (members of the Editorial Committee), Dr. Farhad Noorbakhsh and Mr. Omar Noman (international consultants). I would also like to thank Dr. Mir Mahdi Seyyed Isfahani, head of the Management and Development Centre of Iran, for his valuable cooperation with the Plan and Budget Organization on this project.

It is my hope that this report will be a stepping stone in the regular publication of national human development reports of the Islamic Republic of Iran in the coming years.

Mohammad Ali Najafi

Vice President
and
Head of the Plan and Budget Organization

Foreword by the United Nations Resident Coordinator

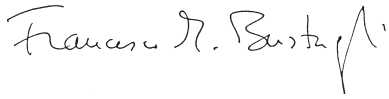
The first Human Development Report of the Islamic Republic of Iran reflects the debate that is taking place within the government and, increasingly, within society at large. Not only does it give a picture of the current situation in the country, but it also champions the national agenda for social and economic reform.

The report's general perspective is enlightening and constructive. There are strong messages on good governance, economic development, gender equity, population issues and environmental protection-messages that are attuned to the concerns and priorities of the United Nations. Along with the forthcoming Third Development Plan, the report will become a key reference to those in Iran and elsewhere who wish to gain a better understanding of this country and the concerns of its government.

The United Nations family in the Islamic Republic of Iran is pleased to have contributed its ideas and resources to this landmark effort-an effort that is already bearing fruit. Spurred on by the findings published here, the UN family is designing a joint project with the government in Sistan and Baluchestan, the province with the lowest human development index in the country. Though still in its early planning stages, this integrated effort to eradicate poverty in its many forms already speaks of a vision that is shared by the United Nations, the government and civil society.

On behalf of the United Nations family, I congratulate the Plan and Budget Organization and the other institutions that have devoted so much time and energy to the first National Human Development Report. This is a milestone occasion on which the United Nations reiterates its firm commitment to the development goals of the host country and all its people.

Francesco M. Bastagli
UN Resident Coordinator



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Preface by the Editorial Committee

The *Human Development Report* by the United Nation Development Programme is the brainchild of the late professor Mahbub ul Haq, whose deep insight and intellectual acumen gave rise to a new conceptual framework in the literature of development. Today, ten years from the publication of the first *Human Development Report* in 1990, this conceptual framework has gained a special place at the global level, exerting enormous influence on decision-makers, researchers, academics and even ordinary citizens.

The idea of human development emerged from the assumption that income does not constitute the entirety of a person's life in society and, therefore, per capita income alone is not enough to measure human progress on earth.

Professor Amartya Sen, the Nobel laureate in economics in 1998, also made an immense contribution to the development of this framework. Putting forward the idea of human capacities and functions, he underlined the all-important fact that achieving a better life has more to do with nurturing and expanding human potentialities and capabilities than constantly promoting consumption of ever more goods and services. Accordingly, the enhancement of the individual's mental capabilities through education, along with the strengthening of his or her ability to earn a living, is one of the basic elements of human development.

Although the Human Development Index is still being seriously debated in academic circles all over the world, what is beyond a shadow of a doubt is that it has greater explanatory force-in any society-than the measure of gross domestic product. But the concept of human development continues to evolve, with increasing attention being paid to the idea that analysis of a country's human development index needs to be considered from a longer perspective-one that takes into account the functioning of its cultural, political and economic institutions. Today, perhaps, dialogue is needed more on the social changes affecting the promotion or decline of human development than on the human development index as such. This is a debate that can be conducted more effectively in national human development reports than in the *Human Development Report* proper.

Today, the publication of more than a hundred national human development reports by various countries is a confirmation of the growing influence of these reports at the national level. Concentrating on issues relating to human development in individual countries, these reports provide a better opportunity than their parent publication to identify national human development challenges and achievements and make recommendations for the improvement of citizens' quality of life. Although the reports are compiled in cooperation with governments, they are designed to belong to all individuals and social groups, and consequently reflect the independent opinions of researchers and experts in the field of development. Because they address the public and non-governmental institutions in the social, cultural and political spheres as well as government decision-makers, the reports prepare the

ground for fruitful critical dialogue. The critical and independent nature of these national reports could lend them national and international reliability, making them valuable to a wide range of users-but only if their objective analysis of human development trends is informed and enriched by an analytical review of the role of social change.

This is the context in which the first *Human Development Report of the Islamic Republic of Iran* was prepared. The focus of the Iranian project has been to discern the role of an empowering social environment in the enlargement of human choices and to present a realistic profile of the country's human development achievements. The challenges facing the country have also been discussed in light of a comprehensive analysis of I. R. Iran's human development indicators and the various demographic, economic, educational, health and environmental dimensions involved. Throughout the report, particular emphasis has been placed on the status of women.

This exercise has resulted in the presentation of a new agenda for human development in I. R. Iran, informed by a profound analysis of the social changes affecting it. The remarkable progress in I. R. Iran's educational and health indicators and the relatively steady growth of per capita income are the most important findings to emerge from the analysis of the country's human development profile. Therefore, the new agenda for higher human development requires a package of structural reforms, two fundamental components of which are political development and transition to a competitive economy.

The Editorial Committee takes this opportunity to thank all the working groups that have provided it with detailed reports for the compilation of the first *Human Development Report of the Islamic Republic of Iran*. We also acknowledge the important contributions of Massoumeh Raghebi, Ladan Nowroozi, Bita Samimi, Morteza Sabet Ghadam, Abolfazl Abolfathi Ghomi, Shahryrar Alaei, Majid Dehghan Sho'ar, Davood Rahbar, Hossein Sharifi and Dariush Farkhak. Our special thanks are due to the international consultants involved in this exercise, particularly Dr. Farhad Noorbakhsh, Director of the Centre for Development Studies at the University of Glasgow. It is our hope that in the years to come National Human Development Reports will enjoy more such cooperation with universities and research centres.

Editorial Committee
The first *Human Development Report of the Islamic Republic of Iran*

Summary: Findings and Recommendations

Chapter 1

The Concept of Human Development

- The concept of human development has evolved, and now is underpinned by the goal of achieving a better life and the idea that an enabling social environment has an important role in expanding human choices. This concept lays the foundation for an analysis in national human development reports of the impact of social change on human development.
- The expansion of people's choices through higher incomes and better education and health for all is a goal that is clearly expressed in the constitution of the Islamic Republic of Iran. The interaction between the two founding principles of I. R. Iran—Islam and republicanism—paves the way for the creation of an enabling social environment for human development.
- The necessity of enlarging human choices is an idea shared by the human development approach and the doctrine of spiritual evolution in Islamic thought.

Chapter 2

A Profile of Human Development in I. R. Iran

- From 1960 to 1995, Iran's human development index values increased 0.452, moving I. R. Iran from the group of countries considered to have low human development to join the ranks of those with medium human development.
- In the past 10 years, I. R. Iran's human development index rose from 0.642 to 0.758.
- Increased life expectancy, higher rates of adult literacy, and better combined enrolment ratios were the primary factors in I. R. Iran's human development gains.
- Analysis of the trend of human development in I. R. Iran indicates that if the country had managed to achieve higher economic growth, it would have attained an even higher level of human development. A rise in per capita income coupled with sustained allocations to the social sector—particularly education and health—are key to achieving high human development in the coming years.
- The human development index adjusted by income distribution has improved in the last decade, due to relatively higher gains in the income share of the poorest 20% than of the richest 20%.
- The fall in human poverty from 31% to 18% was the country's most important human development achievement in the past 10 years.
- In the past decade, the human development index adjusted by gender rose from low to medium. This was largely attributable to the improvement in women's literacy and education, which was more significant than their gains in health and income.
- There has been no remarkable change in the gender empowerment index over recent years. Expansion of women's share in political, scientific and technical positions could help improve this index.
- There are considerable HDI disparities among the provinces. In 1996, Tehran topped the list with an HDI of 0.842 while the province of Sistan-Baluchestan, with an HDI of 0.545, was at the bottom. Differences in gross expenditure per capita were the most important cause of human development gaps among the provinces.
- Disparities in human poverty among the provinces are also significant, ranging from 11.3% in Tehran province to 39.5% in Sistan-Baluchestan in 1996. Differences in the adult illiteracy rate, income distribution, and the percentage of the population without access to safe water and sanitary toilets were the primary reasons for these gaps.
- There are noteworthy disparities in the provinces' HDIs with respect to women, primarily explained by differences in female literacy rates and the number of women representing the provinces in the Islamic Consultative Assembly (parliament).

- A comparison of the provinces' rankings on the gross expenditure per capita index and the human development index reveals that higher economic growth could lead to improved provincial HDIs, but that the most effective way of improving the human poverty index and the gender-adjusted HDI in the provinces would be to redistribute education and health services among them.

Chapter 3

Population Changes and Trends

- The most important factor in weakening population growth (from 3.2% in 1976–1986 to 1.3% in 1991–1996) was the considerable drop in fertility.
- Population changes have caused the active population to grow from 25.4 million in 1986 to 33.7 million in 1996. The population aged 15–64 years is expected to reach 47.6 million in 2006, which means that demand for jobs will increase substantially in the coming years.
- Rapid urbanization and high population growth have had an adverse effect on educational and health services as well as the environment, bringing the country face-to-face with important human development challenges.
- Unemployment did not increase inordinately under the First and Second Development Plans, but if the unemployment rate is to be kept at 9.1% under the Third Development Plan, 750,000 jobs will have to be created every year.
- The pattern of employment in the various economic sectors has changed over the last 20 years. The agriculture sector's share of employment has shrunk as the services sector's share has expanded. The decline in the industrial sector's employment share was due largely to falling employment in construction.
- I. R. Iran is host to some 2 million immigrants and refugees, reflecting a humanitarianism and Islamic compassion unrivaled in the world.
- Continued implementation of population and family planning policies would certainly help prevent a rise in unemployment in the coming years, but the only way to address the unemployment problem effectively is to adopt serious job-creation policies.
- The expansion of employment calls for labour market flexibility, higher productivity in the whole range of production factors, and the mobilization of capital. Revising the country's labour laws and regulations would help achieve this. Development of small and medium-sized enterprises is also an effective employment-expansion strategy.

Chapter 4

Income Trends and Economic Policies

- The first decade after the Islamic Revolution was marked by the Imposed War and the economic embargo, which made it impossible for I. R. Iran to formulate and implement comprehensive development plans. Consequently, the country suffered GDP losses and a downward trend in per capita income.
- In the next ten years, though, because of a strategic change of direction under the First Development Plan towards economic liberalization and privatization, GDP grew at an average annual rate of 7.3%. Since the economic reforms envisaged under the plan were not fully realized, and there was a concurrent steep fall in the price of oil on international markets, average annual GDP growth in during the first four years of the plan was no more than 3.8%.
- The absence of a logical relationship between the Second Development Plan's general policies and its operational programs was a key impediment to the full implementation of economic reforms and high economic growth.
- The economic context in which the Second and Third Development Plan were prepared were very similar. The principle structural problems facing economic reform were (and are) the government's extensive role in the economy, its intervention in price mechanisms, multiple exchange rates and insufficient distinction between fiscal and monetary policies.
- The Third Development Plan's priorities in the economic sector are reforming administrative and management structures, streamlining and increasing the efficiency of state enterprises, downsizing government, reducing monopolies, regulating the tax and budgetary systems, separating fiscal and monetary policies, and regulating the financial markets.

Chapter 5

Education

- An increase in adult literacy rate from 57.1% in 1988 to 74.5% in 1997 and a rise in combined enrolment from 65.6% to 75% in the same period were two key factors in human development gains in the last decade.
- Primary education's share in the combined enrolement has gone down, but gross enrolment rates at the secondary and tertiary levels have registered a remarkable increase.
- Comparison between education index in I. R. Iran (75% in 1997) and countries with high human development (85%–99%) makes it clear that I. R. Iran has considerable room for improvement, even though, on average, it is doing better than most countries with medium human development.
- Quantitative expansion of education, particularly at the tertiary level, has been accomplished at the expense of quality, to some degree at least. It is very important to improve the quality of education because of its impact on the country's overall development, especially at a time when the country needs higher economic growth to achieve higher human development.
- It is vitally important to ensure that education programmes—vocational and technical in particular—are compatible with the various economic sectors' needs and human development goals.
- Important policies for educational system development include boosting private sector involvement at different levels; giving universities and institutions of higher education administrative and academic independence; recruiting qualified faculty and encouraging them to do research; ensuring that tertiary-level curricula are aligned with the needs of the economy and the country's scientific development goals; and expanding independent research and development institutions.

Chapter 6

Health, nutrition and food security

- Human development gains from 1988 to 1997 were due in large measure to the increase in life expectancy from 61.6 to 69.5 years. The drop in mortality among under-fives—from 85.3 per 1,000 live births in 1988 to 37.3 per 1,000 live births in 1997—had the greatest impact on this indicator.
- Compared with life expectancy in countries with high human development (75–80 years), I. R. Iran's 69.5 years leaves considerable room for improvement. Nonetheless, I. R. Iran is higher on this indicator than most countries with medium human development.
- The establishment and expansion of the Public Health Care network was the government's most important policy, giving 100% of the urban population and around 85% of the rural population access to primary health care.
- Policies needed to develop the national health system include continuing government involvement in health care while expanding private sector provision of specialized medical services; introducing realistic fees for health care services; giving local councils more discretion over financial allocations to health care services; and eliminating shortcomings in the Public Health Care network and the health system in general.
- From 1988 to 1997, the average share of different macronutrients (proteins, carbohydrates and fats) in Iranians' total energy supply was similar to that in developing countries.
- To achieve sustainable food security, I. R. Iran needs to increase domestic production of food items, take measures to ensure adequate levels of micronutrients in Iranians' diet, prevent food wastage, improve general nutrition awareness, reduce income poverty, and assure a more equitable distribution of income.

Chapter 7

Women

- Almost all of I. R. Iran's institutions and public organizations have established special units for advancing the status of women. The most important of these are the Cultural and Social Council of Women, the Special Committee for Women and Youth attached to the Expediency Discernment Council, the Centre for Women's Participation affiliated with the Office of the President, the provincial commissions on women's affairs within the Ministry of the Interior, a special parliamentary commission on women and youth and the family, and bureaus of women's affairs in the judicial branch.

- Women have made significant achievements in the legal arena. These include the ratification and implementation of laws and regulations aimed at defending women's rights, the expansion of women's participation in the decision-making process, actions and measures taken to prevent violence against women, and accession to international treaties and conventions.
- The difficulties women face in I. R. Iran can be explained by the fact that modernization in the country's economic, social and political systems has not been matched by a similar level of development in its legal system, resulting in certain inconsistencies in social life. Developing Islamic jurisprudence in such a way as to take account of the changing status of women might be an important step towards eliminating women's legal problems.
- It will be important to expand women's non-governmental organizations; make government agencies dealing with women's affairs more coherent by eliminating duplication; and accede to the Convention for the Elimination of All Forms of Discrimination against Women (CEDAW), with reservations on those sections considered to be in contravention of incontrovertible Islamic principles.
- It has been impossible to assess women's share in the national economy and total employment properly because of the lack of techniques to measure the work done by women in small traditional units. Indeed, official statistics put the female economic activity rate in 1997 at 14.3%. Initiatives aimed at expanding women's employment are needed to improve their human development.
- Some of the most important achievements in women's health are the implementation of reproductive health and family planning programmes; greater popular participation in health care service provision; the formulation of laws and health schemes guaranteeing the reduction and elimination of occupational health hazards for women; and the development of mechanisms to give women full and equal access to health care services.
- Policy priorities to improve women's health are: strengthen the participation of non-governmental organizations in health service provision for women; expand sports facilities for women; and develop social security networks for the protection of women.
- Although the rate of female literacy, particularly in rural areas, has grown remarkably in the past decade, female illiteracy in both cities and villages is still high. A reduction in this rate will greatly help improve women's human development.
- The considerable increase in the rate of admission of girls to universities and institutions of higher education is undoubtedly a significant achievement. The creation of sufficient job opportunities for women with college degrees is now an important challenge.
- The human development of women in Islamic terms requires comprehensive development in all its cultural, political and economic dimensions and based on an approach inspired by Islamic spirituality so that the problems and challenges stemming from unbalanced development in women's affairs can be addressed.

Chapter 8

The environment

- Rapid urbanization during the recent decades, coupled with a lack of attention to the environmental impact of industrial activities, is one of the chief factors threatening the human environment in I. R. Iran.
- The policy requiring the construction of industrial parks in city outskirts is one of the most effective for reducing industrial environmental pollution. To achieve this, it will be necessary for industrialists and factory owners to observe environmental standards more strictly. Another important pollution-reduction measure will be to implement environmental impact assessment of development projects.
- Domestic sewage, industrial effluent, pesticides, herbicides and chemical fertilizers, solid waste, and microbial and chemical pollutants in ground water are the leading sources of water pollution in I. R. Iran.
- Scant rainfall, reduced organic content, increasing salinity and alkalinity, changes in land use, and industrial pollutants are all threatening the soil. Key problems are the absence of a comprehensive plan for protection of the soil, as well as excessive use of agricultural chemicals and improper mining practices.
- Motor vehicles, which are the source of 65% of total air pollutants, are by far the most important factor in air pollution. The use of a variety of fossil fuels for domestic, industrial and agricultural purposes, and industrial activities like cement production, steel and non-ferrous metal foundries and chemical industries are the other leading sources of pollution.
- In order to tackle threats to the human environment, it will be necessary to adopt policies aimed at inculcating an ecosystemic approach to urban development, (particularly urban systems such as transportation, housing, communications, sewerage networks and commercial centres); raising the price of energy; enhancing public awareness of environmental hazards; assessing the environmental impact of development projects; requiring vehicles to conform to environmental standards; and expanding public transportation in order to limit the use of private cars.
- Desertification is one of the most serious threats to the country's natural environment. Since the victory of the Islamic Revolution, the Organization of Forests an Range Lands has implemented a number of projects aimed at rehabilitating the country's pasture

lands and improving their management, as well as numerous other projects. These projects have been important steps towards the protection of the country's forests and pasture lands and the prevention of desertification.

- It will be important to strengthen the Department of the Environment so that it can implement the national biodiversity plan; prepare a comprehensive inventory of plant and animal species; expand the country's protected areas to 10% of its total surface area to protect biodiversity; carefully monitor the exploitation of endangered species; impose a ban on changing the use of forests and pasture lands without conducting a environmental impact assessment; and prepare a national plan for tackling marine pollution.
- Two other steps are required to deal with the environmental challenges facing I. R. Iran: strengthen the system of policy making, management and implementation of environmental protection programmes, notably through the Department of the Environment; and enhance popular participation in environmental protection, particularly by non-governmental organizations and the industrial and manufacturing sectors.
- Expanding regional cooperation within the framework of the Regional Organization for the Protection of Marine Environment (ROPME) will contribute significantly to preventing and reducing marine pollution.

Chapter 9

Drugs

- I. R. Iran captured 70% of all the illicit opium and 90% of the illicit morphine seized throughout the world in 1990–1996. In 1998, I. R. Iran was the international leader in illicit opium seizures, with 86.9% of the world total. These figures illustrate the country's important achievements in controlling the supply and transit of narcotic drugs.
- Vast poppy cultivation and massive narcotic drugs production in Afghanistan, the booming drug markets in European countries, extensive common borders with the Afghanistan and Pakistan, and the high cost of establishing and maintaining physical barriers along its borders to prevent drug trafficking are the major challenges facing I. R. Iran in controlling the supply and transit of narcotic drugs.
- Previous legislation against drug abuse in Iran lacked provisions for reducing demand, concentrating instead on drug-use bans or penalties for offenders. Treatment programmes were few and far between.
- The formulation of a programme for the prevention of drug abuse and treatment and rehabilitation of drug addicts by the State Welfare Organization was the first step towards a comprehensive planning approach to reducing demand for narcotic substances. The organization is currently taking effective demand-reduction measures by establishing outpatient treatment centres, implementing addiction prevention programmes in a number of the provinces, developing self-help services, and publishing educational books and films. It will be necessary, however, for the Ministry of Health and Medical Education's five-year plan to take an approach to its prevention strategy that is inclusive of the whole range of physical, psychological and social aspects of addiction.
- To tackle the drug problem effectively, regional and international cooperation on reducing the supply of and demand for narcotic drugs needs to be expanded, particularly through exchange of information, legal collaboration, confiscation of assets acquired from narcotic drugs, and controlled delivery. Meanwhile, exchange of information on preventing drug use and reducing demand and the provision of training programmes by international organizations would help combat the destructive impact of drug addiction on human development.

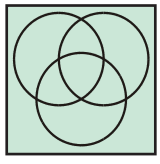
Chapter 10:

Political Development and Economic Reform: A New Agenda for Human Development

- Political development and economic reform are the keys to the creation of an enabling environment for the achievement of higher economic growth and, by extension, a higher level of human development.
- Identifying the conditions and requirements of an integrated matrix of political development and economic reform, and providing the grounds for the realization of these reforms are the primary challenges facing the creation of an enabling environment.
- The formulation and ratification of the constitution of the Islamic Republic of Iran laid the foundation of rule of law. Efforts aimed at the constitution's full implementation are imperative for the development of rule of law in I. R. Iran.

- A comparison between the number of participants in the various elections held in I. R. Iran and the number of eligible voters indicates that political participation is growing. Although this trend has had its ups and downs because of the nature of the different elections, the general conclusion to be drawn is that whenever there was greater pluralism, participation increased.
- Insufficient attention to the socio-political prerequisites for economic reform, policy changes in the course of implementation, and failure to implement fully some of the policies adopted under the plans were among the main reasons why the First and Second Development Plans were not completely successful in achieving their economic goals, particularly for the transition to a competitive economy.
- By forging a relationship between domestic politics, economic reform, cultural policies, and foreign policy, the Third Development Plan strives to present operational strategies for the realization of its general policies. Because it relies on the reform of regulations and institutions and pays more attention to the social, cultural and legal dimensions of development, this plan stands a higher chance of success. Nonetheless, the implementation of the Third Development Plan faces a number of challenges, notably the creation of a suitable socio-political environment for the realization of economic reforms as well as the building of the executive, technical and informational capacity required for its implementation.
- An integrated process of political development and economic reform requires rule of law and popular participation to be strengthened. This can be achieved by carefully monitoring the constitution's implementation, enhancing the people's participation in elections, institutionalizing freedom of association and a free press and assuring government transparency and accountability. It also requires a connection between economic reform and political development—one that can be made by ensuring consistency in the various aspects of privatization policies within the framework of the existing laws and regulations, and by reducing legal obstacles. The government's commitment to executive reform and the provision of judicial, political and social security is also of great importance in this regard.
- Civil society organizations' role in the achievement of an integrated process of political development and economic reform is evinced by their continual monitoring of the government's economic and social policies to ensure that they are compatible with the legal, political and social prerequisites of such a process. It is also reflected by their activities to raise public awareness and strengthen the government's transparency and accountability. It is clear, therefore, that properly functioning civil society organizations have a fundamental role to play in the integration of political development and economic reform.

Chapter 1



The Concept of Human Development

Introduction

The concept of human development is at the very core of the *Human Development Report*. An overview of the role of national human development reports (NHDRs) clarifies this concept and facilitates the understanding of the human development approach.

National human development reports: role and impact

The global Human Development Report was first published by the United Nations Development Programme in 1990. Subsequently national reports were introduced. They have now become an important tool in discussions on the status of human development in many countries, and are used worldwide as a framework for debates on how to respond to human development challenges. The publication of no fewer than a hundred NHDRs reflects the growing acceptance and influence of these reports at the global level.

In 1992, Bangladesh became the first country to publish a national human development report, and so far it has published more than any other nation. Most East European countries published their first reports in 1995, and many Asian, African, Arab and Latin American countries have also issued them in recent years.

NHDRs have three main roles. First, they bear important messages for political and economic decision-makers. By reviewing trends in the overall human development index (HDI) and in the indices adjusted by income distribution, gender and region, the reports expose the challenges lying ahead. They also contain policy recommendations aimed at improving current trends and reducing disparities between various income groups, men and women, and different regions—recommendations that can also be used as guidelines for the allocation of resources to the country's human development priorities. Indeed, the numerous indicators on income, education, health, the environment, and the situation of women and children contained in NHDRs provide a wealth of data for governments to use in policy making.

National human development reports have become an important tool in discussions on the status of human development in many countries.

Second, NHDRs convey important signals to civil society institutions. Because they are realistic and frank, these reports can prepare the ground for constructive dialogue between governments and civil society. By evaluating government policies from a human development perspective and recommending corrective social and economic measures, NHDRs make civil society organizations aware of the challenges facing human development in their countries and the areas in which they could make a useful and realistic contribution.

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Third, NHDRs play an important international role by providing a global focus for discourse on the concept of human development, human development indicators and plans of action aimed at improving them. They also provide a platform for countries to compare their human development status with that of other countries and with the standards proposed in relevant international conferences. These comparisons give the countries of the world a clearer view of their shortcomings, and encourage them to step

up their efforts towards improving their human development status.

The human development approach

The first *Human Development Report* published by the United Nations Development Program (UNDP) in 1990 defined human development as a "process of enlarging human choices." This concept of human development is made clearer when it is compared with three related approaches to human development, namely economic welfare, basic needs and human resource development.

By having "a better life" as its goal, the human development approach presents people with a truly dynamic vision of human choice.

The "economic welfare" approach views the consumption of goods and services as the basic condition for a good life. With such consumption being a function of the people's real income, real income becomes the basic measure of economic welfare. In contrast, the human development approach considers the consumption of goods and services as only one of the factors making for a good life—meeting individuals' spiritual needs and the development of their mental capabilities are other important human development goals, goals that are impossible to achieve without nurturing people's mental potential through education. Consequently, educational attainment is taken as a human development measure alongside real income. The human development perspective also gives precedence to capacity building over consumption of goods and services in the sustainable expansion of human choices, because it is capacity that allows the constant reproduction of the goods and services needed to sustain a good life.

The "basic needs" approach focuses on meeting people's minimum material and non-material needs through the provision of a specific set of goods and services. It differs from the human development approach in that it pays scant attention to the nurturing of mental and material capacities and emphasizes minimums rather than a good life in general.

Unlike the "economic welfare" and "basic needs" approaches, the "human resource development" approach—often mistaken for human development—is cognizant of and attentive to the question of capacity building and the nurturing of capabilities. However, in contrast to the human development approach, it does not set the achievement of a better life as its goal; rather, it aims at increasing people's physical productivity with a view to achieving economic growth. Human development, which emphasizes the expansion of material capacities alongside the growth of mental potentialities, sees economic growth as an instrument in the service of a happier human existence, and as a means of expanding people's choices.

Indeed, the concept of "expansion of human choices" requires a holistic view of a "better life." It means that consumption of goods and services yields its first-place standing to capacity building—which guarantees the sustainability of human development—and expanding people's mental potentialities in parallel with their material capacities. By having "a better life" as its goal, the human development approach presents people with a truly dynamic vision of human choice.

Box 1.1

Key elements in the human development approach

Equality through equal access to opportunities.
Sustainability in the form of accountability to future generations, who are entitled to the same level of development as that achieved by the present generation.
Productivity through investment in human resources and the creation of an empowering environment enabling people to use their capabilities to the maximum.
Empowerment to enable people to attain a level of individual development that would allow them to make choices close to their hearts.

It is this approach to human development that frames how it is measured. The human development index (HDI) gauges the extent to which citizens enjoy the three key components of "a better life":

- the acquisition of knowledge;
- access to the material assets needed for a decent life; and
- a long and healthy life.

The first indicator is calculated using the adult literacy rate (two thirds of the total value) and the combined enrolment ratio (one third of the total value); the second is based on the consumer's dollar-adjusted real purchasing power; and the third is calculated on the basis of life expectancy at birth.

The human development index (HDI) is a simple weighted mean derived from these indicators. The sum of the index falls between a minimum (zero) and a maximum (one). Countries with HDI values lower than 0.500 are classified as having "low" human development; countries with an HDI from 0.500 to 0.799 are categorized as having "medium" human development; and those whose index is 0.800 or above rank among countries with "high" human development.

The minimums and maximums assigned to the indicators in the human development index are those observed to have generally prevailed during the past 30 years, with the expectation that they will continue to prevail for the next 30 years. The minimum for adult literacy and the combined enrolment ratio is zero and the maximum is 100. The life expectancy indicator uses a minimum of 25 years and a maximum of 85 years. The minimum and maximum annual per capita income are set at US$100 and US$40,000 respectively.

Because it is a national average, the human development index is not indicative of human development disparities between various income groups, men and women, and different regions. To explain these disparities, human development indices adjusted by income distribution, gender and region have been formulated. The human poverty index measures the extent of privation in terms of income, health and education, and reveals the portion of the population living in poverty. To determine the extent of lifetime prevalence of deprivation, the index measures the percentage of people with a life expectancy of less than 40 years. The assessment of the lifetime prevalence of deprivation relating to education is based on the illiteracy rate. The percentage of the population without access to clean drinking water, sanitation and health services as well as the percentage of underweight children below five years of age are used to measure deprivation in terms of the amenities necessary for a decent life. (The technical notes in the Human Development Reports describe the methods used to calculate the human development indices.)

An enabling social environment: expansion of the human development concept

As is the case with any other novel idea, critical analysis of the human development concept has driven its evolution. Since the emergence of the human development approach in the development literature, both the concept of human development and the index used to define it have come under a range of criticism.

One line of criticism relates to the failure of the concept to set a "better life" as the principal goal of human development; indeed, some advocates of the concept are blamed for equating the "expansion of choices" with human development. The expansion of human capabilities, critics contend, is merely a means to the end of achieving a better life.

Along the same line of argument, some critics are of the view that a better life cannot be achieved solely through improvements in income, education and health. In other words, the lack of comprehensiveness in the components making up the HDI has

A person's educational attainment or life expectancy cannot be gauged by the level of his or her income alone, although changes in an individual's state of health or educational progress can be partially attributed to variations in his or her per capita income.

A better life cannot be achieved solely through improvements in income, education and health.

The failure to recognize the importance of the social environment in which choices can expand means that the dynamism of human development trends has been overlooked.

been cited among its shortcomings. It is said, for example, that while individuals' political participation is an important factor in the achievement of a better life, their status in terms of their political rights and the value of their input into the political system cannot be measured by the HDI. In response to this criticism, defenders of the HDI explain that it is impossible to include a multitude of indicators in a single human development index, particularly as the data needed for so many indicators are not available at a global and national level. If more indicators were included in the HDI, they add, the general human development picture would become ambiguous, blurring the importance of the major trends.

Box 1.2

The need to renew the concept of development

As development becomes imperative, as we approach the turn of this century, we are faced with the necessity of giving new meaning to the word. Reflecting on development is thus the most important intellectual challenge in the coming years.

Boutros Boutros-Ghali

Other commentators criticize the interdependence of the three indicators in the HDI. They argue that higher per capita income results in higher educational attainment and improved health, that better education leads to improved health and higher income, and that better health leads in turn to better education and higher income.

This criticism could be answered by the argument that while the indicators are undeniably related, they do not lack independence from each other. In other words, each of the three indicators only partially explains changes occurring in the other two. For example, a person's educational attainment or life expectancy cannot be gauged by the level of his or her income alone, although changes in an individual's state of health or educational progress can be partially attributed to variations in his or her per capita income. The conclusion to be drawn from this is that the HDI's identity is independent of the indicators making it up. Some technical criticisms of the HDI methodology have also been made; refer to specialized sources for a discussion of these.

Another important critical argument—one that may well improve the analytical framework of the human development concept—has emerged in some recent national human development reports, notably Ukraine's. The argument is that the human development concept does not take into account the role of an "enabling social environment" in expanding human choices.

Although the displacement of consumption of goods and services by the "enlargement of human choices" has been an important conceptual advance in understanding and promoting a "better life," the failure to recognize the importance of the social environment in which choices can expand means that the dynamism of human development trends has been overlooked. This failure means that the HDI can measure only the situation as it stands: it is virtually silent on how to improve countries' human development status in the future.

Box 1.3

Social capital and human development

Social capital is fundamental to the concept of human development, but has not yet been adequately considered in the definitions therein.

National Human Development Report of Ukraine, 1996

If the notion of an "enabling social environment" is incorporated into the concept of human development and greater emphasis is placed on the goal of a "better life," human development can be redefined as

follows: "*Human development is a process of expanding human choices in an enabling social environment with the aim of achieving a better life.*" Working from this definition, changes in the human development index could be analyzed over a specified period of time within the framework of developments taking place in the country's social environment. The accomplishments and deficiencies revealed by such an analysis would make it possible to formulate recommendations on how to effect improvements.

An analysis of HDI trends within the framework of the changes taking place in the country's social environment would enrich the themes covered in NHDRs and increase their usefulness. Admittedly, each country has its own special cultural, political and economic structures. A study of the impacts of these structures on human development trends would provide important information on how to expand citizens' choices. Recommendations on how to correct and upgrade the performance of a country's social structures and institutions in order to effect human development improvements would become the NHDRs' most important message.

Box 1.4

Expanding the concept of human development

Human development is a process of expanding human choices in an enabling social environment with the aim of achieving a better life.

A conceptual framework is proposed in box 5.1 that describes both the context in which human choice can expand (the enabling social environment) and the yardsticks that could be used to measure it. Its major attributes are:

- emphasis on the analysis of HDI trends;
- emphasis on the role of social developments in HDI change;
- introduction of five key social institutions for the creation of an enabling social environment; and
- emphasis on the need for the social institutions to be integrated in order to create an enabling social environment.

In view of social scientists' findings and the global community's recommendations on creating an enabling environment, it is proposed here that the defining features of an enabling social environment against which a country's human development trends could be analyzed are a social safety net, competitive markets, rule of law, democracy, and cultural identity.

Human development in the Islamic Republic of Iran

The compatibility between religion and the general concepts of development in the Islamic Republic of Iran will provide a particularly positive atmosphere for the emergence of a unique human development approach in this country. This compatibility affects both the goal of human development for a better life and the circumstances reinforcing the creation of an enabling social environment.

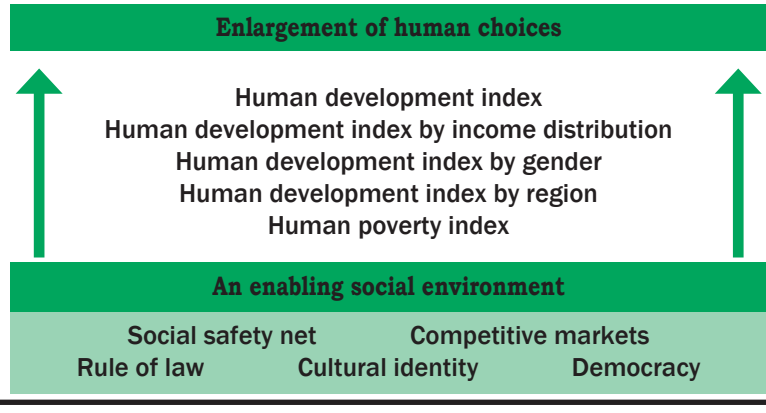
The expansion of choices in the three areas of education, income and health not only provides the necessary conditions for a better material life, but paves the way for the creation of a suitable environment

An analysis of HDI trends within the framework of the changes taking place in the country's social environment would enrich the themes covered in NHDRs.

The compatibility between religion and the general concepts of development in the Islamic Republic of Iran will provide a particularly positive atmosphere for the emergence of a unique human development approach in this country.

Box 1.5

An enabling social environment for human development: a conceptual framework



During the past two years, coinciding with the advent of the new government, a fresh approach has been taking shape in the country's social environment, dramatically affecting its human development trends.

for people's spiritual advancement, which constitutes the very foundation of Islamic thought. Islamic culture views the enhancement of people's capabilities as an imperative, contending that lack of sufficient income condemning one to destitution, inadequate schooling imposing ignorance, and a short life lived in poor health would hardly lead to "a life modeled on the Almighty's decrees." Hence the insistence of Islam on the acquisition of knowledge and income, and the preservation of good health.

By the same token, the country's constitution stipulates the enlargement of the people's choices through universal education and health care, which are among the prime goals of the Islamic system. At the same time, the interaction between the two pillars of the Islamic Republic—Islam and republicanism—within the country's social environment allows for the formation of empowering institutions for human development. The emphasis placed by the constitution on the importance of the rule of law, political participation, competition and social security is one of the explicit manifestations of the existence of such an enabling environment.

During the past two years, coinciding with the advent of the new government, a fresh approach has been taking shape in the country's social environment, dramatically affecting its human development trends. The President's emphasis on the participation of the citizenry and attention to all the cultural, political and economic dimensions involved in development is consistent not only with the objectives of human development, but also with the creation of an enabling environment for it.

Box 1.6

Comprehensive, balanced and sustainable development

Optimal development encompasses economic, social and cultural dimensions. There is no doubt that economic and social development cannot complete itself without cultural development.

Imam Khomeini

In our view, desirable development is comprehensive, balanced and sustainable development, guaranteeing the participation of all individuals, social groups and sectors, including women and youth, in the process of growth and progress. This development is centered on human beings and is directed towards the enhancement of their ability to enjoy the material and spiritual benefits life has to offer.

President Seyed Mohammed Khatami

Box 1.7

Spiritual perfection and human development in Islamic thought

From the Islamic perspective, man has been granted a place of honour in the whole universe. Spiritual perfection is a process of moving in the direction of absolute perfection, which is an attribute of God Almighty. Such perfection can be realized only through the blossoming of spiritual talents by means of moral refinement and commitment to the edicts ordained by God. Thus, spiritual perfection is the fruit of the expansion of man's spiritual capabilities. Due to its emphasis on the expansion of human potentialities, human development is fully compatible with the idea of spiritual perfection. The distinction between the two concepts, however, lies in the way human potential is defined. In the human development approach, the concept of human choices depends on increasing incomes, ensuring educational progress and improving health. The notion of spiritual perfection, while duly recognizing achievements in these areas, considers submission to the will of the Almighty as the prime condition for the actualization of all human potentialities, material or spiritual. In the face of the challenge posed by the idea of spiritual perfection, it is by the translation into quantitative indicators of the obligation to defer to the edicts of God that an objective measurement of the doctrine of spiritual expansion can be contemplated at the national level. This also makes it reasonable to compare countries—particularly Islamic states.

Chapter 2

A Profile of Human Development in I. R. Iran

Introduction

Analysis of the cultural, political and economic changes the country has undergone in recent decades (particularly the last two) has been central to the definition of a realistic human development profile for the Islamic Republic of Iran; it has also revealed the causes of change in the past and possibilities for change in the future. In the 20 years since the foundation of the Islamic Republic, the social environment has changed such that Iranians' choices have expanded considerably, but even more progress could be made. In the meantime, momentous challenges are loaming on the horizon.

Human development in recent decades

From 1960 to 1995, Iran's human development index values increased 0.452, moving I. R. Iran from the group of countries considered to have low human development to join the ranks of those with medium human development (figure 2.1).

There has been significant progress in human development all over the world in the last half of the century. Many countries with low human development have achieved the medium level during this period, although some have made greater progress than others. While I. R. Iran has attained higher human development than Egypt, Iraq, Saudi Arabia and Turkey, it has had a lower rate of growth than countries like Malaysia and the Republic of Korea, which since the mid-1960s have climbed from low to high human development.

While I. R. Iran has attained higher human development than Egypt, Iraq, Saudi Arabia and Turkey, it has had a lower rate of growth than countries like Malaysia and the Republic of Korea.

Figure 2.1: Iran's human development index, 1960–1995

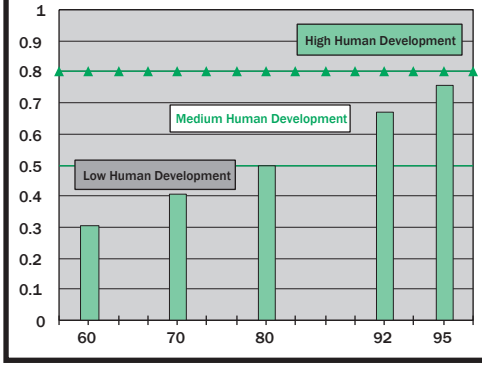


Figure 2.2: I. R. Iran's human development index, 1988–1997

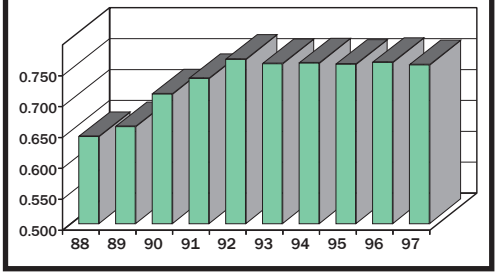


Figure 2.2 shows the upward trend in I. R. Iran's human development index in the past decade (from 0.642 to 0.758), but it has not been constant, actually showing a slight decline in 1995 and 1997.

Social changes and trends in human development

Advances in human development in I. R. Iran are rooted both in the modernization that the country has undergone over

Table 2.1: Life expectancy, 1960–1997 (years)

Year	1960	1988	1997
Life expectancy	49.5	61.6	69.5

While it took three decades (1960–1988) for life expectancy to rise from 49.5 to 61.6 years, it took only one (1988–1997) for it to rise from 61.6 to 69.5 years, demonstrating that there has been significant improvement in citizens' health in the last 10 years.

the last half-century and in the changes wrought in the last 20 years. The transformation of the social environment has significantly affected income, education and health (the three basic components of the human development index), bringing not only progress but also challenges to I. R. Iran.

While it took three decades (1960–1988) for life expectancy to rise from 49.5 to 61.6 years, it took only one (1988–1997) for it to rise from 61.6 to 69.5 years, demonstrating that there has been significant improvement in citizens' health in the last 10 years (table 2.1). By raising public health awareness and giving priority to health care (and allocating significant resources to health care facilities, particularly under the First and Second Five-year Development Plans), the government has created the conditions necessary for increasing Iranians' life expectancy.

Adult literacy rose from 41.8% on the eve of the revolution (1979) to 57.1% in 1988, and then jumped to 74.5% in 1997 (table 2.2). Similarly, the combined enrolment ratio (combined first- second- and third level gross enrolment ratio) shot up from 46% in 1980 to 65.6% in 1988 and then to 75% in 1997. In the final year of the previous regime not even half of the country's school-age children were getting an education; since then, because of the Islamic Republic's emphasis on universal education and its substantial education expenditures (particularly at the primary and secondary levels), all-round improvement has been achieved. A glance at adult literacy rates over time shows that gains were greatest in the second decade after the revolution, propelled by the need for reconstruction after the Imposed War. It can be seen, therefore, that an enabling environment was created for the nationwide expansion of educational facilities after the triumph of the revolution, particularly under the First and Second Development Plans.

Table 2.3, however, speaks of different trends. Before the revolution, real GDP per capita expanded at a rate equal to 150%, from $1,985 in 1960 to $4,976 in 1976. After the revolution, growth slowed, registering an initial drop in the first decade after the revolution, but in the second decade it rose from $3715 to $5,222.

Table 2.2: Educational indicators, 1980–1997 (percent)

Year	1980	1988	1997
Adult literacy rate	41.8	57.1	74.5
Combined enrolment ratio	46.0	65.6	75.0

The primary reason for the growth of per capita income during the decades preceding the revolution was the substantial increase in revenues from oil exports. During this period, however, insufficient resources were being allocated to the education and health sectors for social indicators to improve adequately. On the other hand, the decline of per capita income in the decade following the revolution can be explained by the Imposed War, the economic embargo, the slump in oil prices and, finally, the economic recession that lasted nearly ten years. In the second decade after the revolution, the government failed to curb spending because of the legal structure, and this impeded the creation of a competitive economic environment and high growth in per capita

Table 2.3: Real GDP per capita, 1960–1997 (US dollars)

Year	1960	1976	1988	1997
Real GDP per capita	1,985	4,976	3,715	5,222

income. To a large extent, this economic performance is rooted in the negligence of the organic link between political development on the one hand and social and economic reforms on the other. The adoption of economic policies inconsistent with the existing legal framework and the failure to implement the First and Second Development Plans fully also had an impact on economic performance.

These figures show that during the last two decades the conditions necessary for the economic system to function properly have not been established. On the other hand, because of the considerable financial resources allocated to priority areas in the social sector, it has been possible to achieve fundamental gains, particularly in education and health.

Analysis of the trends relating to the HDI components in the past decades provides very important lessons in respect to human development, which can be summed up as follows:

- It is the improvement in health and education indicators that has taken I. R. Iran from low to medium human development.
- Changes in per capita income have not had a significant role in advancing human development over the long term in I. R. Iran. It is likely that if per capita income had risen at a similar rate to health and educational indicators, the country would have been able to attain a higher level of human development in recent years.
- The substantial financial resources allocated to health and education and the priority given to the provision of social services in the last two decades have been among the principal factors contributing to improvements in health and education.
- If sustainable economic growth is not achieved, or if the country is hit by an economic recession, allocations to health and education will inevitably be squeezed. This will, in turn, diminish human development levels. When I. R. Iran is compared with countries with high human development, there is room for much improvement in health and education indicators.
- Drops in per capita income could engender economic recession or a low level of economic growth in the coming years; this would also lead to a decline in human development. Compared with many countries in the world, I. R. Iran's per capita income leaves much to be desired.
- A rise in per capita income coupled with sustained allocations to the social sector—particularly education and health—is key to achieving high human development in the coming years.

Changes in per capita income have not had a significant role in advancing human development over the long term in I. R. Iran.

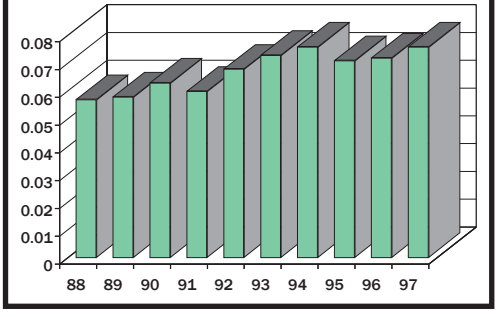
A rise in per capita income coupled with sustained allocations to the social sector is key to achieving high human development in the coming years.

The human development index based on income distribution

The overall human development index can mask the fact that the level of human development can vary from one income group to another and from one region to another—and be quite dissimilar for men and women.

Adjusted human development indices are able to show disparities in human development at the national level, while the human poverty index (HPI) can give a clearer picture of the state of human development by measuring the extent of deprivation.

Figure 2.3: Human development adjusted by income distribution, 1988–1997

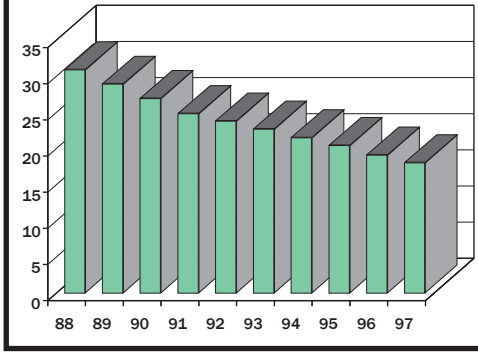


I. R. Iran's graduation from "low" to "medium" standing on the gender-related human development index (from 0.454 to 0.579) in the last decade is seen to be an important achievement for Iranian women.

A reduction in the scale of illiteracy and the number of people without access to clean water and sanitary toilets, together with more equitable income distribution, are therefore key to reducing deprivation in the provinces that are high on the HPI.

As seen in figure 2.3, the human development index, once adjusted by income distribution, rises—from 0.057 to 0.076. In the last ten years, there has been a gradual improvement in income distribution and, consequently, a reduction in human development disparities among different income groups. From 1988 to 1994, real GDP per capita rose for both the poorest 20% of the population (from $810 to $1,271) and the richest 20% of the population (from $9,043 to $12,707). Because the increase for the bottom 20% was larger than for the top 20%, the adjusted human development index for these years shows an improvement. In 1995 and 1996, however, real GDP per capita for the poorest 20% dropped to $1,197 and $1,190 respectively, while the same indicator for the richest 20% rose to $12,774 but then fell somewhat to $12,561, causing the human development index to register a decline in these years. The narrowing of the human development gap between different income groups has, for the most part, resulted from the more equitable distribution of incomes. New initiatives aimed at increasing the income share of the lower-income deciles would improve the human development index in the coming years.

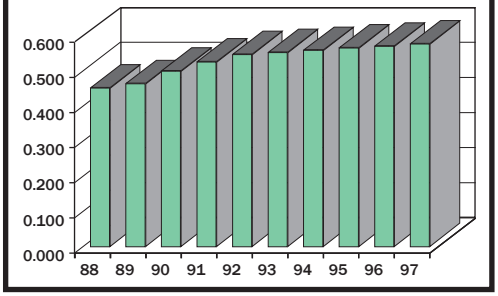
Figure 2.4: Human poverty index, 1988–1997



Trends in the human poverty index

The Human Poverty Index (HPI), which depicts the extent of deprivation in terms of life expectancy, education and per capita income, improved considerably in the last decade. The HPI's decline from 31% in 1988 to 18.1% in 1997 could be viewed as one of I. R. Iran's outstanding achievements in the area of human development (figure 2.4). The fall in adult illiteracy, the decline in the number of people without access to clean water and sanitary toilets, and the decrease in the portion of the population with a life expectancy of less than 40 years have been key factors in this amelioration. It is important to note that the rise in education and health care expenditures masked losses accruing from the lack of fundamental improvement in per capita income and income distribution—in other words, the income poverty indicator did not help lower the broader HPI. It is clear, therefore, that economic growth and a more equitable distribution of income would contribute greatly to reducing human poverty.

Figure 2.5: Human development index adjusted by gender, 1988–1997



The human development indices by gender

The human development index adjusted by gender reflects a country's success in eliminating the disparities between men and women in life expectancy, access to education and per capita income.

I. R. Iran's graduation from "low" to "medium" standing on the gender-related human development index (from 0.454 to 0.579) in the last decade is seen to be an important achievement for Iranian women. Furthermore, the improvement of women's status in terms of per capita income,

education and health during this period has considerably affected the country's overall human development index. Gains in female literacy and the combined enrolment ratio for girls (from 46.3% and 59.8% in 1988 to 67% and 73.3% in 1997 respectively) have been greater, however, than they have been in health and income.

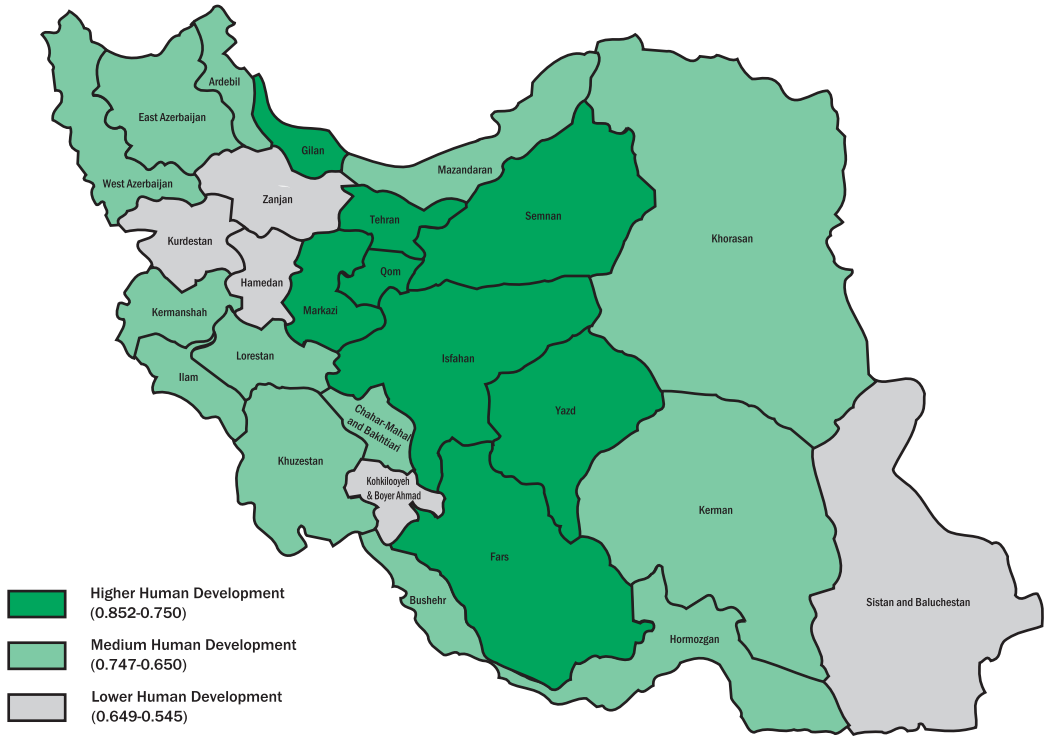
Men's share of total earned income declined from 92.4% in 1988 to 90.3% in 1997 while women increased their share from 7.6% in 1988 to 9.7% in 1997. The substantial gap between the income shares of men and women is one of the prime reasons for women doing less well than men on the human development scale. This disparity does not obtain in health and education because the political and social environment, particularly under the First and Second Development Plans, has supported improvements in the health and education status of women. In contrast, the economic structure has limited the development of conditions necessary for the expansion of women's participation, particularly in terms of employment.

A comparison between the income share of men and women in other countries throws the income situation of Iranian women into relief. For instance, in 1995, the difference between the income share of men and women in Malaysia was 39.2%, while in I. R. Iran it was 62.2%. This points to the tremendous potential for improving the human development status of women—potential that could be realized if women's employment and economic participation were promoted in the years to come.

From 1988 to 1991, I. R. Iran's gender empowerment index (GEM), which increased from 0.200 to 0.201, showed no significant change in the level of women's social, economic and political participation, but

The substantial gap between the income shares of men and women is one of the prime reasons for women doing less well than men on the human development scale.

Map 2.1: HDI disparities in the provinces, 1996



The human development index broken down by province shows how resources could be allocated to improve the situation of the more deprived provinces.

by 1995, the index had risen to 0.261, indicating remarkable progress in this area. When I. R. Iran's ranking on this scale is compared with countries that have high human development, however, it becomes clear that if the status of women is to be improved, they must be given more opportunities to assume responsibilities in political, scientific and technical positions. Changing cultural beliefs that impede broader economic participation by women is a prerequisite for the creation of an empowering environment for women's human development in I. R. Iran.

Disparities in human development among the provinces

There are wide disparities in human development at the provincial level (table 2.4). In 1996, the provinces of Tehran, Qom, Isfahan, Fars, Yazd, Gilan, Semnan and Markazi enjoyed higher levels of human development than Zanjan, Hamedan, Boyer-Ahmad, Kurdestan, and Sistan and Baluchestan at the other end of the scale. This gap, largely explained by the different levels of gross expenditure per capita (measured in household surveys) in the two groups of provinces, derives from the scope of opportunity, investment and economic resources available to them. The human development index broken down by province shows how resources could be allocated to improve the situation of the more deprived provinces. The low level of gross expenditure per capita in the deprived provinces suggests that disparities between regions could be significantly reduced through economic growth and more equitable distribution of economic resources.

Map 2.1 reveals the disparities in HDI levels between the provinces, which fall into three human development categories.

1. Higher: Tehran, Qom, Isfahan, Fars, Yazd, Gilan, Semnan and Markazi
2. Medium: Kermanshah, Khuzestan, Kerman, Mazandaran, East Azerbaijan, Bushehr, Ardebil, Khorasan, Hormozgan, Chahar-Mahal and Bakhtiari, Lorestan, Ilam, and West Azerbaijan
3. Lower: Zanjan, Hamedan, Kohgilooye and Boyer-Ahmad, Kurdestan, and Sistan and Baluchestan.

The level of deprivation seen in the third group and the vast area covered by the provinces in the second group suggests that special disparity-reducing measures need to be taken.

Remarkable regional disparities are also seen in the human development index (HDI) when it is adjusted by the gender-related development index (GDI) and the gender empowerment measure (GEM). A comparison among provinces reveals convergence between GDI and HDI, but not between GEM and HDI. The considerable gap in male and female adult literacy rates is one of the principal reasons for the disparity in GDI between the provinces of the first group and those of the third group. In the provinces of Tehran, Qom, Isfahan, Fars, Yazd, Gilan, Semnan and Markazi, this gap ranges from 8% to 15%, while in Zanjan, Hamedan, Kohgilooye and Boyer-Ahmad, Kurdestan, and Sistan and Baluchestan it ranges from 21% to 27%. It follows that the adoption of policies aimed at raising the female adult literacy rate in provinces with lower human development will greatly contribute to a reduction of disparities in the human development index adjusted by gender.

The gender empowerment measure reveals a remarkable gap between Tehran, Isfahan, Hamedan, Khorasan and West Azerbaijan on the one hand, and the country's remaining provinces on the other. The high level of this index in the former group of provinces is explained largely by the fact that women are among the deputies representing the former group of provinces in the Islamic Consultative Assembly or *majlis* (parliament). Increased political participation by women, particularly through expanded representation in the majlis, could, therefore, reduce this disparity.

The distribution of poverty among the provinces is similarly uneven: provinces

Table 2.4: Human development by province, 1996

Province	HDI	GDI	GEM	HPI
Tehran	0.842	0.610	0.441	11.3
Qom	0.795	0.555	0.229	17.6
Isfahan	0.789	0.614	0.386	15.4
Fars	0.785	0.584	0.232	20.8
Yazd	0.778	0.642	0.244	16.1
Gilan	0.759	0.646	0.276	20.9
Semnan	0.751	0.573	0.245	15.0
Markazi	0.750	0.563	0.236	21.1
Kermanshah	0.747	0.535	0.246	24.8
Khuzestan	0.746	0.515	0.225	23.5
Kerman	0.739	0.562	0.271	22.9
Mazandaran	0.724	0.566	0.245	22.1
East Azerbaijan	0.719	0.542	0.229	25.2
Bushehr	0.706	0.510	0.223	21.7
Ardebil	0.705	0.510	0.205	29.8
Khorasan	0.698	0.552	0.338	23.1
Hormozgan	0.693	0.486	0.220	27.7
Chahar-Mahal and Bakhtiari	0.682	0.564	0.243	24.6
Lorestan	0.680	0.499	0.207	27.6
Ilam	0.675	0.520	0.226	23.7
West Azerbaijan	0.650	0.474	0.316	30.4
Zanjan	0.649	0.490	0.251	28.5
Hamedan	0.637	0.492	0.380	26.2
Kohgilooye and Boyer-Ahmad	0.623	0.491	0.164	33.2
Kurdestan	0.619	0.448	0.225	31.7
Sistan and Baluchestan	0.545	0.393	0.220	39.5

HDI = human development index
GDI = gender-related development index
GEM = gender empowerment measure
HPI = human poverty index

There are wide disparities in human development at the provincial level in 1996. Remarkable regional disparities are also seen in the human development index (HDI) when it is adjusted by the gender-related development index (GDI) and the gender empowerment measure (GEM).

enjoying a higher level of human development have a lower level of poverty, and those with lower human development endure a generally higher level of poverty. Although inequities in gross expenditure per capita go some way towards explaining this situation, HDI disparity among provinces can actually be traced back their adult literacy rate, the share of the their population without access to clean water and sanitary toilets, and the ratio between gross expenditure per capita by the poorest 20% and the richest 20%. A reduction in the scale of illiteracy and the number of people without access to clean water and sanitary toilets, together with more equitable income distribution, are therefore key to reducing deprivation in the provinces that are high on the HPI.

Table 2.5 shows the gaps between the richest and poorest provinces when their

rankings on the gross expenditure per capita index and the HDI, HPI, GDI and GEM are correlated. These gaps have been quantified by subtracting each province's ranking on the various indices from its gross expenditure per capita index ranking. A positive difference shows that the province ranks higher on the HDI, HPI, GDI or GEM index than on the gross expenditure per capita index, while a negative difference indicates the reverse. These figures underline the dependence of human development on gross per capita expenditure.

In 1996, the differences between the provinces' rank on the gross expenditure per

Table 2.5: Correlation of human development and gross expenditure per capita indices by province, 1996

Province	GEP	HDI	Diff	GEP	HPI	Diff	GEP	GDI	Diff	GEP	GEM	Diff
Tehran	1	1	0	1	1	0	1	4	-3	1	1	0
Qom	1	2	-1	1	5	-4	1	11	-10	1	15	-14
Isfahan	6	3	3	6	3	3	6	3	3	6	2	4
Fars	2	4	-2	2	6	-4	2	5	-3	2	14	-12
Yazd	5	5	0	5	4	1	5	2	3	5	11	-6
Gilan	9	6	3	9	7	2	9	1	8	9	6	3
Semnan	11	7	4	11	2	9	11	6	5	11	10	1
Markazi	7	8	-1	7	8	-1	7	9	-2	7	13	-6
Kermanshah	3	9	-6	3	16	-13	3	14	-11	3	9	-6
Khuzestan	4	10	-6	4	13	-9	4	17	-13	4	17	-13
Kerman	8	11	-3	8	11	-3	8	10	-2	8	7	1
Mazandaran	13	12	1	13	10	3	13	7	6	13	10	3
East Azerbaijan	10	13	-3	10	17	-7	10	13	-3	10	15	-5
Bushehr	15	14	1	15	9	6	15	16	-1	15	18	-3
Ardebil	10	15	-5	10	22	-10	10	16	-6	10	21	-11
Khorasan	14	16	-2	14	12	2	14	12	2	14	4	10
Hormozgan	12	17	-5	12	20	-8	12	21	-9	12	19	-7
Chahar-Mahal	18	18	0	18	15	3	18	8	10	18	12	6
Lorestan	16	19	-3	16	19	-3	16	18	-2	16	20	-4
Ilam	19	20	-1	19	14	5	19	15	4	19	16	3
West Azerbaijan	17	21	-4	17	23	-6	17	23	-6	17	5	12
Zanjan	20	22	-2	20	21	-1	20	19	1	20	8	12
Hamedan	21	23	-2	21	18	3	21	22	-1	21	3	18
Kohgilooye	22	24	-2	22	25	-3	22	20	2	22	22	0
Kurdestan	20	25	-5	20	24	-4	20	24	-4	20	17	3
Sistan and Baluchestan	23	26	-3	23	26	-3	23	25	-2	23	19	4

GEP = gross expenditure per capita
HDI = human development index
GDI = gender-related development index
GEM = gender empowerment measure
HPI = human poverty index
Diff = The province's rank on the identified index subtracted from its rank on the gross expenditure per capita index.

capita index and the human development indices ranged as follows:

- HDI: from –6 to 4;
- HPI: from –13 to 9;
- GDI: from –13 to 10;
- GEM: from –14 to 18.

The narrowest differences in rank—even in the poorest and richest provinces—are between the gross expenditure per capita index and the HDI, proving that gross expenditure per capita plays the leading role in the disparity between provinces' HDI. In contrast, there are significant differences between gross expenditure per capita and the HPI and the GDI, indicating that provincial disparities in these indices are due more to adult literacy rates, (particularly women's) and the share of the population that has no access to clean water or sanitary toilets than to gross expenditure per capita.

The greatest differences, however, are between gross expenditure per capita and the GEM, suggesting that gender empowerment in the provinces is not highly dependent on the state of the economy there. One of the reasons for this could well be that some provinces have female members of parliament while others do not.

Table 2.5 leads to two fundamental conclusions:

- There is a remarkable correlation between human development index and gross expenditure per capita index rankings, confirming that a higher rate of economic growth is a prerequisite for the achievement of higher human development. Clearly, reducing regional disparities and ensuring that the provinces share equally in the benefits of economic growth are key to achieving real progress in human development on a regional scale.
- Correlation between rankings on the gross per capita income index and the HPI and the GDI is weaker because disparities among the provinces on these indices are assumed to be caused by differences in literacy rates and health status. The corollary to this is that improvements to health and educational services could reduce disparities between the provinces on these indices. Although there has been remarkable progress in health and education at the national level, it has not been equally distributed among the various regions.

This analysis makes it clear, therefore, that an improvement in human development in I. R. Iran as a whole requires not only a higher rate of economic growth but also a more equitable distribution of health and education facilities.

Gross expenditure per capita plays the leading role in the disparity between provinces' HDI.

An improvement in human development in I. R. Iran as a whole requires not only a higher rate of economic growth but also a more equitable distribution of health and education facilities.

A balance sheet of human development

Achievements	Failures
Education	
• Between 1988 and 1997 the adult literacy rate rose from 57.1% to 74.5%. • During the same period, the combined gross enrollment at all levels of education rose from 65.6% to 75%.	• Vocational and technical education was not much popular among the country's school age population. • Educational attainment was not equally distributed between the provinces.
Health	
• During the past decade life expectancy increased from 61.6 years to 69.5 years. • During 1988-97 under-five mortality rate declined from 85.3 to 37.3 in every 1,000 live births.	• There was an increase in the prevalence of cardiovascular diseases. • The country's provinces showed considerable disparities in respect of life expectancy.
Income and poverty	
• During the past decade human poverty decreased from 31% to 18%. • Income distribution was more equitable, favoring the lower deciles.	• Distribution of human poverty among the country's provinces was not equitable. • Compared to countries with high human development, the real per capita income was low.
Population trends	
• The population growth rate declined from about 3.2% during 1976-86 to 1.3% during 1991-96. • Along with a rise in life expectancy, the country's population saw a decline in the relative share of the young and the rate of dependency during the past decade.	• Along with a growth in the potentially active population from 25.4 million in 1986 to 33.7 million in 1996, there was a rise in the country's unemployment rate. • The past decade saw a rapid rise in urbanization.
Women	
• During the past decade the female literacy rate rose from 46.3% to 67%, while the female rate of admission in higher education also saw a proportionate increase. • Female life expectancy increased from 62.7 years to 70.6 years.	• 37.6% of rural women and 18.3% of urban women are still illiterate. • Relative to men, women earn lower incomes.
Children	
• During 1988-97 the infant mortality rate was reduced from 63.5 in every 1,000 live births to 30.7. • The gross enrollment of primary school age girls saw a remarkable rise.	• There is a considerable gap between urban and rural areas regarding births attended by untrained health personnel. • Health and educational disparities persist among the country's provinces.
Nutrition and food security	
• In 1997 food production per capita increased by 37% from the base year of 1988. • The population was supplied with the necessary food-based energy.	• There are shortcomings in the supply of micronutrients in the people's dietary pattern. • There are deficiencies in the composition of food items.

Chapter 3

Population Changes and Trends

Introduction

Demographic change in the Islamic Republic of Iran in recent decades has had significant economic and social effects. It is important to review this change in order to assess the impact it will have on various aspects of human development in the future.

Recent population trends

In 1976, according to the national census of population and housing conducted that year, Iran's population was 33.7 million and had grown at an average rate of 2.7% per year since 1966. With the triumph of the Islamic Revolution in 1979, family planning programmes pursued since the Fourth Five-year Development Plan (1967–1972) were virtually abandoned. By 1986, the annual population growth rate had soared to 3.9%, and the population had reached 49.4 million (table 3.1).

Table 3.1: Changes in the population size and growth rate

Year	Population (thousands)	Growth rate (%)
1976	33,708	—
1986	49,445	3.91
1991	55,837	2.46
1996	60,055	1.47

Source: General census of population and housing, Statistical Centre of Iran

The decade preceding the 1986 census had been marked by major population movements: hundreds of thousands of Iranians had left the Islamic Republic, and millions of Afghans fleeing the Soviet invasion and large numbers of Iraqis of Iranian descent had taken refuge in I. R. Iran. Even when immigrants were excluded from population calculations, the natural annual growth rate stood at no less than 3.2%, which was still very high.

It was in this context that the Islamic Republic, under its First Five-year Development Plan, re-instituted a population and family planning programme.

In 1991, according to an intercensal survey, the country's population was 55.8 million, and had grown at an annual rate of 2.46% since 1986. By the time the 1996 census was taken, Iran's population had risen to 60.05 million but the annual population growth rate had slowed to 1.47%. The repatriation of a large number of Afghan refugees between 1991 and 1996 had contributed to the lower rate of population growth, but the most important factor in the dramatic decline in those years was a considerable reduction in fertility. It is expected that by 2006 I. R. Iran will have a population of 70.34 million, and that 67.2% will be living in urban areas (figure 3.1).

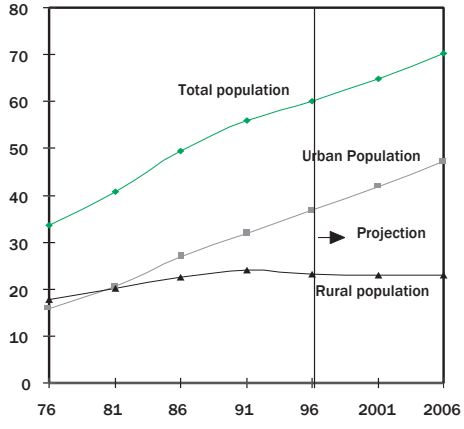
The most important factor in the dramatic decline of population growth in recent years was a considerable reduction in fertility.

It is projected that by 2006, 27.63% of the population will be under 15 years of age, 67.67% will be in the 15–65 age group, and 4.7% will be over 65. Although a slight decline in the fertility rate is expected in the next ten years, the considerable increase in the number of women of childbearing age means that the annual growth rate is likely to increase a little to 1.59%. During this decade, the youth of the population

Iran's population had become considerably younger from 1976 to 1986 because of the increase in the fertility rate, but this trend has undergone a steady reversal in the last decade, resulting in an improved population structure.

will decline as the median age increases to 24.05 years (figure 3.2).

Figure 3.1: Changes in total population, urban and rural, 1976–2006 (millions)

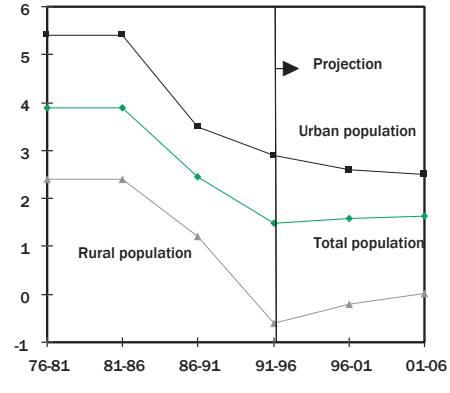


Changes in the age structure of the population

Because of the increase in the population growth rate from 1976 to 1986 and its subsequent decline from 1986 to 1996 (due largely to changes in the fertility rate), the median age fell slightly from 17.4 years in 1976 to 17 years in 1986 and then climbed to 19.4 years in 1996. As a consequence, the dependency ratio fell substantially in 1996 to 78.19%, from 94.31% in 1986 and 92.45% in 1976. The decline in the dependency burden and a corresponding decrease in household expenditures meant that the potential for an increase in savings had strengthened.

Iran's population had become considerably younger from 1976 to 1986 because of the increase in the fertility rate, but this trend has undergone a steady reversal in the last decade, resulting in an improved population structure. As shown in table 3.2, the decline in both fertility and mortality rates and the increase in life expectancy have caused a corresponding reduction in the under-15 age group and growth in the population share held by the potentially active and the elderly.

Figure 3.2: Trends in population growth rates, 1976–2006 (percent)



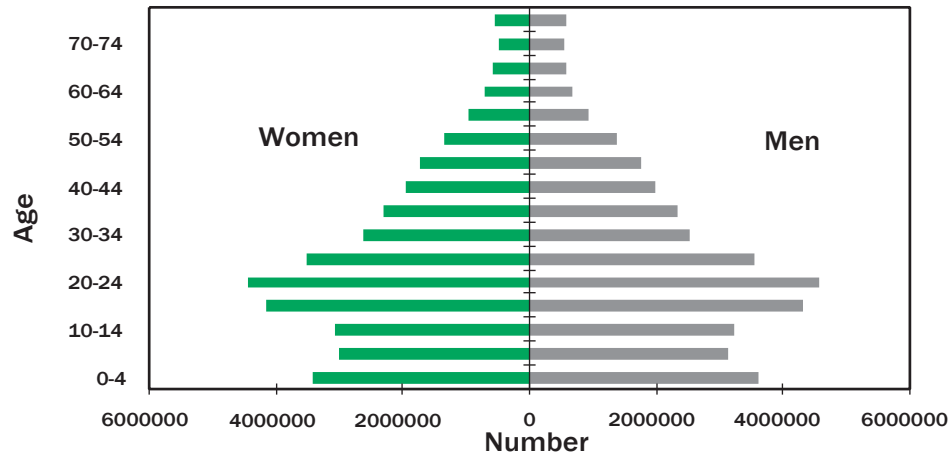
These demographic shifts mean that the country's potentially active population, having jumped from 25.4 million in 1986

Table 3.2: Population by age groups, 1976-1996

Age group	1976 Population		1986 Population		1991 Population		1996 Population	
	Thousands	Percentage	Thousands	Percentage	Thousands	Percentage	Thousands	Percentage
Youth (below 15)	15,009	44.53	22,474	45.45	24,724	44.28	23,726	39.51
Potentially active (15-64)	117,514	51.96	25,446	51.46	29,164	52.23	33,702	56.12
Elderly (65 and over)	1,186	3.52	1,525	3.08	1,949	3.49	2,627	4.37
Total	33,709	100.00	49,445	100.00	55,837	100.00	60,055	100.00

Source: Intercensal population survey, Statistical Centre of Iran.

Figure 3.3: Projected age structure of the population in 2006



to 33.7 million in 1996, will likely reach around 47.6 million in 2006 (figure 3.3). This substantial increase in the workforce will soon translate into a high demand for jobs—and one of the greatest challenges the country has to face.

The gender structure of the population

From 1986 to 1996, the sex ratio in the under-15 age group was constant at about 105. The sex ratio in the 15–65 age group, on the other hand, was not so uniform, increasing from 104 in 1986 to 106 in 1991, and then dropping to 102 in 1996.

The low ratio in 1986 may be attributable to increased male mortality during the Imposed War, while the increase and subsequent decrease registered in 1991 and 1996 may have been caused by the mass entry and later exit of Afghan immigrants, most of whom were men (since the movement of refugees from Afghanistan to Iran had started before 1986, the sex ratio registered in that year would also have been affected). The fact that more men than women have left Iran in recent years may also have had an impact on the 1996 sex ratio.

There have been sharp changes in the sex ratio in the over-64 age group from 1986 to 1996. While this might be explained by higher mortality among women of childbearing age in the previous 50 years, the possibility that women aged over 65 years were undercounted in censuses cannot be ruled out—although, given the relatively small proportion of elderly people in the total population, undercounts are unlikely to have had a significant impact on census results.

Changes in family structure

In 1996, Iranian households had 4.8 members on average, with urban and rural families having an average of 4.6 and 5.1 members respectively. According to past censuses, the national average household size used to be 5 or slightly higher. The contraction of households in 1996 was attributable to reduced fertility and a general penchant towards smaller families in the previous decade. It is projected that with accelerated reduction in fertility and a growing preference for nuclear families (just parents and children), household size is set to shrink even further.

Thanks to the decline in fertility during the past decade, the percentage of large families (families with seven or more members) fell from 27% of total families in 1986 to 21% in 1996. The age of marriage has increased in recent years, which means that young

The country's potentially active population, having jumped from 25.4 million in 1986 to 33.7 million in 1996, will likely reach around 47.6 million in 2006 (figure 3.3). This substantial increase in the workforce will soon translate into a high demand for jobs.

people are staying longer in the family home. It could be argued that this actually increased family size and the proportion of large households, but it would seem that the decline in fertility rates had a much greater impact on the overall figures.

There has also been a remarkable increase in the number of people—women in particular—living alone. According to the 1996 census, the number of single-member households numbered about 550,000, more than 25% higher than in 1986. Of these, 64% were women and 36% were men. It is interesting to note, in light of the age structure of the population, that more than 72% of the single women and 47% of the single men were over 50 years old. The proportion of elderly people living alone is expected to increase in the coming years as young people's interest in tying the knot diminishes, the divorce rate surges, and more and more young people leave home just as their parents approach retirement age. This scenario highlights the importance of providing social security services for the elderly, the majority of whom are women.

These population trends have also had a tremendous impact in other areas, such as rapid urbanization, environmental degradation and burgeoning education, health care and employment needs.

Urban migration was propelled not only by social and cultural factors such as access to higher education and better health, welfare and recreational facilities, but also by economic considerations like more job opportunities and an expectation of higher income.

Population growth, urbanization and the environment

From 1976 to 1986, as the population growth rate surged, urbanization also gained momentum, with the urban population increasing up to 5.4% annually—compared with only 2.4% in rural areas. However, as the national population growth rate slowed in the following decade, the rate of urbanization also eased, to 2.9%. The country's rural population has stayed fairly stable in recent years at around 23 million (table 3.3).

Many factors contributed to the growth of the country's urban population in the last 20 years, including urban migration, the settlement of tribal people in newly constructed townships, the spontaneous expansion of villages into towns, and the development of existing villages and other settlements in peri-urban areas. Many of these changes also resulted in further expansion of major cities. The unprecedented scale of urbanization translated into the number of urban centers in I. R. Iran nearly doubling from 373 in 1976 to 615 in 1996.

Urban migration was propelled not only by social and cultural factors such as access to higher education and better health, welfare and recreational facilities, but also by economic considerations like more job opportunities and an expectation of higher income. The rapid mechanization of agri-

Table 3.3: Population, growth rates and urbanization coefficients, 1976-1996

Year	Total population (thousands)	Urban population (thousands)	Rural population (thousands)	Urbanization coefficient (percent)	Annual population growth rate (percent)	Annual urban population growth rate (percent)
1976	33,708	15,855	17,854	47.0	-	-
1986	49,445	26,845	22,600	54.3	3.9	5.4
1991	55,837	31,835	24,000	57.0	2.5	3.5
1996	60,055	36,818	23,238	61.3	1.5	2.9

Source: National census of population and housing, Statistical Centre of Iran

cultural activities, which reduced demand for manual labour in the agriculture sector, played a key role in this process as well.

Rapid and uncontrolled population growth, along with expanded urbanization, have clearly had a destructive impact on the country's environment and natural ecosystems. The degradation of natural resources, soil erosion, air pollution, noise pollution—indeed, an ever-expanding burden of pollution in its various forms and degrees—are among the problems facing the country. The need constantly to increase the country's agricultural output to meet the food requirements of a growing population has resulted in the destruction of forests and green areas, causing irreparable damage to the nation's environment.

In addition, the settlement of migrants from rural areas on the outskirts of big cities has brought a considerable amount of highly fertile land under construction, turning it into housing estates and other forms of urban landscape. At the same time, air pollution from densely populated urban spaces and never-ending lines of exhaust-spewing motor vehicles has had an adverse affect on the physical and mental health of city dwellers. The explosion in demand for jobs, housing, education, health and sanitation, foodstuffs, water, and urban transport is one of the undesirable consequences of increasing urbanization in recent years.

Population pressures, education, health care and employment

A high rate of population growth can have undesirable social, economic and environmental consequences. On the national level, rapid growth of population can cut gross national product, reduce the amount of cultivable land, degrade the environment, and curtail per capita investment in education, health and housing, and increase unemployment. At the family level, expansion of household size can result in reduced investment in the education, health and nutrition of children, decreasing their potential contribution to the broader community. All of these can have adverse effects on human development status.

Because of the high population growth rates in the first decade after the Islamic Revolution, the number of Iranian children of school age (6–18 years) shot up to 23 million in 1996 from 16 million in 1986—a growth rate of 3.2%. Despite the huge population pressure, the combined enrolment ratio rose from 65.6% in 1988 to 75% in 1997. During the same period, in line with policies adopted under the First and Second Development Plans, the adult literacy rate also jumped from 57.1% to 74.5%.

Again despite high growth in the country's population, improvements in health and medical treatment indicators point to the remarkable success of the policies introduced in this sector under the First and Second Development Plans. Achievements include:

- The proportion of the population with access to clean, safe drinking water increased from 85.7% in 1988 to 94.5% in 1997.
- The mortality rate for children less than five years old decreased from 85.3 per 1,000 live births in 1988 to 37.3 per 1,000 live births in 1997.
- The maternal mortality rate dropped from 90 per 100,000 live births in 1988 to 37.4 per 100,000 live births in 1997.

Another challenge facing the government was the need to provide employment for young people entering the labour market. The target under the First Development Plan (1988–1993) was to create 394,000 jobs annually over the five years and reduce unemployment from 15.9% in 1988 to 13.4% in 1993. Although the plan lacked an executive programme to achieve this goal, the economic boom during that period resulted in the creation of 470,000 new jobs every year, pushing the unemployment rate down to 11.4% in 1993.

Rapid and uncontrolled population growth, along with expanded urbanization, have clearly had a destructive impact on the country's environment and natural ecosystems.

If the Third Development Plan sets its unemployment target at 9.1%, over 750,000 jobs will have to be created every year from 2000 to 2004. These figures point to the scale of the job-creation problem in the coming years.

The Second Development Plan projected the creation of 2 million jobs during the plan period (1995–1999). However, due to plunging oil prices, and the ensuing these objectives of the Second Development Plan are now not expected to be completley achieved.

In 2004, it is forecast, the labour supply will rise to 21.5 million as the 1980s' baby-boom generation enters the job market. If the Third Development Plan sets its unemployment target at 9.1%, over 750,000 jobs will have to be created every year from 2000 to 2004. These figures point to the scale of the job-creation problem in the coming years.

Recent achievements in reducing population growth

A number of factors contributed to the increase in fertility that led to substantial population growth from 1976 to 1986; chief among them were the discontinuation of the population and family planning policy immediately after the triumph of the Islamic Revolution in 1979; the annulment of the law setting a minimum marriage age; the adoption of a policy aimed at encouraging early marriage; the passage of legislation favouring higher fertility; a decline in the employment of women; the promotion of a sense of (misplaced) hope and optimism; the reinforcement of people's expectations of the government regarding its obligation to provide them with adequate food, health care and education; and, finally, the social and psychological conditions created by the Imposed War. During these years, the total fertility rate reached 6.4 children per woman, and the annual natural population growth rate was 3.2%.

After the results of the 1986 census were released, there was heightened awareness—and then concern—about the problems posed by the steep growth of the country's population. This led to population control policies being taken seriously once again under the First Development Plan.

A series of measures were envisaged under the First Development Plan to reduce the natural population growth rate to 2.9% by the final year of the plan period. These included

- placing fresh emphasis on the importance of literacy and general awareness among Iranians in general, and girls and women in particular;
- reaffirming the necessity of women's participation in society and the economy;
- promoting a higher level of health for all and reducing maternal and child mortality;
- repealing all regulations encouraging population growth; and
- most importantly, expanding the scope of family planning activities on a nationwide scale.

The same population policy goals were pursued under the Second Development Plan. It was expected that by 1996 the country would achieve a total fertility rate of 3.88 children per woman.

As policies adopted under the First and Second Development Plans were implemented, Iranian society underwent important social and economic changes—and simultaneously, fertility and population growth rates registered a dramatic decline. The fertility rate was deeply affected by a number of factors:

- higher levels of education and employment among women
- the remarkable increase in the literacy rate
- the prevalence of a higher average age at marriage
- the decline in the child mortality rate
- widespread migration from rural to urban areas
- the increase in people's general awareness
- the legitimacy accorded to family planning programmes

- the rising cost of bringing up children, due particularly to the steep rise in education and health care expenses.

Statistics show that efforts made under the two development plans to reduce the fertility rate have exceeded all expectations. The total fertility rate for 1996 had been projected at 3.88 children per woman, but it actually declined to 3 children per woman that year, shrinking the population growth rate to 1.5%.

Even though the population base had expanded in the ten years following the 1986 census, the number of registered births fell from 2.2 million in 1986 to 1.2 million in 1996, reflecting the remarkable success of I. R. Iran's population and family planning policies.

The total fertility rate had dropped sharply in urban and rural areas alike. In the urban areas, the rate fell from 5.8 children per woman in 1986 to 2.6 in 1996, while in rural areas it dropped from 7.4 to 4.1. A major factor in this strong downward trend was that significantly more married women of childbearing age were using modern contraceptives: under the first and second development plans' family planning policies, contraceptive use had expanded from 24% in 1988 to 54.9% in 1996

One of the most important factors in the decline of the fertility rate was the drop in infant mortality from 10.4 per 1,000 live births in 1986 to 6.7 per 1,000 live births in 1996. This change was due largely to

- improvements in health care, notably in preventive medicine, immunization, and maternal and child health care;
- the surge in adult literacy;
- enhanced social awareness; and
- improved living conditions.

Continued decline in the infant mortality rate might well contribute to the total fertility rate falling further.

Developments in employment in recent decades

From 1976 to 1986 and from 1986 to 1996, the proportion of Iranians aged 10 years and over grew at an average annual rate of 3.6% and 3.3% respectively, while the economically active population grew 2.7% and 2.3% respectively. The difference in the growth rates of these two population groups resulted in a decline in the labour participation rate from 42.6% in 1976 to 39% in 1986 and 35.3% in 1996.

In 1996, the labour participation rate in I. R. Iran among the population aged 15 and over was 43.1%. This compares very poorly with labour participation rates in the industrialized countries which range from a low of 58.5% in Spain to a high of 77.1% in the U.S.A. Furthermore, this rate has experienced a steady downward trend since then.

One of the factors affecting I. R. Iran's labour participation rate has been the proportion of the active population pursuing secondary and higher education.

One of the factors affecting I. R. Iran's labour participation rate has been the proportion of the active population pursuing secondary and higher education. From 1976 to 1996, the proportion of 6-to-24-year-olds enrolled in the education system rose from 50.23% to 66.15%. Of this increase, 11.25% was achieved between 1986 and 1991, and 2.36% occurred in the following five years, indicating a slow-down in the rate of growth in educational enrolment. Because enrolment is expected to stabilize in the coming years, the limiting effect it has on the labour supply will ease, resulting in a higher participation rate.

Another factor contributing to the low participation rate is the high percentage of women who are housewives.

Another factor contributing to the low participation rate is the high percentage of women who are housewives. The need to care for children has always been one of the reasons keeping women from entering the labour market. However, as the average number of children per family declines, the free time available to women increases, and the economic value of a full-time housewife (compared with a wage-earner) diminishes, more women are expected to enter the labour market. This trend is likely to be reinforced by

- the growing tendency to delay marriage;
- the rising number of educated women;
- the ever-increasing cost of living which squeezes the real wages earned by men; and,
- the transformation of women's traditional role in the family and society to one involving greater participation outside the home.

These adjustments, together with growth in the population aged 10 years and over, mean that the labour force and the labour participation rate are set to grow more quickly than they have in the past. It is clear that the creation of sufficient new jobs is crucial to halting further expansion of unemployment.

The expansion of the service sector's employment share was brought about by an increase in public sector activity in the national economy.

Changes in employment within economic sectors

Figures showing the sectoral distribution of employment among the population aged 10 years and over from 1976 to 1996 reveal that the agricultural and service sectors have moved in opposite directions, with the agricultural sector's employment share falling from 34% to 23%, and the service sector's share rising from 30.9% to 46.8%. From 1976 to 1986, as shown in table 3.5, there was a sharp decrease in the manufacturing sector's share from 34.2% to 25.3%, although it expanded again to 30.3% in 1996.

The decline in the agricultural sector's employment share could be seen as a natural consequence of increased mechanization. This is a normal feature of the transition from traditional and subsistence agriculture to modern agriculture, and has occurred all over the world. The rise in the service sector's employment share, with a parallel increase in the use of advanced technology, is also far from unnatural and has been experienced in other countries. However, the explosive pace of this expansion—an 11.5% jump to 42.4% from 1976 to 1986—at a time when the oil sector registered an 8.9% decline cannot be taken as an entirely positive development.

The service sector's increased share of employment is due primarily to growth in the social and personal services occupational group—from 17.2% in 1976 to 27.7% in 1986. Of all the employees in this group, 80% are in the public sector. In other words, the expansion of the service sector's employment share was brought about by an increase in public sector activity in the national economy.

The employment share of the manufacturing sector (industries and mines) shrank from 1976 to 1986, due largely to share reductions in the manufacturing and construction occupational groups. The employment share of the manufacturing occupational group—the largest in the manufacturing sector—contracted from 19% in 1976 to 13.19% in 1986, while the construction group's share fell from 13.51% to 10.96% in the same period. In 1986, however, the manufacturing sector's share of total employment in I. R. Iran began

Table 3.4: Average annual population growth rates in various categories (percent)

Period	Population aged 10 years and over	Economically active population	Students	Housewives	Unemployed people with income	Other
1976-96	3.45	3.49	5.36	2.72	3.38	9.16
1976-86	3.63	2.73	3.93	3.78	-1.7	16.47
1986-91	3.29	2.83	7.76	1.6	9.63	-4.23
1991-96	3.27	1.69	5.89	1.7	7.83	9.29

Source: Report on the structure of employment and unemployment in Iran's labour market, Institute for Research in Planning and Development, 1998

gradually to rise, increasing from 25.3% that year to 27.6% and 30.7% in 1991 and 1996 respectively. There was a parallel improvement in the manufacturing group's share: growing from 13.19% in 1986 to 15.38% in 1991 and 17.51% in 1996, this occupational group's share accounted for fully 80% of the increase in the manufacturing sector's share of total employment during this period.

From 1986 onward, the pace of growth in the service sector's share of total employment slowed. The share of the social and personal services occupational group in total employment dropped from 27.72% in 1986 to 22.53% in 1996, while the wholesale and retail trade occupational group rose from 7.96% in 1986 to 13.22% in 1996.

Employment in the public sector

From 1976 to 1991, public sector employment grew at much higher rate than total employment, but then it halted, actually registering a slight decline of 0.4% from 1991 to 1996. The difference between the rate of growth in public sector employment and total employment was reflected in the ratio of public employees to total employees which rose from 19% in 1976 to 33.18% in 1991. Under policies adopted within the framework of the First and Second Development Plans, however, this ratio dropped to 29.22% in 1996. The 4.78% average annual growth rate brought the number of public sector employees from 1,673,000 in 1976 to 4,258,000 in 1996. These figures show that while the total number of employees increased less than 1.7 times in this 20-year period, the number of employees in the public sector expanded more than 2.5 times.

Because around 80% of university and college graduates are absorbed by the public sector, the public sector's constant growth explains the low rate of unemployment in this population group. The slow-down in public sector employment, growing financial constraints, and policies aimed at downsizing government mean that demand for employees with higher education by the public sector—long the most important supplier of jobs to this category of job-seekers—can be expected to continue its decline.

Table 3.6 shows that the ratio of public sector employees to total employees is far higher in urban areas than it is in rural areas.

Although the gap has been narrowing in recent years, the ratio in urban areas is still 2.4 times the ratio in rural areas, largely due to the fact that public and government agencies and organizations are primarily based in cities.

When these ratios are broken down by gender, however, another picture emerges. In urban areas, the ratio of female public sector employees to total female employees is higher than the equivalent ratio for male employees, but in rural areas the opposite is true: the ratio of male public sector employees to total male employees is higher than the equivalent ratio for female employees. This difference results from the social and cultural differences between urban and rural areas. The conclusion to be drawn from these figures is that women owe their share of employment in urban areas to the fact that public sector activities are, for the most part, concentrated in cities. Indeed, in 1991, 74% of all working women in urban areas were employed in the public sector. It is important to note that the 1996 decline in the overall public sector employment ratio pulled the ratio of female public sector employees down to 63.2%—a clear indication of the vulnerability of female public sector workers in the urban job market. In any event, the share of women in public sector employment nationwide has never exceeded 16.4%, which is not very high, despite the importance of this sector in providing employment for women in both urban and rural areas.

While the total number of employees increased less than 1.7 times in this 20-year period, the number of employees in the public sector expanded more than 2.5 times.

It is important to note that the 1996 decline in the overall public sector employment ratio pulled the ratio of female public sector employees down to 63.2%—a clear indication of the vulnerability of female public sector workers in the urban job market.

The rural unemployment rate declined steadily over these 20 years, with the rural–urban difference in unemployment dropping to its lowest level in 1996, suggesting that rural migrants have transferred part of their unemployment to cities.

Employment and unemployment in urban and rural areas

As shown in Table 3.7, the participation rate in urban areas from 1976 to 1996 was invariably less than the rate for the whole country, while the rate for rural areas was generally higher than the national rate. This can be at least partly explained by the desire of urban youth to achieve higher levels of education and the longer duration of school attendance in towns and cities. These education preferences could well result in the delayed entry of urban people into the job market.

From 1976 to 1996, the unemployment rate was invariably higher in rural areas than in towns and cities (except for the rate reflected in the national census of 1986, when the country was at war). Higher rural unemployment might be one of the reasons for urban migration. On the other hand, the rural unemployment rate declined steadily over these 20 years, with the rural–urban difference in unemployment dropping to its lowest level in 1996, suggesting that rural migrants have transferred part of their unemployment to cities.

In these two decades, the share of the urban labour force engaged in agricultural activities was, at below 6%, very insignificant compared with the share in rural areas (50%) (table 3.8). This is primarily due to the nature of these activities and their compatibility with the conditions prevailing in rural areas. This pattern is reversed in the service sector: the ratio of service sector employees invariably exceeded 55% in urban areas, but it was never higher than 22% in the rural areas.

The employment ratio in the manufacturing sector in urban and rural areas seems to be more balanced, ranging from 29.6% and 38% in the urban areas and from 20.4% and 30.9% in the rural areas. The difference between the rural and urban areas in the manufacturing sector is less than it is in the service and agriculture sectors. The conclusion to be drawn from these figures is that in rural areas agriculture plays the leading role in total employment, while in urban areas the dominant role belongs to the services sector.

Refugees and other migrants

At present, the I. R. Iran is host to 1,963,780 refugees from neighbouring countries, particularly Afghanistan and Iraq. Of these, 1,400,730 are Afghans who were forced to leave their country in the wake of the Soviet invasion in 1980 and who now make up by far the largest group of refugees in the Islamic Republic. The Afghan refugee population is young, with 79.6% under 40 years of age, of whom 65% are single and 35% are married. On their arrival in I. R. Iran, 89% were illiterate, which explains why more than 75% of them are

Table 3.5: Employment by economic sector

Sector	Number of employed persons (thousands)			Average annual growth rate (percent)	
	1986	1991	1996	1986-1991	1991-1996
Agriculture	3,190.7	3,205.4	3,357.3	1.0	0.9
Manufacturing	2,781.0	3,615.7	4,473.0	5.4	4.3
Services*	5,029.8	6,275.5	6,741.0	4.5	1.4
Total	11,001.5	13,096.6	14,571.6	3.5	4.2

** Including unregistered jobs*

Source: A survey of the current state of the country's labour market 1996–2006, Plan and Budget Organization, 1997.

Table 3.6: Ratios of public sector employment to total employment, 1976–1996 (percent)

Year	National ratio	Ratio in urban areas			Ratio in rural areas		
		Men and women	Men	Women	Men and women	Men	Women
1976	19.00	34.16	32.33	48.59	5.72	6.25	2.98
1986	31.39	34.57	40.95	69.98	17.18	17.97	8.48
1991	33.18	44.02	40.73	74.03	18.37	18.98	12.05
1996	29.22	38.09	34.90	63.23	15.85	16.86	9.32

Source: Structure of employment and unemployment in Iran's labour market, Institute for Research in Planning and Development, 1998.

unskilled and mostly engaged in simple manual labour.

The second group of refugees is composed of 530,605 Iraqis who came to I. R. Iran in successive waves, the first being in 1970 during clashes between the Iraqi government and the Kurds. The second wave followed the chemical attack on Halabjah in Iraqi Kurdestan by the government of Iraq, and the third wave coincided with the escalation of clashes in 1990 between the Kurds of northern Iraq and the central government in Baghdad. The fourth wave was triggered by the displacement of Iraqi Shiites from their homes in Iraq's southern marshlands following deadly raids against them in 1993. Finally, in the wake of clashes between rival Kurdish factions, tens of thousands of Kurds living in the northern parts of Iraq, including Suleimanieh, sought refuge in Iran.

Over 95% of the refugees residing in Iran are leading normal lives in the country's urban and rural areas, much as typical Iranian citizens, and a number of them have bought or constructed houses for themselves and their families, and even formed expatriate communities and neighborhoods in some cities. They are also covered by government subsidies on energy (electricity and fuels), education, potable water, sanitation, intercity and urban transport as well as municipal, security, cultural and social services, much in the same way as enjoyed by the country's own citizens. The remaining 5% are housed in 33 guest towns, where such services as food, the basic amenities of life, safe and clean potable water, health and treatment services, educational facilities, etc. are provided to them. Refugees are subject to the relevant employment regulations, which depend on the kind of residence permits they hold. Those with refugee residence permits are allowed to work in 15 fields as unskilled workers. Access to official jobs requires work permits. At present, according to the Ministry of the Interior, some 1 million employment opportunities are open to Afghan and Iraqi refugees in different sectors, ranging from construction to manufacturing and agriculture.

Finally, mention must be made of another category of migrants, most of whom chose to escape economic turmoil and hardship in their countries in the hope of finding employment and earning higher incomes in I. R. Iran.

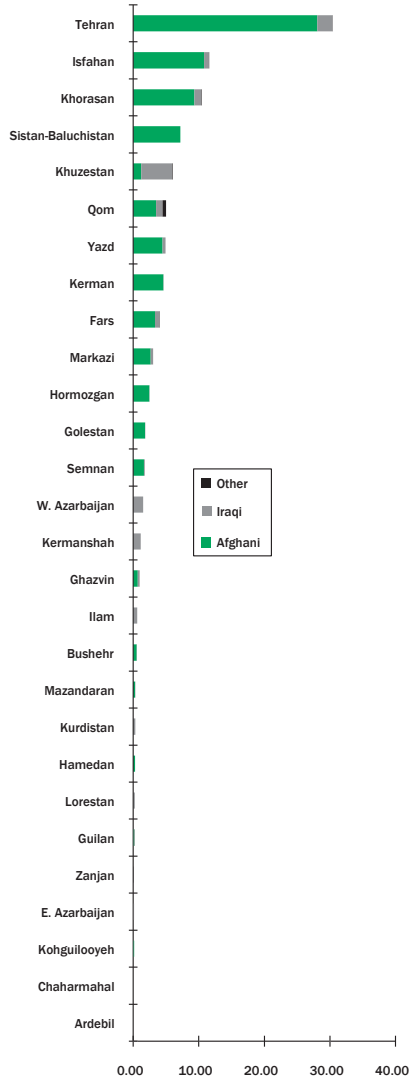
As shown in figure 3.4, about 30% of the refugees live in Tehran. The provinces of Isfahan, Khorasan, and Sistan and Baluchestan are the next most important hosts. While the majority of Afghan refugees reside in the eastern provinces, the Iraqi refugees are mostly settled in the country's western and southern provinces.

Because they have a relatively high level of economic and industrial development and can offer better job opportunities, Tehran

Over 95% of the refugees residing in Iran are leading normal lives in the country's urban and rural areas, much as typical Iranian citizens.

Beyond a shadow of a doubt, the Islamic Republic's management of the refugee problem, given its huge dimension, and its treatment of the refugees are among its outstanding achievements.

Figure 3.4: Geographic distribution of refugees



and Isfahan have absorbed the bulk of the refugee population.

I. R. Iran's treatment of refugees, particularly those from Afghanistan and Iraq, has always been compassionate, consistent with the teachings of Islam, and based on humanitarian principles as well as national interests. Beyond a shadow of a doubt, the Islamic Republic's management of the refugee problem, given its huge dimension, and its treatment of the refugees are among its outstanding achievements.

At the same time, the presence of refugees on this scale has posed challenges for I. R. Iran and has prompted the government to call for the adoption of the following policies:

- Develop and implement a scheme for the identification of foreign nationals in order to collect reliable information on individual immigrants.
- Plan and prepare the dignified repatriation of refugees while ensuring that they do not face political problems upon their return.
- Offer appropriate protection to refugees residing in guest towns and provide them with suitable employment in these centers.
- Redistribute refugees among smaller, provincial cities, while taking into account the provinces' ability to absorb and support these populations.

Foci of the country's population and employment policies

As this review shows, demographic change in I. R. Iran will bring pressures to bear on various aspects of education, health and the

Table 3.7: Participation rate and unemployment rate, urban and rural areas, 1976–1996

	Participation rate (persons aged 10 years and over)%				Unemployment rate%			
Year	1976	1986	1991	1996	1976	1986	1991	1996
Total	42.6	39.0	38.1	35.3	10.2	14.2	11.1	9.1
Urban	37.9	38.4	37.8	33.9	5.1	15.3	10.4	8.9
Rural	47.2	39.7	38.6	37.6	14.2	12.9	12.1	9.4

Source: National census of population and housing, 1976, 1986, 1996; and Intercensal survey, 1991, Statistical Center of Iran.

Table 3.8: Urban and rural employment ratios by sector (percent)

Sector	Ratio in urban areas				Ratio in rural areas			
	1976	1986	1991	1996	1976	1986	1991	1996
Agriculture	5.6	5.3	4.8	5.2	58.9	56.6	51.9	49.8
Manufacturing	38.0	29.6	31.5	33.4	30.9	20.4	22.5	26.8
Services	55.2	61.0	59.8	59.4	9.6	20.7	21.4	22.0
Unregistered	1.2	4.1	3.9	2.0	0.6	2.3	4.2	1.4

Source: National census of population and housing, Statistical Centre of Iran.

environment, and pose important human development challenges. Demographic projections and ensuing debates on the implications of population trends (particularly the expected change in the median age) highlight the growing need for education, employment and health care. If these needs are to be met, effective population and employment measures will have to be taken, notably under future development plans.

With respect to population, it is imperative that current policies on population control, family planning and reproductive health continue. Increased public education in these areas, as well as expanded family planning services, might also be effective.

As for policies relating to employment, measures aimed at avoiding economic crisis are key to preventing further deterioration in people's living standards. Although the fertility rate has declined in the past decade or so, the high birth rate in the early 1980s means that the labour supply is now projected to grow 3–4%—a substantially higher rate than in the general population. The burgeoning labour force is not the only factor in the rising rate of unemployment: unsuitable education and training, the uneven geographic distribution of labour supply and demand, and the economy's shift towards capital-intensive technologies have also undermined employment. Indeed, government intervention in the pricing system, the introduction of an unrealistic foreign exchange rate, low interest rates in the banking system, and legal and regulatory restrictions on the labour market have all contributed to lower capital costs and higher labour costs; this, in turn, has encouraged the use of capital-intensive technologies in the production sectors.

Box 3.1

Employment policies in the Third Development Plan

- Take measures to encourage employers to hire additional employees, notably by reducing the employers' share of insurance premiums and tax.
- Reduce the use of expatriate labour and facilitate dispatch of Iranian labour abroad.
- Support the expansion of self-employment and entrepreneurial initiatives, and provide productive jobs for surplus rural labour.
- Provide effective and principled support for development of the cooperative sector.
- Continue population control and labour supply policies, while expanding the family planning programme and public education.
- Expand the country's social security system.
- Promote private sector participation in economic activities.
- Review laws and regulations governing the labour market to ensure higher employment.
- Improve general, specialized, vocational and technical education to meet the requirements of the labour market.
- Enhance research and development activities.
- Improve productivity (capital, manpower, energy, etc.).
- Create the conditions necessary to expand private sector investment and attract foreign investment.
- Give priority, where possible and economically justifiable, to labour-intensive production.
- Carry out structural and institutional reforms to upgrade information systems for job-seekers, employers, investors and planners.

Restrictions stemming from the Labour Law of 1990 caused the labour market to stagnate and were among the factors that contributed to the employment crisis of recent years. The Second Development Plan recognized that growth in the employment rate in the long term depended on labour market flexibility, improvements in the whole range of production factors, and the mobilization of investment capital, and consequently amended laws and regulations affecting the labour market, including the 1990 Labour Law. As outlined in box 3.1, a more fundamental approach to tackling unemployment is to be taken under the Third Development Plan.

Unsuitable education and training, the uneven geographic distribution of labour supply and demand, and the economy's shift towards capital-intensive technologies have also undermined employment.

Reform of labour market regulations and institutions should aim at increasing the labour market's flexibility. It is to this end that government and labour organizations should put aside their short-term interests and work together to protect the country's long-term economic well-being.

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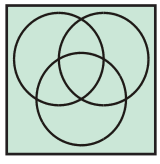
Chapter 4



Income trends and economic policies

Introduction

Analysis of the human development status of the Islamic Republic of Iran shows that an increase in per capita income is a prerequisite for high human development. A review of recent developments in the country's economy, particularly under the national development plans, sheds light on the economic situation here over the last 20 years. Recommendations based on a clear understanding of the effect of past economic developments on income trends may help create a more dynamic economy in the future.

A brief history of planning and economic development

Iran has a 50-year history of development planning. The First Seven-year Development Plan (1949–1955) was implemented two years after the end of the Second World War, but the movement to nationalize Iran's oil industry and the resulting crisis practically brought it to a standstill in 1951. The Second Seven-year Development Plan (1956–1962) was followed by three five-year development plans up to 1978.

From 1956 to 1978, the price of oil on world markets rose and a considerable part of Iran's oil export revenues was allocated to implementing development plans. This gave the government an historic opportunity to invest in the country's development without putting pressure on the private sector. During this period public sector investment gradually expanded from infrastructure to heavy industry and then to social sectors of the economy, while private sector investment was growing in the construction, transportation and light industries.

Despite ups and downs in the national economy at this time, gross domestic product (GDP) had a generally upward trend, growing at an average real rate of 6–7% annually. With an average annual population growth rate of around 3%, per capita income increased remarkably during this period.

The most important factors for economic development were exogenous oil income, relatively stable social and economic policies, and the role played by the public sector and the country's banking system. However, Iran's dependence on oil revenues gradually caused rent-seeking activities and began to complicate economic development. Easy income from oil resulted in mounting rent-seeking activities in the mid-1970s. Economic bottlenecks were caused by both the adoption of unrealistically ambitious policies for economic growth which depended on oil income and the failure to pay sufficient attention to structural problems. This slowed down the growth rate and generated inflationary pressures in the years leading up to the Islamic Revolution.

Economic developments after the Islamic Revolution

The economic development of I. R. Iran since the revolution can be reviewed in two ten-year periods. The first decade after the revolution was marked by the flight of capital and qualified manpower, the nationalization of banks and major sources

Economic bottlenecks were caused by both the adoption of unrealistically ambitious policies for economic growth which depended on oil income and the failure to pay sufficient attention to structural problems.

of capital, and the eight-year Imposed War with Iraq. As domestic production weakened and national revenues (at constant prices) fell, the population expanded at an unprecedented rate, bringing economic disruption and a steep drop in per capita income.

There were two five-year development plans in the Islamic Republic's second decade. The first (1989–1993), launched barely a year after the end of the Imposed War, signaled a strategic change of direction towards economic liberalization. Under this plan, the government concentrated its investments on post-war reconstruction and the maximization of existing productive capacity. The government encouraged the private sector to expand its activities by adopting liberalization, privatization and protection policies.

Under this First Development Plan, the Iranian economy underwent a process of reconstruction. GDP grew at an average annual rate of 7.3%.

Under this First Development Plan, the Iranian economy underwent a process of reconstruction. GDP grew at an average annual rate of 7.3% and, for the first time since the revolution, the 1978 GDP threshold was reached (although per capita income was actually 40% lower than it had been in 1978 because of population growth). This upturn was attributable to the availability of unutilized capacity and a rapid increase in production during the first three years of the plan. As existing capacity came on stream, however, the cost of building new capacity kept rising.

One of the key factors undermining the First Development Plan was the failure to develop the legal frameworks needed to support the plan's goals.

This first plan did not entirely achieve its objectives for economic liberalization and privatization of state companies. Inefficient investment in the state sector and heightened demand for raw materials and consumer goods led to a decline in currency reserves. A sharp rise in prices occurred towards the end of this plan period, a trend that continued until the later stages of the Second Development Plan.

One of the key factors undermining the First Development Plan was the failure to develop the legal frameworks needed to support the plan's goals. It was a problem that beset the Second Development Plan as well.

Box 4.1 shows the fundamental economic problems prevailing at the time the Second Development Plan was being prepared. It was because of these problems that the Second Development Plan was launched in 1995 with the announcement that it would follow strategies similar to its predecessor's (box 4.2).

In mid-course, however, a number of factors caused the Second Plan to undergo a

Box 4.1

Structural economic problems prior to the preparation of the Second Development Plan

- The negative real rate of return on savings had depressed national savings. The low level of savings and investments constrained the formation of fixed capital and the expansion of production capacity. Existing idle capacity had been redeployed quickly under the First Development Plan, but it was now costly to create new capacity and returns on investment were slow.
- Inefficiency in the tax system (administration, legislation, incentives, etc.) and oil market restrictions limited the resources available to government. At the same time, because the government had overstretched itself, the public had to bear, through the general budget, the social costs of state companies' low productivity.
- The allocation of bank resources to state enterprises in the annual budget limited private sector access to loans and credit, also reducing investment efficiency while intensifying inflationary pressures.
- Foreign exchange constraints and high demand for imported primary materials and consumer goods increased external debt, which was difficult to repay because of limited hard currency returns from oil. The chaotic situation surrounding foreign trade and exports was compounded by the absence of an effective exchange rate system.
- Prevailing uncertainty about attracting and utilizing foreign investments was a barrier to capacity-building and modern-technology transfers.
- Social development costs had grown progressively due to the baby boom of the 1980s.

Box 4.2

A summary of the goals and policies of the Second Development Plan

1. Foreign sector policies
   - Adopt a unified floating exchange rate.
   - Make the country's currency convertible on the basis of a floating exchange rate.
   - Simplify trade and customs procedures.
   - Set customs tariffs to protect Iranian producers and consumers, and give their products a relative advantage on international markets.
2. Monetary policies
   - Provide more incentives for savers by rationalizing interest rates and ensuring depositors receive positive returns on their savings.
   - Issue participating and government bonds.
   - Increase specialized banks' lending capacity in accordance with the government's economic development goals.
   - Attract popular participation in the establishment of non-bank credit institutions.
   - Regulate the relationship between economic growth and the volume of liquidity in order to control inflation.
3. Fiscal policies
   - Increase government revenue in the long term by increasing the share of taxes in total revenues.
   - Increase the share of direct taxes (excluding payroll tax) in total tax revenues.
   - Remove tax exemptions granted to various sectors (excluding agriculture).
   - Levy indirect taxes on the basis of the value of goods.
   - Grant tax exemptions on infrastructure investment, production of basic goods, and activities that earn hard currency, develop deprived regions, and create jobs.
   - Reform the country's taxation system; this includes improving tax administration and revising tax exemptions.
   - Target subsidies to needy groups and make them more transparent in the general budget.
   - Curb the public sector's borrowing requirement.
   - Ensure that state companies' budgets are in line with I. R. Iran's development goals.
   - Reduce the role and presence of government in the economy and downsize the bureaucracy accordingly.
4. Public administration policies
   - Reduce the size of the public sector.
   - Reform the management of state-owned enterprises.
   - Emphasize economic discipline and management development.
5. Population policy
   - Promote public awareness of population issues.

fundamental change of direction; some of them are described below.

Significant results—including 7.3% average annual growth in GDP (at constant prices)— were achieved through government investment in economic reconstruction and social development, and the adoption of a liberalization policy under the First Plan. However, progress made under the First Plan eventually came to a halt because of inflationary pressures caused by unexpected expansion of credit facilities. By setting the exchange rate in the last year of the First Development Plan far below its real value, heavy foreign exchange commitments were incurred. Furthermore, limited access to foreign sources of long-term finance led to an emerging foreign trade deficit that reduced foreign currency reserves and created many short-term debts. These factors, along with a unexpectedly large drop in oil prices in 1994, put great pressure on I. R. Iran's balance of payments and brought the country face-to-face with mounting—and maturing—foreign debts.

Economic liberalization coincided with persistent and relatively high inflation as a result of the First Development Plan's expansionary policies, the imposition of import restrictions towards the end of the plan period, and a slowdown in GDP

Economic liberalization coincided with persistent and relatively high inflation as a result of the First Development Plan's expansionary policies, the imposition of import restrictions towards the end of the plan period, and a slowdown in GDP growth.

growth. The effects of all these factors had become clear by 1993, creating difficult conditions for the implementation of the Second Development Plan. Consequently, the unified floating exchange rate policy was replaced by a series of controls, including:

- the establishment of a multiple-rate system of exchange
- the imposition of a foreign exchange quota system
- the introduction of import and export controls
- the resumption of price controls
- the introduction of a deflationary monetary policy.

When a new government was elected mid-way through the Second Development Plan and a fresh policy of domestic political development and détente in foreign relations was announced, economic development priorities shifted.

Taken together, these measures signalled a fundamental shift in the strategies used under the Second Development Plan.

Although these controls created a margin of safety in the country's external balance of payments until 1996, they had a somewhat a negative effect on domestic economic performance because of foreign exchange constraints, the overvaluation of the rial that affected imports of primary and intermediate goods, and falling demand for Iranian exports.

When a new government was elected mid-way through the Second Development Plan and a fresh policy of domestic political development and détente in foreign relations was announced, economic development priorities shifted. As new policies are implemented, obstacles to foreign investment are likely to be progressively removed, and improvement in relations with OPEC member states will help stabilize the hitherto perennially variable oil market which dominates the national economy. Indeed, the recent economic plan confirms these development strategies.

On the downside, the industrialized countries of Southeast Asia faced a major economic recession in 1997 that deeply affected the demand for I. R. Iran's oil and non-oil exports. The steep fall in oil prices on world markets in 1998 further adversely affected the Iranian economy and imposed a state of stagflation, the effects of which have persisted into 1999.

Macroeconomic policies

Macroeconomic policies implemented since 1989 under the First and Second Development Plans have played a central role in the Islamic Republic's economic performance and explain the dominant trends in the economy in the last ten years.

Foreign exchange policies

Oil export revenue has historically played the major role in Iran's economic development. In the first ten years after the revolution, because the country was at war, the government sought to control imports, exports and foreign exchange, and introduced a multiple exchange rate system. This system had a role to play in wartime but it eventually led to increased rent-seeking in the acquisition of foreign exchange and reduced the efficiency of the Iranian economy. As a result, a unified floating foreign exchange rate system, in keeping with the economic liberalization policies adopted under the First and Second Development Plans was adopted as soon as conditions were ripe.

In 1993, when the war had ended and oil export revenue had begun to rise, the government brought in a unified floating exchange rate. Because the rate was set below its equilibrium price at 1,750 rials to US$1, the lines of credit opened by the banks for imports rapidly exceeded I. R. Iran's foreign exchange reserves, which were further diminished by a drop in oil revenues in 1994. A foreign payments crisis followed this huge reduction in the country's ability to honour its external debts. By the end of the First Plan, I. R. Iran owed $23 billion to its overseas creditors. This crisis was followed by several other problems resulting from the expansionary policies of the First Plan––short-term external debt, growing budgetary pressures, and spiralling inflation.

The government then pegged the exchange rate at 1,750 rials against the US dollar and announced a set of import and export controls to tackle these problems. Although these generated a foreign trade surplus and created a margin of safety for its foreign reserves, heightened demand for imports led to a steep hike in the exchange rate on the open market. A second exchange rate for non-oil exports was set at 2,345 rials to cope with this turbulence; it was raised to 3,000 rials in early 1996. Meanwhile, hard currency transactions could only be conducted through the banking system, and open market transactions were made strictly illegal.

I. R. Iran currently operates a multiple exchange rate system. The official—or "floating"— rate is fixed at 1,750 rials to the US dollar. This rate is applied to oil and gas exports, imports of basic goods and services, payments on the country's external debts, and imports required for national projects. The export exchange rate, fixed at 3,000 rials to the US dollar in 1995, is applied to revenues from non-oil exports and other transactions related to the foreign trade balance.

To make the foreign exchange system more efficient, exporters of non-oil products may use the foreign exchange earned from exports to import goods. Import licences can also be traded on the Tehran Stock Exchange (TSE). Since exporters may import goods worth up to 100% of the value of their export permits, the real export rate is equivalent to the set export rate of 3,000 rials plus the current price of the TSE. This real rate is also applied to goods imported on permits. Through this process, the real rate is gradually replacing the curb market rate.

While this real exchange rate is a function of macroeconomic fluctuations, the open market rate is largely influenced by short-term political developments. Although the open market rate is approximately three times more than the official rate, the volume of transactions in the open market is much smaller than that of official transactions because most foreign exchange earned from oil and non-oil exports passes through official channels. Supplies of foreign exchange on the open market come either from foreign exchange sales by government to the private sector or from transactions by overseas travellers whose share of total transactions is insignificant.

Fiscal policies

I. R. Iran's public sector comprises the government (central government and twenty-eight provincial administrations), over 400 state companies and financial and non-financial organizations. The national budget is divided into two parts: one for the government per se and the other for state companies. Government transfers to state companies as well as taxes and profits received from these companies are included in the government budget. Transfers to some non-financial state companies for investment purposes, such as the National Iranian Oil Company, are also covered by the annual budget under the "Development" heading.

Balanced and deficit-free budgets were primary goals under both the First and the Second Development Plans.

Balanced and deficit-free budgets were primary goals under both the First and the Second Development Plans. The First Development Plan kept the budget deficit to 1.2% of GDP in 1992, which was very low compared with the peak deficit of 5.2% in 1988, the last year of the Imposed War. However, the new exchange rate put great pressure on the government's financial operations in 1993, and caused a dramatic rise in both revenue and expenditure. When the oil price fell in 1994, the government faced a deficit equivalent to 7.2% of GDP when exchange rate guarantee losses were taken into account. Subsequent efforts to raise revenue and cut expenditure reduced the budget deficit—including exchange rate guarantee losses—to 2.2% of GDP by 1996. Nevertheless, the budget deficit started increasing again in 1997 and 1998 as a result of weak oil prices.

Important steps have been taken in recent years towards improving tax administration and collection; these include issuing identification numbers for many taxpayers, computerizing taxation procedures and training tax assessors.

Revenues from oil and gas sales, taxes, and non-tax revenues are the main source of government income. Oil and gas revenues are mainly from exports, although the government also receives a small amount in taxes from domestic sales of oil products. In 1993, oil and gas revenues increased sharply as a result of the higher exchange rate and their share of total government revenue rose from 42% in 1992 to 75% in 1993. Since then, oil revenue (calculated on the export exchange rate of 3,000 rials to the US dollar) have increased, but its share of GDP has steadily declined, largely because of domestic inflation.

Tax income comes from taxes on income, wealth, imports, consumption and sales. The ratio of taxes to GDP dropped from 6% in 1992 to 4% in 1995 due to slower growth in tax revenue than in nominal GDP. This ratio then climbed to 5% in 1996 because of an increase in oil income, a consequent rise in imports, and efforts to increase tax revenue. The tax-to-GDP ratio for 1997 was 6.2%.

Important steps have been taken in recent years towards improving tax administration and collection; these include issuing identification numbers for many taxpayers, computerizing taxation procedures and training tax assessors. The minimum tax exemption has also been raised, while the maximum income and corporate tax rate has been reduced from 75% to 54%. The number of tax classifications has been reduced to nine, and several trade unions have been consulted on facilitating tax procedures for their members. Coupled with efforts to collect unpaid corporate taxes, these measures have resulted in an increase in business tax receipts from 0.3% of GDP in 1994 to 3.9% in 1996. Similar improvements have been made in raising income and property occupation taxes.

The country's tax base has shrunk to some extent through tax exemptions granted to the agricultural sector, cooperatives and several industrial, mining and public utility organizations. Such bodies as the Foundation for the Benefit of the Oppressed and the War-disabled (MJF) and their affiliates are still tax exempt. There is currently no tax on foodstuffs and medicines. The general trend, however, points towards an expansion of the country's tax base, and this is expected to continue in the coming years. A gradually increasing number of companies, including the National Iranian Oil Company, have now become subject to taxation.

Sales and consumption taxes have been levied on a limited number of companies, and new regulations have been applied since 1997 to increase revenues from these taxes. The possibility of introducing a value-added tax is also being considered and the necessary administrative structures for this are being studied.

Government expenditure increased sharply in 1993 as a result of the weakening rial, the higher exchange rate, import subsidies, transfers to commercial banks, and debt-service payments. Total government expenditure, including the net volume of banking facilities, increased from 19.7% of GDP in 1992 to 38.2% in 1993. In 1996, government expenditure fell to 29% as a result of domestic inflation and its impact on the real rate of exchange.

In terms of the structure of government expenditure, 1995 current and development expenditures came to 19.3% and 7.5% of GDP respectively, down from 28.6% and 7.7% in 1993. These ratios then dropped to 16.4% and 7.3% in 1997.

In 1995 and 1996, as in previous years, budget deficits were met through interest-free loans from the Central Bank with no maturity date. This borrowing mainly covered foreign exchange rate losses incurred to honour external payments. Under I. R. Iran's interest-free banking law, the government may not sell treasury bonds to the private sector but it is permitted to sell participating bonds to finance current and development expenditure.

From the start of 1994, the government started using World Bank loans to finance certain projects. Financing from foreign sources rose from 58 billion rials in 1994 to around 300 billion rials in 1995. Transfers to state enterprises were reduced from an average of 0.4% of GDP in the 1992 and 1993 budgets to an average of 0.2% in the 1995 and 1996 budgets. There is already evidence that these enterprises are beginning to improve their performance.

Monetary policies

The Iranian banking system comprises the Central Bank of the Islamic Republic of Iran, six commercial banks and four specialized banks, all owned and administered by the government as required by the constitution. In the first half of 1997, the commercial banks had a total of 11,000 local and 62 overseas branches; the number of bank branches in I. R. Iran had increased at an average annual rate of 20% since 1991. Specialized banks had expanded to about 2,000 branches, which translates into 36% average annual growth.

The first non-bank financial institution to operate since the revolution was established in 1997. The government also controls several insurance companies, pension funds and finance companies.

Liquidity growth slowed from 34.2% in 1993 to 28.5% in 1994. In the next two years, however, it expanded nearly 37% annually, partly because of growth in both the government's foreign assets and the credits given to state companies. Indeed, the expansionary effect of these factors was greater than the 8.5% deflationary effect of the reduction in exchange rate guarantee losses. Domestic banking facilities grew in 1996 following an increase in the number of credits provided to both the public and private sectors. Credits to the non-government sector, the private sector and non-financial institutions increased by 21,000 billion rials, or 25% of the money supply—and approximately three times the target set by the Second Development Plan.

The banking system increased credits for the repayment of I. R. Iran's foreign debt by about 2,000 billion for the public sector and 1,100 billion rials for the private sector. Credits also increased steeply during the last quarter of 1996 as banks issued many letters of credit to encourage the import of capital goods.

Reflecting the decline in the government's net assets in the initial volume of money, liquidity growth fell to 15.2% in 1997, with foreign reserves yielding to domestic reserves as the major source of monetary expansion.

The nominal rate of return on savings remained stable and, although inflation eased somewhat, the real return on savings was still negative. Given the persistence of negative real returns on bank deposits and a weakened financial market in connection with monetary intermediation, non-bank financial institutions began to emerge. Stock market activity grew considerably from 1994 to 1996 with a six-fold increase over three years, but it fell back by half in 1997.

In recent years, a number of other investment companies have been established and the Islamic Republic's first non-bank financial institution opened in 1997.

Annual growth of money reserves rose from 16% in 1992 to 42% in 1995. There had been an increase in money reserves between 1993 and 1994, principally as a result of credits from the Central Bank to government and public institutions under the Currency reserve guarantee credit scheme. The monetary situation moved from a deflationary state in 1993 to an expansionary one in 1994 as a result of debts owed by other banks to the Central Bank as well as the state of the Bank's net foreign assets. This also led to the reserve deposit increasing faster than liquidity. In 1993 and 1994 as well, import deposits had

Given the persistence of negative real returns on bank deposits and a weakened financial market in connection with monetary intermediation, non-bank financial institutions began to emerge.

In 1997, after three years of steady growth, activity on the Tehran Stock Exchange eased in tandem with the general economic slowdown. Now, investment-company activities are steadily picking up, and the TSE seems to be poised for an equally steady rise in trading.

a strong deflationary impact on the reserve deposit. Part of the deposit was held for imports by government enterprises, with the Central Bank requiring an advance equal to 100% of the value of government and private sector imports. From 1995, commercial banks were required to deposit 60% of this amount with the Central Bank.

Each bank's credit ceiling is set in its annual budget in accordance with the current development plan. The Central Bank sets each bank's credit limit on a monthly basis, but it allows banks to overstep agreed credit limits when economic conditions are right.

In 1993 the legal deposit for the five-year deposits with the commercial banks was reduced from 15% to 10%, while that of the specialized banks was brought down from 15–17% to 10%. In 1995, the rate of reserve deposits by commercial banks for deposits carrying no interest were reduced from 30% to 25%.

The purchase of bonds has made no significant difference to the banks' assets. The Central Bank bought some bonds from the other banks in 1993 to build up their liquidity, increasing its bond sales to the banks by a small amount in the following year. The rate of return on two-year government bonds is normally 5.5%; it is 7% on seven-year bonds. Some non-interest bearing bonds have also been allocated to banks with an average return amounting to 4%.

Interest rates for savings are set by the government and vary according to the length of deposit, with the highest rates applying to the longest-term deposits. Likewise, interest rates on bank loans depend on the type of the loan. Loans to the agricultural sector carry the lowest interest rates, and the highest rates are charged on loans to the service sector. Under the Islamic banking system, these are projected (minimum) rates; the rate eventually charged is usually a bit higher. The weighted average for interest rates rose gradually between 1992 and 1994 from 10% to 12.4%, while the highest rates increased from 12.8% to 16.8%

A drop in the share of pseudo-money in the total volume of money from 53.5% to 50.7% from 1992 to 1995 points to the waning attraction of depositing money in banks. In terms of borrowing, though, there was increased demand for loans due to the negative real rate of bank deposits. This, in turn, reduced the efficiency of the Central Bank's control mechanisms. Since 1991, Iranian banks have had to pay the set 14% interest rate on credit from the Central Bank.

Commercial banks have to follow Central Bank policy on the distribution of credit amongst the different sectors of the economy. The criteria for this are set administratively; interest rates vary according to sector and type of loan. Under the Law of the Second Development Plan, commercial banks should allocate 55% of their resources to the private sector and 45% to the public sector.

In 1994, the Money and Credit Council approved the issue of participation bonds in conformity with Islamic principles; Tehran Municipality issued the first series. It was a significant development in terms of financial instruments and led to increased activity on the Tehran Stock Exchange. The Central Bank is also considering whether the private sector should be allowed to issue participation bonds. In 1997, after three years of steady growth, activity on the Tehran Stock Exchange eased in tandem with the general economic slowdown. Now, investment-company activities are steadily picking up, and the TSE seems to be poised for an equally steady rise in trading.

Foreign trade policies

Exports and imports are subject to Ministry of Commerce regulations issued annually and approved by the Cabinet of Ministers. The Cabinet of Ministers also oversees the division of imports into three categories—

permitted, conditional and prohibited. Permitted imports need no authorization, but imports falling into the conditional categorie require import licences. All imports require letters of credit that can range from zero to 100%, depending on the nature of the goods to be imported and the importer's line of credit at his or her bank. Most imported goods are subject to customs tariffs, including taxes and commercial benefit duties; the rate of the latter is set annually in the export and import regulations.

All exports are covered by special regulations and exporters of non-oil goods must submit export foreign exchange guarantees to the bank. Since early 1998, imports worth up to 100% of the value of letters of credit have been permitted. Exporters may either use the permits issued to them in person or trade them on the Tehran Stock Exchange.

Until 1996, the level of foreign investment in I. R. Iran was insignificant, reaching no more than $14 million that year. Under the Law of Attraction and Protection of Foreign Investments, foreign investment is limited to the manufacturing, mining, agricultural and transport sectors and requires investors not to request hard currency in excess of the foreign debt. Although 50 projects worth $722 million were officially approved between 1993 and 1997, only $40 million was actually invested.

Currently, foreign investment through joint ventures is legal and, in recent years, the requirement that the share of the foreign partner does not exceed 50% of the total investment has been waived. The fact that one fifth of projects already approved have more than 50% foreign content shows that this waiver is being applied effectively. Indeed, the regulation concerning foreign investment is under review and prospects for foreign investment seem good, given the emphasis on attracting foreign capital as well as recent foreign policy developments.

Price controls and subsidies

The Organization for the protection of consumers and producers sets prices on only a limited number of subsidized goods, some of which are distributed through the ration card system. These goods include sugar, wheat and flour, cooking oil, milk, cheese, red meat, rice, chemical fertilizers, pesticides, and products such as paper, agricultural machinery, petrochemical products and vehicle batteries that are produced through state monopolies, as well as goods such as detergents and medicines that are imported by means of foreign exchange allocations at the official rate of 1,750 rials. Subsidized goods are currently imported at the official exchange rate by procurement and distribution companies; the private sector may also import and distribute these goods using the export exchange rate of 3,000 rials.

Several disguised subsidies come through oil by-products sold at prices considerably lower than elsewhere in the world. For example, the average price of gasoline in I. R. Iran is about one fifteenth of international prices and the weighted average price of petroleum products is one eighth. The price of oil derivatives increased 20–30% under Second Development Plan, but the high rate of inflation meant that these increases had little effect on their real price.

Macroeconomic performance and income growth

I. R. Iran's economic performance has invariably been influenced by macroeconomic policy in the fiscal, monetary, foreign exchange and foreign trade sectors. The Islamic Republic favoured centralized economic policy in the first ten years after the revolution because of the particular conditions prevailing then. This policy manifested itself in the nationalization of banks and large production units, the imposition of controls on foreign exchange and foreign trade, and the adoption of price controls. The Imposed War and the economic embargo on the one hand, and

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the adoption of centralized economic policy on the other hand, were major factors in reducing economic growth and per capita income compared with pre-revolution years.

In the next ten years, however, economic policies were increasingly liberalized and privatized to respond to the need for reconstruction. Although not yet fully realized and lacking the necessary legal and political frameworks, this strategic turn-around has contributed to increased economic growth and per capita income. As a result of these policies, the national economy grew at an annual rate of 7.3% during the First Development Plan. Average annual growth dropped steeply to around 4% during the Second Development Plan, however, due to the massive economic downturn in Southeast Asia and the subsequent slump in the oil price.

The Second Development Plan had projected an average GDP growth rate of 5.1% at constant prices. Average annual growth dropped steeply to around 4% during the Second Development Plan.

Quantitative macroeconomic goals of the Second Development Plan

It is helpful to review the quantitative goals and the economic performance of the Second Development Plan because trends in economic growth have a direct impact on human development.

The Second Development Plan had projected an average GDP growth rate of 5.1% at constant prices. The projected average growth for different economic sectors is given in table 4.1 below. The highest rate of growth is anticipated in the water, electricity and gas sectors while the lowest is forecast for the oil sector.

Gross domestic investment had been projected to grow 6.2% annually in order to reach the forecast level of growth. Private consumption had been forecast to grow at an average rate of 4%, but government expenditures had been expected to show negative growth at –0.9%. This would bring government consumption down from 13.1% of GDP at the beginning of the Second Development Plan to 9.8% at the end (table 4.2).

The budget also projected lower growth in total government expenditure. Although government revenue was expected to grow 15.2% annually, a zero budget deficit was forecast over the plan period. Similarly,

Table 4.1: Value added and GDP under the Second Development Plan (billions of rials at 1982 constant prices)

	1994		1999		
Sector	Sub-sector	Total sector	Sub-sector	Total sector	Growth rate(%)
Oil		2,687		2,903	1.6
Non-oil sector		12,779		15,636	4.1
Agriculture		3,687		4,545	4.3
Industries and mines		3,172		4,202	5.8
•Manufacturing and mining	2,222		2,954		5.9
•Water, electricity and gas	366		537		8.0
•Construction	584		711		4.0
Services		5,920		6,888	3.1
•Transport	1,079		1,359		4.7
•Communications	72		100		6.8
•Other services	4,769		5,429		2.6
Gross domestic product		13,766		17,635	5.1

Source: The law of the Second Development Plan, *Plan and Budget Organization*

the current budget as a proportion of total expenditure was forecast to drop from 62.6% in 1994 to 52% by the end of the Second Plan, against a 15.1% annual rise in total expenditure. Growth in net government debt to the banking system was forecast not to exceed 3.8% annually, while the maximum net debt owed by state companies to the banking system was projected to grow by no more than 18.1%. The money base and liquidity were expected to grow by 12.5%, while the average rate of inflation during the Second Development Plan was forecast at 12.5%.

On the basis of annual growth projections for non-oil exports and oil exports, which were 8.4% and 3.4% respectively, it was expected that I. R. Iran would be able to reduce its external debt by $1.64 billion annually by the end of the second plan period.

It was also estimated that employment would grow 2.7% per year, from 14.21 million to 16.23 million by the end of the second plan period—in other words, more than 2 million new jobs would be created over these five years.

Figure 4.1: Gross domestic product (billions of rials at constant 1982 prices)

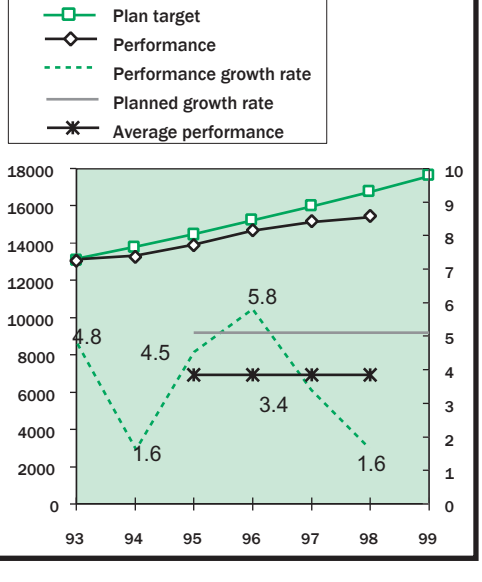


Table 4.2: National expenditure in the Second Development Plan (billions of rials at 1982 constant prices)

	1994	1999	Growth rate (%)
Gross domestic expenditure	13,766	17,635	5.1
Gross domestic investment	2,263	3,056	6.2
Private consumption	9,287	11,312	4.0
Government consumption	1,804	1,727	–0.9

Source: The law of the Second Development Plan, *Plan and Budget Organization*

Performance of economic sectors during the Second Development Plan

After a drop in GDP growth in 1994, it rose by 4.5% and 5.8% in the next two years. As a result of oil price slumps, GDP growth slowed to 3.4% in 1997 and 1.6% in 1998. During the first four years of the second plan period, average annual GDP growth rate was less than 4%. (figure 4.1 above).

The value added in four economic sectors and the targets set for them by the Second Development Plan are compared in figure 4.2. The agriculture and services sectors' performance more or less corresponds with planned projections, while the value added and the growth rate achieved by the industries and mines sector are a little higher than targeted. The oil sector, however, failed to reach the planned targets in either value added or growth terms. As a result, the share of industries and mines in GDP has increased while that of the oil sector has declined.

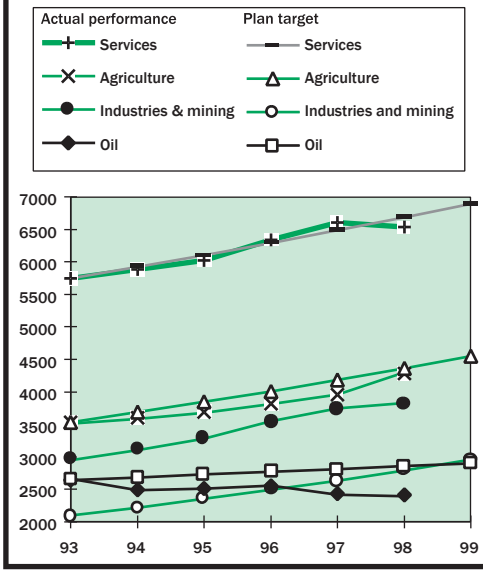
The agriculture and services sectors' performance more or less corresponds with planned projections, while the value added and the growth rate achieved by the industries and mines sector are a little higher than targeted. The oil sector, however, failed to reach the planned targets in either value added or growth terms.

Oil and gas

The oil and gas sector's value added grew by 1.9% in 1996 but growth then contracted to –5.3% in 1997; oil revenues continued to fall the following year, causing the sector to register –0.8% growth in 1998. Oil production remained at 3.6 million barrels a day in 1996, although exports decreased slightly to 2.44 million barrels a day as a result of increased domestic consumption. Oil income rose to $19.3 billion in 1996

As well as supplying a large proportion of I. R. Iran's food requirements, agriculture is an extremely important source of income for the rural population and is firmly rooted in village life.

Figure 4.2: Comparison of economic sectors' value added



following a price rise of about $4 a barrel, an increase of 27% on the previous year.

From 1992 to 1995, domestic consumption of oil products increased a total of 3.9%; it increased by the same amount again in 1996 alone. I. R. Iran's petrochemical capacity is being increased in order to meet growing domestic demand and decrease imports. The output of petrochemical products reached 11.2 million tonnes in 1997, a huge increase over 2.4 million tonnes in 1989. Thirty petrochemical projects requiring financing of some $24 billion are planned or already being implemented as part of a long-term strategy (to 2010). Once they are completed, these projects will take Iranian petrochemical production capacity to 21 million tonnes.

As in recent years, natural gas production grew by 8% in 1996 and reached a capacity of 64.2 billion cubic meters. Government policy is to replace consumption of oil products with natural gas, increase its use in petrochemical production, and build exports.

Figure 4.3: Value added of the oil sector (billions of rials at 1982 constant prices)

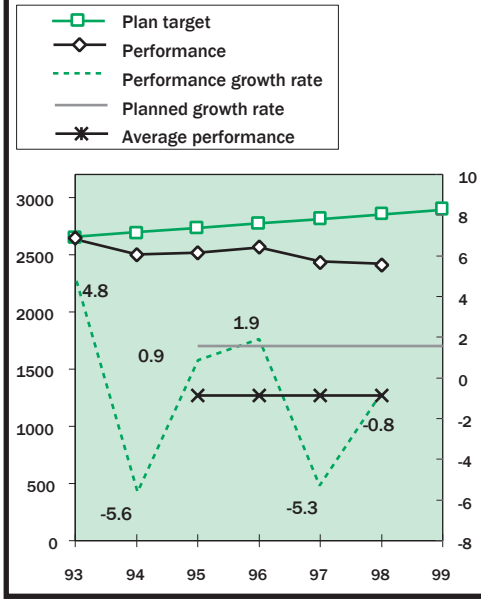
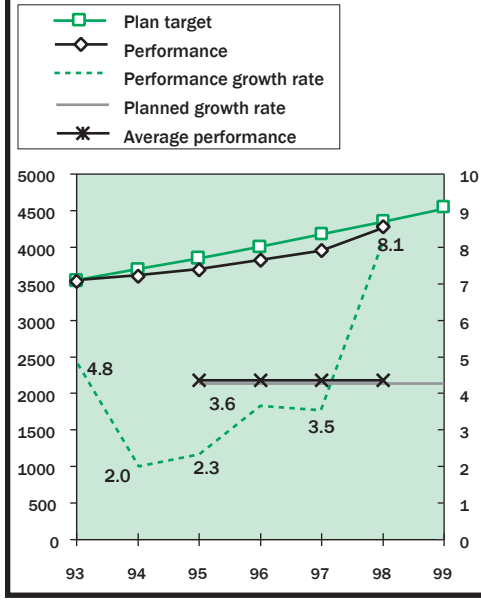


Figure 4.4: Value added of the agriculture sector (billions of rials at constant 1982 prices)



Agriculture

The value added of the agricultural sector has been rising constantly, with an average growth rate slightly higher than the target set by the Second Development Plan. Growth in this sector reached 8.1% in 1998, which was considerably higher than in previous years. However, agricultural

output is expected to decline steeply as a result of a countrywide shortage of rain in 1999 and its erratic distribution during the year (figure 4.4).

Except for its infrastructure development activities, the government plans to reduce its intervention in the agriculture sector and encourage more involvement by the private and cooperative sectors. To achieve this, subsidies on agricultural machinery and other agricultural inputs have been reduced considerably.

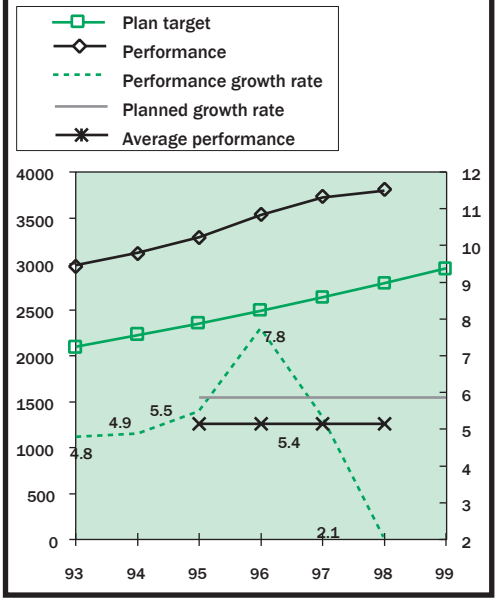
Guaranteed prices for basic agricultural products are set by the government and calculated on the basis of real costs plus a 20–25% profit margin. These prices are generally protective and aimed at supporting farmers in the event of market disturbances. Market prices are normally higher than these guaranteed prices and government intervention in market prices is generally a rare event.

As well as supplying a large proportion of I. R. Iran's food requirements, agriculture is an extremely important source of income for the rural population and is firmly rooted in village life. However, the capacity of the agriculture sector to create new jobs in rural areas is limited. Indeed, changes in the balance of rural and urban populations in recent decades show that the agriculture sector's employment capacity has already reached a ceiling. Limited water resources constrain further capacity building in this sector and, as a response, significant budget allocations have been made for water supply and distribution.

Manufacturing (Industries and Mines)

Several large state-owned companies still account for around 70% of the value added in the manufacturing sector. Value added growth in this sector in 1996 was 7.8%, a significant increase from 5.5% a year earlier. In 1997 and 1998, this sector grew at 5.4% and 2.1% respectively. Average annual growth in the manufacturing sector, at more than 5%, was higher than it was in both GDP and the oil sector (figure 4.5).

Figure 4.5: Value added of the manufacturing sector (billions of rials at constant 1982 prices)



The manufacturing sector's international competitiveness has been reduced by the concentration of industry in the state sector and by long-standing protection policies, mainly in the form of hard currency allocations at preferential rates and favourable customs regimes. This situation has also prevented the private sector from competing on an equal footing with the state sector, and is one reason why private sector manufacturing tends to be confined to light and marginal industries. Legal obstacles such as state monopolies are also a constraint in this sector. As the impact of these factors has become better understood, however, more importance has been placed on liberalization and privatization in this sector. Measures to provide security for private sector investment and attract foreign investment will be needed to support development of the manufacturing sector.

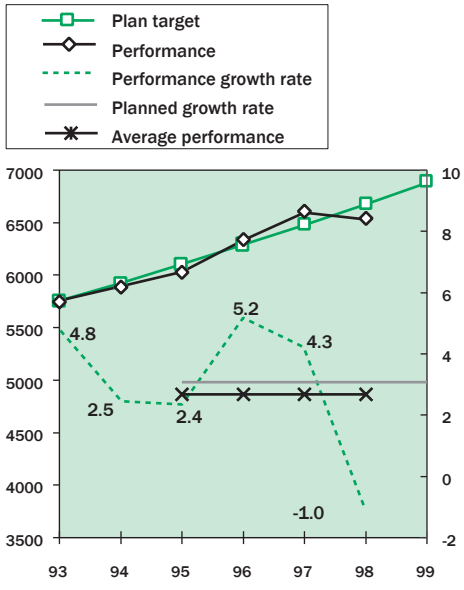
Services

The service sector is the largest in the economy, generating roughly 43% of GDP.

The manufacturing sector's international competitiveness has been reduced by the concentration of industry in the state sector and by long-standing protection policies, mainly in the form of hard currency allocations at preferential rates and favourable customs regimes.

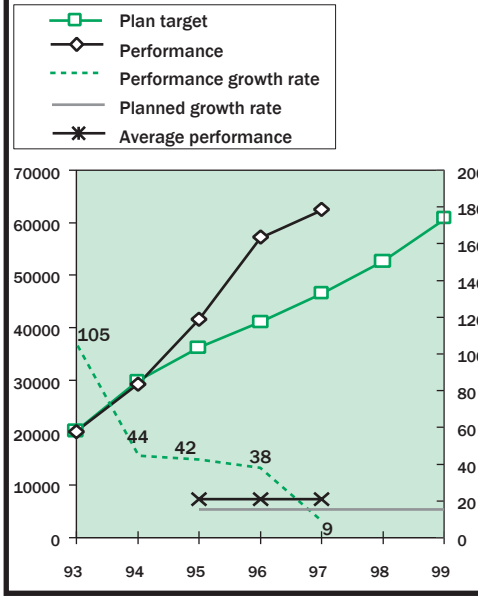
Expansion of the service sector has been a function of oil revenue.

Figure 4.6: Value added of the service sector (billion of rials at constant 1982 prices)



Expansion of the service sector has been a function of oil revenue and its rate of growth, so far, has been slightly below the rate projected in the Second Development Plan (figure 4.6).

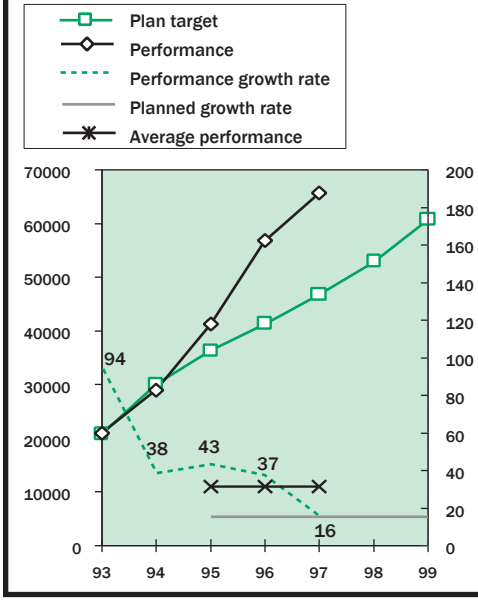
Figure 4.7: Government revenue (billions of rials)



The government budget: revenue and expenditure

As the Second Development Plan ran its course, government revenue invariably exceeded set targets, largely as a result of the exchange rates in effect in 1995, higher oil income in 1996, and increased tax revenues in 1997. Although the rate of growth in government revenue was higher than forecast, it was actually in a downward trend over the plan period and even fell below target in 1997. The share of tax revenue in the government budget rose under the Second Development Plan because of reduced oil income and higher tax revenues, which exceeded set targets (figure 4.7).

Figure 4.8: Government expenditure (billions of rials)

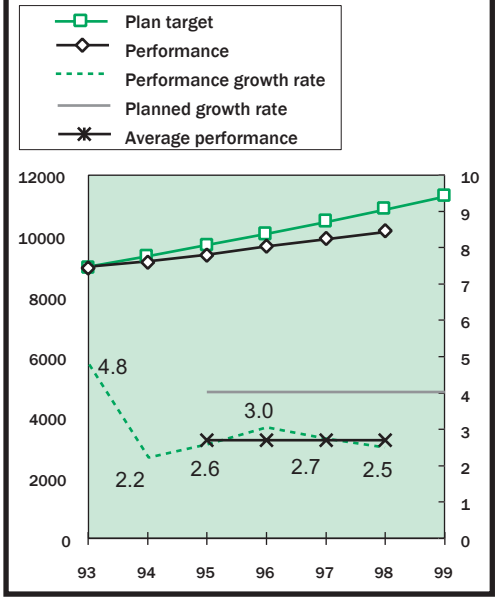


As with revenue, government expenditure also exceeded planned limits and, here too, the rate of growth was higher than projected. Nonetheless, expenditure growth slowed down following a drop in government revenue in 1997 (figure 4.8).

Development expenditure and its share in total government expenditure both rose in 1996, but then fell in 1997 as a result of lower revenue, leading to a growing

proportion of the total being taken up by current expenditure.

Figure 4.9: Private sector consumption (billions of rials)



National expenditure

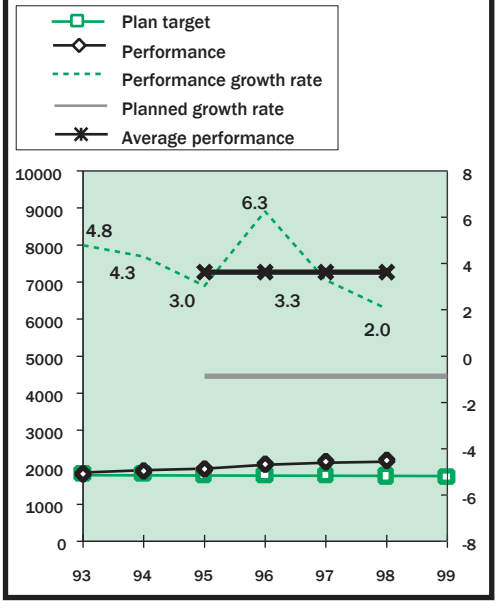
Both consumption and investment grew relatively rapidly during the first four years of the Second Development Plan. Gross domestic expenditure increased by 4.2%, 6.7%, 3.7% and 1.8% in those years. Private sector consumption was very high as a proportion of gross domestic expenditure at 1982 constant prices, reaching 68.1%, 65.8%, 65.1% and 65.6% respectively. Public sector consumption during these years varied between 14.1% and 14.2%. As figures 4.9 and 4.10 show, private sector consumption grew at a lower rate than forecast in the Second Development Plan while government consumption exceeded projected figures.

Investment

Gross investment by both the private and public sectors accelerated in 1996 compared with the previous year. In 1996 and 1997, the investment growth rate in the private sector rose from 2.5% to 6.4% and jumped from 4.2% to 10.9% in the public sector. Although investment slumped in 1997, its share of GDP was still higher than the average investment share of GDP for the three previous years. The main reason for the decline in investment in absolute terms was the drop in oil and gas prices.

In recent years, investment has stood at around 16–17% of GDP, a much lower rate than in countries with high economic growth. Economic security and the elimination of legal obstacles to domestic and foreign investment are prerequisites for the expansion of investment in I. R. Iran.

Figure 4.10: Government consumption (billions of rials)



Liquidity and the level of prices

The inflation rate peaked in 1995 as a result of the steep rise in the volume of liquidity towards the end of the First Development Plan. The consumer price index then dropped to 23.2% in 1996 from its annual peak of 49.4% in 1995 following the adoption of a deflationary policy. It fell further to 17.3% in 1997. The price of goods saw the steepest decrease, falling from a high of 57.8% in 1995 to 16.9% in 1996 and sliding further to 12.2% in 1997. In the service sector, the consumer price index dropped during these three years from 40.6% in 1995 to 40.2% in 1996 and

Private sector consumption grew at a lower rate than forecast in the Second Development Plan while government consumption exceeded projected figures.

The foreign trade balance moved from a deficit of $1.2 billion in 1993 to surpluses of $6.8 billion in 1994, $5.5 billion in 1995 and $7.4 billion in 1996.

then to 21.5% in 1997. In the housing, fuels and lighting sectors, the consumer price index rose from 28.9% in 1995 to 35% in 1996 but then slid back to 30.4% in 1997.

Employment

From 1986 to 1996, the number of employed rose from 11 million to 14.6 million. Employment increased from 4.7 million to 6.5 million in the service sector, and from 2.7 million to 4.4 million in the industries and mines sector. Despite 2% annual growth in I. R. Iran's active population, the annual unemployment rate fell from 14.2% in 1986 to 9.1% in 1996—an average of 360,000 new jobs were created every year in this period. If this employment rate is to be maintained in the coming years, however, more than 750,000 new jobs will have to be created every year. This is one of the most significant social and economic issues that the Third Development Plan will have to address.

The external sector

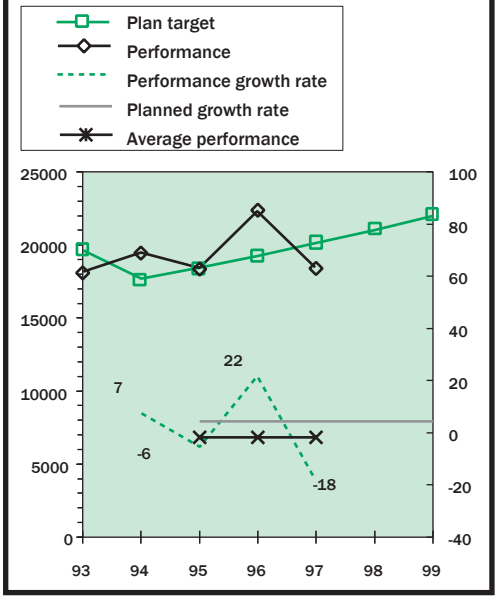
In the past six or seven years, I. R. Iran's external sector moved in tandem with oil prices and macroeconomic policies. The foreign trade balance moved from a deficit of $1.2 billion in 1993 to surpluses of $6.8 billion in 1994, $5.5 billion in 1995 and $7.4 billion in 1996. Although oil exports remained relatively stable at 2.5 million barrels a day, income from of oil and gas exports fluctuated between $14.4 billion and $19.3 billion owing to changes in world prices (figure 4.11). Oil and gas exports made up around 80% of total exports in these years.

Non-oil exports performed exceptionally well in 1994 when they peaked at $4.8 billion. They dropped to $3.2 billion in 1996, however, and remained around the $3 billion mark for the next two years.

As for imports, strict controls imposed after 1993 reduced total imports from $19 billion that year to less than $13 billion in later years. Imports worth $15 billion were permitted in 1996 (figure 4.12) because of the increase in oil prices.

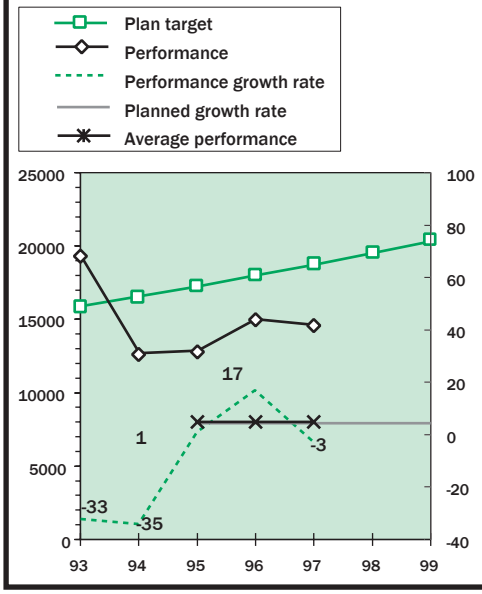
Further progress was made in 1996 on reducing and rescheduling I. R. Iran's foreign debt. Total external debt was cut from its 1993 peak of $23 billion to $12.1 billion by 1997. Short-, medium- and long-term debts, which had amounted to $16.3 billion in 1994 after rescheduling agreements were reached, fell by more than $7 billion to $8.8 billion in 1997. Total short-term debts decreased from a high of $6.7 billion in 1993 to $3.2 billion in early 1997.

Figure 4.11: Exports (millions of US$)



Thanks to rescheduling agreements, outstanding debt obligations worth $11 billion in 1993 had been cleared by 1996. This overall reduction in external debt, coupled with an improvement in I. R. Iran's foreign reserves, created better conditions for securing short- and medium-term loans on international financial markets and accessing foreign financing for development projects. In addition, the government managed to eliminate the burden of short-term loans used as a source of finance for imports by replacing them with short-term bank-to-bank credits, cutting interest rates on

Figure 4.12: Imports (millions of US$)



short-term financial credits under usance arrangements from 20% to 7.5%.

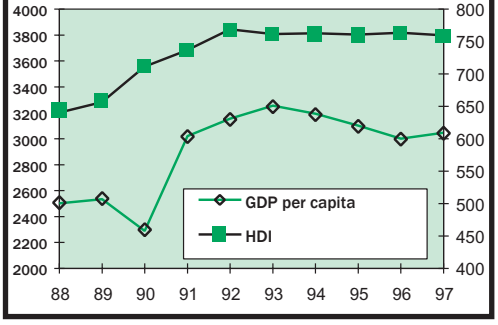
GDP trends and human development

Higher per capita income is regarded as one of three key factors propelling human development, so a comparison of GDP trends and human development index (HDI) under the First and Second Development Plans is revealing.

The trend of GDP has been similar to that of HDI in the last ten years (figure 4.13), due to the relatively stable rate of GDP growth coupled with remarkable improvement in education and health indicators. Although no direct relationship between GDP and HDI has been observed over the long-term, this does not mean the two are not related. On the contrary, there is ample evidence that if GDP were to grow at the same rate as the education and health indicators have, higher human development would result.

The review of the Second Development Plan's performance (above) highlighted the structural factors impeding GDP growth and revealed where structural reforms need to be made to achieve a desirable rate of economic expansion.

Figure 4.13: GDP and HDI, 1988–1997



Social expenditures for human development

The improvements wrought in human development by I. R. Iran over the last 20 years are due, first and foremost, to expenditure on education and health services. Table 4.3 shows that on average about 50% of the general budget has been allocated to social expenditure and that education and health's share in GDP has

There is ample evidence that if GDP were to grow at the same rate as the education and health indicators have, higher human development would result.

Table 4.3: Social expenditure ratios, 1988–1997 (percent)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Ratio of the general budget to GDP	20.8	17.3	18.4	17.8	18.1	24.9	24.5	25.4	25.6	25.6
Ratio of social expenditure to the general budget	44.9	51.5	49.6	54.6	61.8	48.7	42.3	40.6	45.6	48.0
Ratio of health and education expenditure to GDP	6.3	6.1	5.6	5.5	6.3	7.6	6.5	5.8	6.9	7.3

risen steadily. These trends indicate not only a heavy dependence on the general budget for social expenditure but also the Islamic Republic's will to provide health and education services to the whole population.

It is possible that if a high rate of economic growth is not achieved in the coming years, social expenditure will be reduced and human development in I. R. Iran will then face a serious challenge—an issue that has to be addressed seriously in the Third Development Plan. It is particularly important for human development that the upward trend in social expenditure is maintained, especially in the areas of health and education. Because it increases the quality of human capital, this expenditure is key to creating the conditions the economy needs to achieve growth—growth that will raise human development. At the same time, a more dynamic economy and higher incomes are indispensable for maintaining social expenditure levels.

It is possible that if a high rate of economic growth is not achieved in the coming years, social expenditure will be reduced and human development in I. R. Iran will then face a serious challenge.

Recommendations for the creation of a dynamic economy

The economy needs to be made more dynamic for per capita income to increase. Drawing on a general evaluation of the Second Development Plan and looking to the challenges lying ahead, a number of recommendations on how to achieve this dynamism are made here. Particular reference is made to the Third Development Plan's economic policies.

An objective evaluation of the Second Development Plan shows that the plan has scored significant success in paying down the country's external debt, paying the service charges on its foreign debt and controlling population growth.

A general evaluation of the Second Development Plan

The general performance of the Second Development Plan shows how the drop in oil revenues—an exogenous factor—resulted in some quantitative targets not being met in the short term. However, the crucial role played by the government's economic policies in the plan's overall success cannot be overlooked. A review of these policies shows that:

- The necessary legal measures still have to be adopted to reform the tax system and regulations governing exports and imports.
- Because policies on improving the quality of labour have been vague and clearly defined guidelines on technical education have been lacking, few practical measures have been taken to increase productivity and formulate effective training programmes.
- The pursuit of sustainable growth and development, the completion of unfinished projects, the allocation of public resources to projects with short payback periods, and the reduction of the scope of government activity are all issues that have been either neglected or inadequately addressed.
- The Second Plan has not been completely successful in terms of fiscal and financial policies, controlling inflation, unifying the exchange rate and balancing the general budget.
- An objective evaluation of the Second Development Plan shows that the plan has scored significant success in paying down the country's external debt, paying the service charges on its foreign debt and controlling population growth. Prevailing international conditions and the logic of maintaining and expanding external economic relations have undoubtedly helped pave the way for such policies. At a time when I. R. Iran is in dire need of modern technology and foreign investment, a demonstrated ability to meet its obligations will protect its international reputation and create more favourable conditions for attracting financial resources from abroad. Increased international standing is also a powerful instrument for dampening the effects of negative domestic and foreign propaganda. Similarly, exceeding the plan's targets for containing population growth is an outstanding achievement, which reflects the relevant authorities' tremendous efforts in this area. The decline in real oil income in the first three years of the Second Development Plan

contributed to the decline in government revenue.

If I. R. Iran is to combat economic slowdown, the low level of household income and the high rate of inflation, it is absolutely necessary for it to increase its economic efficiency by downsizing government and accelerating privatization. Although privatization may well increase unemployment in the short term, it is no longer acceptable to incur further losses by continuing the policy of borrowing from the banking system. It is becoming more urgent to reduce government involvement in economic activities so that the private sector can prosper more rapidly. For this reason, the development of an effective social security system and the acceleration of economic growth to expand employment are the most important socio-economic policy goals.

Consistent implementation

A development plan is a set of interrelated components, and a change in any one component can affect the whole range of the plan's expected results. The policies contained in the Second Development Plan were designed to follow on from the liberalization and privatization policies of the First Development Plan. Naturally, transforming a virtually stagnant, closed, mostly government-controlled and heavily subsidized economy into a market economy will have some undesirable consequences, even though the outcome will be positive in the longer term. One of these consequences is that most market prices will be higher than previously controlled prices. Positive results will gradually emerge after some years only if the plan is rigorously and persistently followed. In the case of the Second Development Plan, however, an unwillingness to face early difficulties translated into later policy reversals. As a result, little serious effort was made in terms of privatization, unification of the exchange rate, protection of capital and investment, and foreign investment attraction. In these circumstances, it was unreasonable to expect any swift achievement of the plan's objectives.

Structural obstacles

The context in which the Third Development Plan of I. R. Iran is being prepared is such that the structural impediments to economic reform are more or less the same as those facing the Second Development Plan:

- The negative real rate of return on savings has reduced the volume of savings, limited credit resources and restricted investment opportunities.
- The obligation of the banking system to allocate its credit resources to the public sector is constraining private sector investment.
- The wide range of services provided by government, combined with general inefficiency in the public sector, increases the burden on the treasury and prevents limited resources from being allocated to more desirable social goals. This means that the burden of financing the state sector—whether it be from oil revenues and taxes, or borrowed from the banking system—is carried by the public.
- Government intervention in pricing distorts the labour market as well as the money, financial and commodity markets. Establishing multiple price and exchange rate systems increases rent-seeking, incurs high administrative costs and increases national expenditure.

The general orientation of structural reforms should therefore be towards a streamlined and more efficient public sector. It should also be directed towards liberalizing and privatizing the economy, mobilizing domestic and foreign investment resources, and creating a transparent, secure and healthy environment for investment and economic activities.

A package of structural reforms will be needed to achieve these goals, the most important of which are:

The development of an effective social security system and the acceleration of economic growth to expand employment are the most important socio-economic policy goals.

The general orientation of structural reforms should therefore be towards a streamlined and more efficient public sector. It should also be directed towards liberalizing and privatizing the economy.

- Creating a stable social and political environment for economic decision-making
- Liberalizing and privatizing economic activities
- Separating monetary from fiscal policies and making the Central Bank more independent
- Developing financial and credit markets
- Increasing interest rates on savings
- Protecting private sector investment
- Developing private credit and banking institutions
- Simplifying procedures and regulations governing private sector investment
- Liberalizing the financial sector and eliminating preferential banking facilities
- Creating the necessary conditions for establishing a unified exchange rate.

The Third Development Plan includes a package of executive polices for making economic reforms over the coming five years. In addition to the above points, the plan places emphasizes:

- Reorganizing state companies to streamline them and increase their efficiency
- Reforming the country's administrative structures and economic management
- Rehabilitating government monopolies and enhancing their competitiveness
- Making fundamental changes to the country's tax and budgetary systems
- Regulating and developing the money and investment markets
- Pursuing decentralization to expand the provinces' responsibilities
- Promoting science and technology
- Expanding the social security system to help regulate the labour market
- Attracting foreign investment.

Chapter 5

Education

Introduction

Educational attainment is considered to be one of the principal elements of human development. The expansion of knowledge not only paves the way for the enlargement of human choices, but also provides better living conditions through greater access to employment opportunities and improved health. It is for these reasons that the government of the Islamic Republic of Iran paid great attention to education in the decades following the revolution.

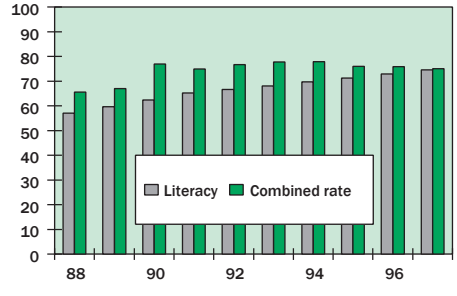
Trends in educational indicators and human development

Two of the most important factors in the improvement of human development levels in I. R. Iran from 1988 to 1997 were the improvement of the adult literacy rate from 57.1% to 74.5% and the increase in the combined enrolment ratio from 65.6% to 75% (figure 5.1).

As shown in figure 5.1, adult literacy grew at a higher rate than combined enrolment. This can be explained largely by the fact that because literacy was a prerequisite for access to further education, training, and employment opportunities, demand for literacy courses was high. The gross enrolment ratio at the tertiary level jumped from 6.89% in 1988 to 18.17% in 1997, while the ratio at the secondary level went up from 52.7% to 77.5% in the same period. The ratio at the primary level, on the other hand, declined from 122.5% in 1988 to 119.2% in 1997. Table 5.1 shows that tertiary education has expanded more than secondary education, while primary education has contracted.

The significant increase in the number of universities and institutions of higher education and the growing presence of

Figure 5.1: Educational indicators, 1988–1997 (percent)



Two of the most important factors in the improvement of human development levels in I. R. Iran from 1988 to 1997 were the improvement of the adult literacy rate from 57.1% to 74.5% and the increase in the combined enrolment ratio from 65.6% to 75%

Table 5.1: Gross enrolment ratios at primary, secondary and tertiary levels, 1988–1997 (percent)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Primary	122.5	122.1	125.6	133.8	132.8	131.3	126.6	122.2	119.1	119.2
Secondary	52.7	55.3	57.8	61.7	67.9	71.8	74.2	75.2	76.8	77.5
Tertiary*	6.89	8.11	9.28	11.02	12.24	14.2	15.53	16.19	17.95	18.17

** Includes all students aged 18 to 23 enroled in state universities and the Islamic Azad University.*

Table 5.2: Female enrolment indices, 1988–1996 (1988 = 100)

	1988	1989	1990	1991	1992	1993	1994	1995	1996
Tertiary	100	122	143	179	200	231	257	274	323
Secondary	100	108	117	127	138	149	161	175	189
Primary	100	103	106	109	112	115	119	122	125

Source: Education statistics, Deputy Minister for Manpower Planning, Ministry of Education, and Statistical data on Iran's higher education, Institute for Research and Planning in Higher Education. (1989-1996)

There was a downward trend in technical and vocational education, however, with its share of the secondary-level population dropping from 2.4% in 1986 to 2% in 1996.

In 1997, I. R. Iran's education index stood at 0.75, compared with 0.85–0.99 in countries with high human development, showing that there is still plenty of room for improvement.

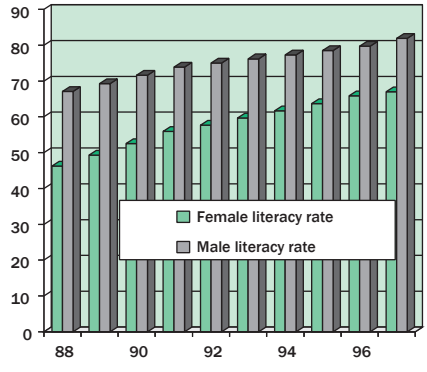
the private sector at this level explain why growth in tertiary education has been higher than in secondary and primary education. Another important reason for the rise in enrolment at the tertiary level is that attainment of higher education is perceived to have economic advantages. In this period, the share of secondary education increased in absolute terms as the population of secondary-level students rose from 5,763,000 in 1986 to 8,414,000 in 1996.

There was a downward trend in technical and vocational education, however, with its share of the secondary-level population dropping from 2.4% in 1986 to 2% in 1996. This decrement was caused by declining interest in this type of education among students in this age group—a conspicuous feature of changes in the educational structure of the population. One of the reasons why technical and vocational education showed the least growth of all education types was reduced growth in the manufacturing sector. Since technical and vocational education play a crucial role in the development of small and medium-sized enterprises and the process of industrialization as a whole, this educational trend has important implications for economic growth and per capita income, which, in turn, impact human development.

In 1997, I. R. Iran's education index stood at 0.75, compared with 0.85–0.99 in countries with high human development, showing that there is still plenty of room for improvement. Any measures to increase literacy and boost enrolment in different levels of education would improve I. R. Iran's education index and, as a corollary, raise its level of human development.

A comparison between men and women's educational status is also important from a human development perspective (figure 5.2).

Figure 5.2: Adult literacy rates for men and women, 1988–1997 (percent)



From 1988 to 1997, the adult literacy rate for women rose from 46.3% to 67.0%, while the rate for men increased from 67.1% to 81.9%. It is worthy of note that although the age composition of the population shows more men having an opportunity to become literate, women have shown a greater interest in literacy. Table 5.2, which shows female enrolment indices at various education levels, reveals that the index for the number of female students in higher education increased from 100 (the base figure) in 1988 to 322 in 1996. In the same

period, the index for female secondary enrolment rose to 189, and the index for female primary enrolment went up to 125.

Table 5.3: Adult literacy rates and combined enrolment ratios in the provinces, 1996 (percent)

Province	Adult literacy rate	Combined enrolment ratio
Tehran	84.7	82.9
Qom	75.4	73.6
Isfahan	79.5	77.8
Fars	74.7	74.6
Yazd	77.9	77.7
Gilan	72.6	77.5
Semnan	79.5	79.3
Markazi	71.7	77.2
Kermanshah	68.1	73.8
Khuzestan	69.2	72.6
Kerman	70.5	81.3
Mazandaran	72.0	78.1
East Azerbaijan	67.5	72.9
Bushehr	72.5	74.8
Ardebil	63.2	72.7
Khorasan	73.9	74.6
Hormozgan	63.3	70.7
Chahar-Mahal and Bakhtiari	67.2	75.6
Lorestan	65.0	79.2
Ilam	67.0	83.2
West Azerbaijan	61.1	64.8
Zanjan	65.2	72.3
Hamedan	68.1	73.2
Kohgilooye and Boyer-Ahmad	61.9	86.7
Kurdestan	56.9	68.3
Sistan and Baluchestan	48.1	61.3

In 1988, 60.5% of students were in urban areas, while the remaining 39.5% were in rural areas. Of all the learners covered by the Literacy Movement, 56.8% were in urban areas and 43.2% were in rural areas.

In 1996, of I. R. Iran's 26 provinces, Tehran and Sistan and Baluchestan had the highest and lowest adult literacy rates respectively, with a 36.6% gap between them—and there were considerable disparities among the provinces between these extremes (table 5.3).

Tehran and Sistan and Baluchestan also have the highest and lowest combined enrolment ratio at 82.9% and 61.3% respectively. Although the gap between them—21.6%—is remarkably wide, it is not as wide as the adult literacy gap, showing that access to all levels of education is more equitably distributed among the provinces than access to literacy facilities.

Access to all levels of education is more equitably distributed among the provinces than access to literacy facilities.

These disparities in educational indicators point to the need for measures to ensure more equitable distribution of education facilities among the provinces, particularly in those that have low adult literacy rates and low combined enrolment ratios.

The role of supportive educational policies in expanding educational facilities

By setting policies for the expansion of educational facilities, the First and Second Development Plans played an important part in the improvement of educational indicators. The most important policies concerning primary education adopted under the First Development Plan were:

- Develop programmes to ensure universal access to and full enrolment in primary education.
- Coordinate adult literacy education with primary education so that existing facilities are used more efficiently, and support literacy for parents as a means of achieving universal primary education of children.
- Reform educational evaluation techniques, particularly of teaching methods and curricula; this included improving the efficiency of teachers and principals through better assessment, identifying

the reasons for educational underachievement, and introducing appropriate remedial schemes for underachieving students in order to reduce repetition rates at the primary level.
- Reform educational regulations and improve coordination between the literacy programme and primary education by a better division of responsibilities so that the adult literacy programme covers all those over 12 years of age.
- Utilize all possible means of publicity and every possible incentive to attract children not in school—particularly rural and tribal children—to primary education, using teaching methods and curricula at the primary level (especially in the early grades) that are appropriate for the various regions.
- Assign the best teachers, particularly female teachers, to the early primary grades and provide teachers with adequate material and spiritual incentives to dissuade them from moving to other regions where better facilities are available.
- Make primary education compulsory for all primary school children 6–10 years old.
- Use schools for no more than two full shifts a day.
- Support private sector involvement in primary education by extending bank facilities.
- Use qualified army conscripts as teacher-soldiers to expand educational coverage, particularly in the poor regions.

Policies implemented under the First and Second Development Plans to support secondary education also played an important role in improving educational attainment levels. The most important of these policies were:
- Reform the country's secondary education system so that students can match their fields of study to their interests and capabilities.
- Ensure maximum flexibility in teaching methods.
- Use human resources, space and other inputs according to the type of education being offered and the sex and individual interests of students.
- Endeavour to expand secondary education in poor regions.
- Provide access to both in-school and distance education in remote areas.
- Reduce the content and number of general subjects at secondary level.
- Emphasize compatibility between curricula and the economic, social and cultural needs of Iranian society.
- Transfer responsibility for compiling, printing and distributing textbooks to the private sector.

Key policies implemented to support tertiary education were:
- Improve coordination and centralization of planning and policy-making in the higher education system.
- Increase decentralization of policy and programme implementation.
- Create Centres of Excellence in scientific and specialized fields at selected universities so that other institutions of higher education can draw on them to develop their own capacities.
- Increase the number of graduate and post-graduate students at universities and add courses at these levels.
- Improve procedures for admitting students into universities and institutions of higher education so that the student body is more representative of the various regions.
- Expand the role of the private sector in higher education and concentrate government resources on expanding higher education in deprived regions.
- Make higher education, both qualitatively and quantitatively, more compatible with available job opportunities.
- Supply universities and institutions of higher education with qualified faculty by providing teacher education inside the country or by attracting qualified expatriate Iranians.

- Increase the independence of institutions of higher education.
- Improve the quality of research and institutionalize it within universities and institutions of higher education.
- Ensure regional balance when expanding and facilitating access to higher education.
- Develop academic cooperation at regional and international levels.
- Expand technical and vocational education by attracting talented students.
- Introduce organizational and managerial reforms.
- Attract private sector participation with a view to lowering costs.

All these policies have undoubtedly been effective in raising literacy rates and boosting enrolment ratios at every level of the education system. The allocation of considerable budgetary resources to education under the two development plans has also been of great importance in raising educational attainment. The share of public expenditures on education in GDP rose from 4% in 1988 to 5.3% in 1997. At the same time, public expenditure on education as a percentage of total public expenditure increased from 19.4% to 20.7%, while the share of public expenditure on higher education went up from 12.8% to 22.5%.

Performance of the education system under the First and Second Development Plans

The structural reforms accomplished under the First Development Plan were particularly supportive of primary and secondary education, and were felt most in the rural areas. The diminution in the share held by primary education was a result of the stabilization of primary school enrolment and decline in the number of children starting primary school at older ages. Plan projections of student distribution are shown in table 5.4. As shown in table 5.4, the enrolment share of preschool, guidance, high school and tertiary education grew at an average annual rate of 5.8% under the First Development Plan. When the structure of education in urban and rural areas is compared, however, there is balance only in primary education, with about 49% of students at this level residing in rural areas. After that, the share of rural

The structural reforms accomplished under the First Development Plan were particularly supportive of primary and secondary education, and were felt most in the rural areas.

Table 5.4: First Development Plan's projection of student distribution in the formal sector (percent)

Year	1988	1989	1990	1991	1992	1993
Preschool	1.2	1.3	1.3	1.3	1.4	1.4
Primary	57.9	58.9	55.9	55.3	54.8	54.5
Guidance	19.7	19.9	19.5	19.8	19.9	20.0
High school	11.4	11.1	11.6	12.0	12.4	13
• Technical and vocational	(1.5)	(1.5)	(1.5)	(1.5)	(1.5)	(1.6)
• Academic	(9.9)	(9.6)	(10.1)	(10.5)	(10.9)	(11.4)
Other post-secondary	–	–	–	–	–	–
Adult education	8.2	8.0	10.1	10.1	9.8	9.6
Special students	0.2	0.2	0.3	0.3	0.3	0.3
Disabled	0.2	0.2	0.2	0.2	0.2	0.2
Higher education	1.4	1.4	1.4	1.4	1.3	1.3

Source: Educational statistics, Deputy Minister for Manpower Planning, Ministry of Education, and Statistics of higher education, Institute for Research and Planning in Higher Education. (1989-1996)

Table 5.5: Second Development Plan's projection of student distribution

Year	Literacy '000s	Literacy %	Primary '000s	Primary %	Guidance '000s	Guidance %	Secondary '000s	Secondary %	Gifted '000s	Gifted %	Tertiary '000s	Tertiary %
1994	586	3.0	9,752	50.3	4.828	24.9	3,204	16.5	74	0.4	927	4.8
1995	463	2.4	9,467	49.2	4,949	25.7	3,326	17.3	75	0.4	968	5.0
1996	388	2.0	9,180	47.6	5,090	26.4	3,533	18.3	79	0.4	1,011	5.2
1997	261	1.3	8,935	54.7	4,981	25.5	4,167	21.3	85	0.4	1,110	5.7
1998	210	1.1	8,786	44.8	4,839	24.8	4,526	23.1	87	0.4	1,161	5.9

Source: Educational statistics, Deputy Minister for Manpower Planning, Ministry of Education, and Statistics of higher education, Institute for Research and Planning in Higher Education. (1994-1998)

The private sector's share in primary education is expected to rise from 13.9% in 1994 to 17.2% in 1999, and its share in high school education is projected to increase from 29.3% to 43.2% in the same period.

students declines as the level of education increases.

Although the relative share of rural areas in primary and secondary education (preschool education excluded) improved under the First Development Plan, there was still a significant difference between urban and rural districts. Indeed, only 34.5% of guidance students and a mere 10.8% of high school students were going to school in rural areas at the end of the First Development Plan.

The educational policies of the Second Development Plan were formulated on the basis of projections that the share of primary and literacy students in combined enrolment would fall against students in secondary and higher education, and that the shares held by guidance and gifted students would remain relatively stable (table 5.5).

The table indicates that the share of primary students would drop from 50.3% in 1994 to 44.8% in 1998, a decline projected as a function of structural population change attributable to lower natural population growth in the previous ten years. While the share of guidance students was projected to be the same as in 1993 at the end of the Second Development Plan, the share of secondary students was expected to increase from 16.5% to 23.1% and the share of tertiary students was estimated to reach 5.9% in 1998 from 4.8% in 1994.

Another important development in the education sector was the remarkable rise in the share of students studying in private sector institutions. At the start of the Second Development Plan, around 93.9% of the students in primary, secondary and higher education were studying in public sector institutions. In 1998, this share was projected to fall to 83%. The largest drop was expected in secondary education, while the least decrease was forecast at the primary level. The corresponding figures for higher education and the guidance cycle are 8.9% and 8.3% respectively.

On the whole, though, the public sector's share in primary and literacy education has diminished, while its share in guidance cycle, secondary and higher education has been on the rise. These shifts are due partly to the change in the age structure of the population, and partly in response to the need for expansion of education at higher levels. But, as envisaged in the Second Development Plan, the private sector is becoming increasingly involved in primary and high school education, while its share at the guidance level and in higher education has been declining. The private sector's share in primary education is expected to rise from 13.9% in 1994 to 17.2% in 1999, and its share in high school education is projected to increase from 29.3% to 43.2% in the same period. On the other hand, the private sector's share at the guidance level and in higher education in the same

period will go down from 21.1% and 35.7% respectively to 20.1% and 19.5%.

Qualitative issues in the education system

It is true that the country's educational indicators speak of significant progress in the past two decades. Yet, this quantitative achievement, unless it is matched with equally significant qualitative progress, will stand little chance of sustainability in the long term. Nor will it be able to make the expected contribution to achieving a higher level of human development. Of particular importance in this connection is the impact of the quality of education on economic growth as a prerequisite for sustainable human development. It is a fact that during the past two decades the country has not succeeded in achieving an adequate level of human capital formation, which is a crucial requirement for high economic growth. In the face of this failure, which has been a serious constraint on economic development, more attention must be paid to improving the quality of the country's education system. Such improvements are also key to enlarging people's choices, which is at the heart of human development.

There is some evidence of qualitative shortcomings at various levels of the education system, particularly in higher education. Continued neglect of these shortcomings is certain to pose grave challenges to the country in future. The issue of quality in education, particularly at the tertiary level, has important implications for human development from various perspectives. A qualitative mismatch between the content of higher education and the requirements of the labour market will obviously result in increased unemployment among the educated and will amount to a waste of the resources allocated to higher education.

Several factors have contributed to the decline in educational quality, particularly at the tertiary level. One problem has been that the emphasis on increasing the number of students in higher education was not accompanied by a similar emphasis on ensuring the quality of that education. A reason for this was the sizeable increase in the population of students at university and college age, which prompted the expansion of higher education as a solution to the problem of youth unemployment. This quantitative expansion, however, was not accompanied by necessary attention to such crucial factors as qualified faculty and suitable educational facilities; this resulted in serious shortcomings that adversely affected the quality of higher education. At the same time, the government's dominant role in higher education was not conducive to the emergence of competition in this area; this also contributed to reduced efficiency and lower quality. In the Third Development Plan, efforts have been made to come up with effective approaches to these challenges, but it seems that more serious attention is needed from the perspective of human development.

There is some evidence of qualitative shortcomings at various levels of the education system, particularly in higher education.

Achievements and challenges in educational institutions and mass communications

The "Education for All" conference in Thailand in 1992 placed great emphasis on the role of cultural institutions, educational centres and the mass media as the major instruments for the expansion of the people's educational capacities. These institutions, centres and communication channels, it was believed, exert an important effect on society's educational structure, particularly through the provision of informal educational services and facilities. Therefore, their impact on educational and human development indicators cannot be ignored.

In I. R. Iran, in addition to such formal public institutions as schools and universities, there are other non-governmental institutions that have a role in influencing society's educational environment. Cultural centres such as libraries, cinemas, centres of dramatic arts, cultural and art complexes, mosques and other religious places are

among these institutions. Also included in this category are mass communications media such as radio and television, the press and other print media, all of which influence the country's educational environment. It is important to assess the role played by these institutions and communications media in general public education.

There was a significant increase in the number of schools over the last ten years. The number of primary schools rose from 54,431 in 1988 to 62,659 in 1997, representing annual growth of 1.6%.

There was a significant increase in the number of schools over the last ten years. The number of primary schools rose from 54,431 in 1988 to 62,659 in 1997, representing annual growth of 1.6%, with primary schools for girls and boys increasing in number at an annual average rate of 4.6% and 3.1% respectively. At the same time, the total number of classes at primary level had grown an average of 1.8% annually. The number of schools in urban areas grew 6.1% annually while the number in rural areas rose 0.08%.

At the secondary level, the total number of guidance schools grew from 13,405 in 1988 to 26,698 in 1997—an 8% average annual growth rate. The increase in the number of guidance schools in urban areas was 11.1%, higher than the national rate, while the rate in rural areas was 5.5%. In 1997, the number of classes at the guidance level nationally was 167,651; 34.2% of these were in rural areas and 65.8% were in urban areas.

In 1997, there were 11,901 high schools in I. R. Iran, an annual increase of 14.1% since 1988, with the annual growth rate for boys' and girls' high schools at 13.3% and 15.3% respectively. More than 77% of all the high schools in the country were in urban areas in 1997.

The number of guidance and high schools has increased at a higher rate than primary schools, reflecting the growing demand for secondary education as the population's age structure changes. As efforts are made to increase the number of schools, attention has to be paid to educational quality as well.

In 1997, for every full-time academic faculty member in state universities there were 29.6 students, and for every teacher employed in primary and secondary education there were 31.

Public libraries and cultural centres

Iran has a long history of producing written cultural and literary works and preserving them in special places. This, coupled with the special importance Islamic teachings accord to books and reading, was among the reasons for establishing public libraries in even the remotest parts of the country as effective tools for promoting reading among all social groups.

Figure 5.3: Growth in the number of public libraries, 1988–1997

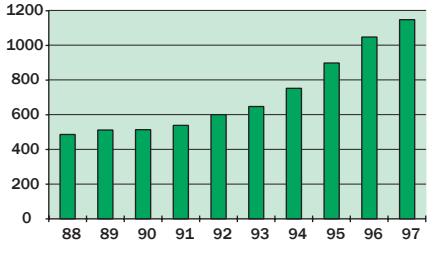


Table 5.6: Visits to public libraries, 1988–1997 (thousands)

Year	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Number of visitors	6,000	6,500	7,300	8,100	9,000	9,500	16,110	31,068	30,715	31,551
Annual growth (%)	–	8.3	12.3	10.9	11.1	5.5	6.9	9.3	2.0	2.7

Source: Third Development Plan Documents, *Plan and Budget Organization.*

Available data indicate that there were 486 public libraries in I. R. Iran in 1988. Growing at an average annual rate of 10%, the number of public libraries more than doubled to 1,147 in 1997.

Although most public libraries lack an efficient system for recording the number of visitors and borrowers, available data show that the annual number of visitors to public libraries increased from 6 million in 1988 to 31.5 million in 1997.

Table 5.6 shows the rising trend of visits to public libraries in the same period. The expansion of public libraries has had a remarkable role in the improvement of the country's educational indicators, particularly for guidance and high school students. For students with nowhere suitable to study at home, the expansion of the public library system fills an important need.

Although figures on the number of public libraries and visits to them speak of remarkable improvement over the past decade, there are still inadequacies which will have to be addressed in the coming years. The quantitative expansion and qualitative improvement of public libraries on a nationwide scale should be considered as an effective means of promoting educational attainment and, by extension, human development.

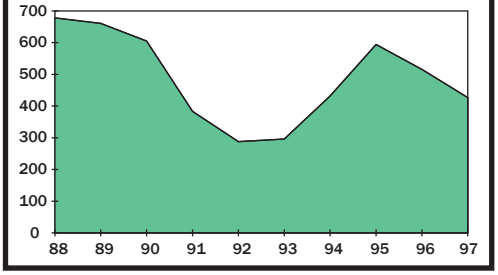
Cinemas, theatres, and other cultural and art centres have also played a role in creating an educational environment and contributed to human development. The quantitative expansion of the programmes offered by such centres is an indication of their impact on learning. However, according to available data, the number of cinemas has not risen significantly: there were 260 in 1988 and only 295 in 1996.

Films deliver education indirectly, usually through a combination of educational concepts, artistic expression and cinematic effects. This education is targeted at the general public, and particularly to adolescents and young people who are more receptive to ideas. Two groups of films can be categorized as having an educational content: first, films specifically made for children and young adults and, second, those specifically produced for educational purposes.

After declining between 1991 and 1993, the production of educational films picked up again in later years (figure 5.4).

The establishment of cultural and arts complexes was one of the initiatives launched by the Islamic Republic of Iran. In 1997, 70 cultural and arts centres and 36 cultural houses were active in the country's urban and rural areas. These centres have had remarkable success in presenting a variety of educational and cultural programmes to adolescents and young people and have proved effective in encouraging them to strive for higher levels of educational attainment.

Figure 5.4: Production of educational films, 1988–1997



Available data indicate that there were 486 public libraries in I. R. Iran in 1988. Growing at an average annual rate of 10%, the number of public libraries more than doubled to 1,147 in 1997.

However, according to available data, the number of cinemas has not risen significantly: there were 260 in 1988 and only 295 in 1996.

Mass media

The country's mass media have also played an important part in creating a lively educational environment. Television programmes produced by the Islamic Republic of Iran Broadcasting Organization (IRIB) registered average annual growth of 22.9% from 1989 to 1997. Production of radio programmes by IRIB made a gigantic leap from 45,530 hours in 1989 to 146,019 hours in 1997. Radio programmes broadcast over IRIB's

In the Islamic Republic of Iran, mosques and other religious places have also served as important channels of communication affecting the country's educational environment.

various channels rose from 79,939 hours in 1989 to 180,935 hours in 1997.

Of IRIB's radio programmes on different subjects, 36% focused on guidance and moral edification, 17% provided entertainment, and 47% were educational and informative.

The print media grew at an average annual rate of 23.8% in numerical terms, with the highest increase in dailies at 27.5%, and the lowest in monthlies at 19.3%. Momentous social developments, a higher level of public awareness, and government support in recent years were the main reasons for the remarkable growth in the Iranian press.

From 1994 to 1997, print media circulation grew an average of 20.6% annually, indicating the increasing importance of this medium to the general public, and the substantial expansion of the press's role in education and awareness among different social groups, particularly youth. It is likely that in the coming years the press will have an even stronger impact on public education and, by extension, human development.

Publications are another important channel for transmission of information to students at all levels of the education system. From 1988 to 1997, titles specifically addressed to children and young adults grew at an average annual rate of approximately 20% and circulation grew 14% annually. Importantly, books for children and young adults held a significant share of the country's total publications, reaching 19% of all titles published and 38% of total circulation.

In the Islamic Republic of Iran, mosques and other religious places have also served as important channels of communication affecting the country's educational environment. In addition to their traditional role in providing religious education, these centres have also been offering other educational programmes, particularly in the arts and technical and vocational fields. In 1996, there were 78,908 mosques and other religious places in the country, which were engaged in a wide range of educational areas. The educational activities of these centres, except for the theological seminaries, are primarily focused on literacy programmes, military training, tutoring classes aimed at helping students with their formal education at the secondary level, and foreign languages. Technical and vocational training and computer courses have also been offered in some 300 mosques and other religious places throughout the country.

The attention paid to the role of educational, artistic and cultural centres as well as that of the mass media and educational NGOs reflects awareness of their tremendous importance in generating an empowering environment for Iranians. The establishment of a more systematic and constructive relationship among the services offered by these centres is, therefore, one of the requirements for achieving a higher level of human development.

Recommendations for education system development

Innovative programmes need to be launched to develop the education system at the primary and secondary levels and in the tertiary sector. A number of approaches have been envisaged in the Third Development Plan.

- Reorganize staffing at primary and secondary, technical and vocational, and tertiary levels so that economic and social requirements are met, and work with the private and cooperative sectors to ensure that the education system provides appropriate job skills, particularly for women and young people.
- Review policies and laws to determine the appropriate level of participation in the education sector by the government and non-government organizations, and provide the resources these organizations need to both diversify and mobilize educational funding.

- Increase people's participation in education and expand the private sector's activities in the sector.
- Reform the organizational structure of primary and secondary education so that it is less centralized, and managers at the different levels have more authority.
- Increase the quality of teachers and instructors, providing continuing education facilities for teachers at the primary and secondary levels.
- Expand and strengthen the role of provincial councils of education in mobilizing non-government resources to meet educational requirements.
- Redirect educational programmes so that young adults are encouraged to pursue technical and vocational education, and provide financial and administrative support for the expansion of technical and vocational education centres.
- Improve the quality of primary and secondary education by reviewing curricula and textbooks so that they meet the needs of both individual students, according to their age, sex and capabilities, and society at large.
- Design supplementary programmes in order to reduce repetition and drop-out rates.
- Improve evaluation and testing methods on the basis of findings from the latest scientific and educational research, taking students' creativity into consideration.
- Prepare to give provincial departments of education responsibility for educational affairs, and involve urban and rural education councils in the development of education policies.
- Ensure universal access to students in the primary and guidance school age groups by expanding boarding facilities at central village schools and guidance schools in poor regions, designing distance and part-time education programmes and programmes that use audio-visual media, and setting up satellite schools.
- Establish special educational television channels.

The Third Development Plan has also made a number of recommendations for the development of the country's higher education.

- Increase the role and share of research and development in the country's development plans and GDP, drawing on the support of government and non-government sectors and development-oriented research.
- Expand cooperation and joint research activities between domestic and foreign scientific and technological institutions and enhance relations with scientific and research centres abroad.
- Direct research activities towards applied research with a view to finding solutions to the problems facing the economic and social sectors and strengthening basic research through the allocation of more government resources.
- Expand research and development institutions in the government and non-government sectors.
- Update the content of all fields of study in higher education, taking into account the diverse and rapidly changing needs of society, and transfer responsibility for academic planning to universities and institutions of higher education.
- Establish and strengthen Centres of Excellence in more leading universities on the basis of the importance of their research and doctoral programmes.
- Reform the organizational structure of the higher education system with a view to making it more dynamic and academically competitive by giving universities and colleges more authority over both education and research, and setting up an integrated system of policy-making in higher education.
- Curtail the uncontrolled expansion of universities taking place without regard to the country's economic and social needs.

The Third Development Plan has also made a number of recommendations for the development of the country's higher education.

- Provide financial support to faculty to encourage their greater participation in research activities.

In line with these policies aimed at the development of the country's education system, it is important to emphasize a few points related to the key role of educational attainment in human development.

Key task facing I.R. Iran's education system is to ensure that secondary and higher education meet the needs of the country's labour force

First, qualitative improvement of general and higher education turns education into an effective instrument for the enlargement of human choices. Although higher growth rates in literacy and enrolment at different levels of education increase educational attainment, it is the quality of education offered at the primary, secondary and tertiary levels that counts as far as the expansion of human choices is concerned. Consequently, the main challenge the education system has to meet is simultaneously to maximize access to education and improve the quality of education at all levels.

Second, the quality of education is important because of its impact on human resource development and, by extension, on economic growth and higher employment rates.

Third, a key task facing I.R. Iran's education system is to ensure that secondary and higher education meet the needs of the country's labour force—particularly the young people entering the labour market for the first time—and of the manufacturing, agriculture and service sectors.

Chapter 6

Health, Nutrition and Food Security

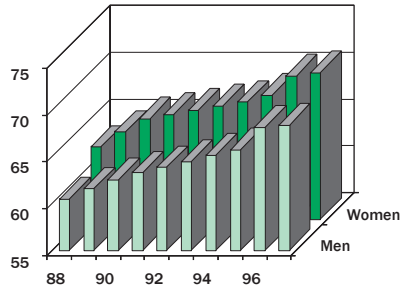
Introduction

Improvement in Iranians' health status over the last 20 years has been one of the main reasons for the progress in human development in the Islamic Republic of Iran. Expansion of health facilities, particularly primary health care, has greatly contributed to longer life expectancy, which is one of the three components of the human development index (HDI).

Health indicators and human development

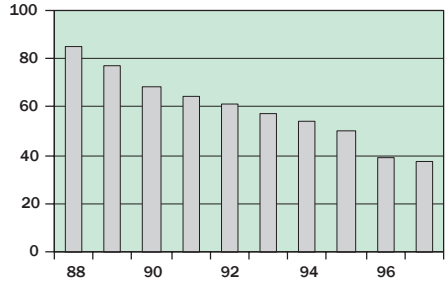
Life expectancy in I. R. Iran increased as much from 1988 to 1997 as it did in the three previous decades as a result of the provision of public health services. Figure 6.1 shows the rising trend in life expectancy for men and women between 1988 and 1997. Life expectancy in I. R. Iran, which stood at 61.1 years in 1988, had risen to 69.5 years by 1997.

Figure 6.1: Life expectancy in I. R. Iran, 1988–1997



The most important factor in increasing life expectancy over the past ten years was the decline in the mortality rate among children under five years from 85.3 per 1,000 live births in 1988 to 37.3 per 1,000 live births in 1997.

Figure 6.2: Mortality rates of children under five years old, 1988–1997



Other factors contributing to longer life expectancy included a decline in infant and maternal mortality, a drop in the rate of under-fives dying from diarrhoea, and a fewer deaths from malaria and measles.

Infant mortality fell from 63.5 per 1,000 live births in 1988 to 30.7 in 1997, while maternal mortality dropped from 90 per 100,000 live births to 37.4 in the same period. Likewise, the number of deaths from diarrhoea declined from 10.5 per 10,000 children under five in 1989 to 3.7 in 1997. Cardiovascular disease and cancer are now the main causes of death in I. R. Iran, while the spread of acquired immune deficiency syndrome (AIDS) and tuberculosis is beginning to cause alarm.

Expansion of primary health care services, greater access to safe drinking water,

The most important factor in increasing life expectancy over the past ten years was the decline in the mortality rate among children under five years from 85.3 per 1,000 live births in 1988 to 37.3 per 1,000 live births in 1997.

nationwide immunization programmes, and increased care for women and mothers were the leading reasons for the reduction in mortality, particularly of infants, children and mothers. A remarkable reduction in acute respiratory disease and diarrhoeal diseases, safe childbirth and access to maternity services also played an important part in reducing mortality.

To maintain these trends and achieve higher life expectancy it will be necessary to sustain basic health care, conduct stronger campaigns against communicable diseases, pay more attention to the prevention of non-communicable diseases like cardiovascular problems, and take measures to prevent genetic diseases. Despite recent achievements, life expectancy in I. R. Iran is still considerably lower than that of countries with high human development, and so it is extremely important that the government continue to allocate sufficient resources to the health sector.

Life expectancy among the provinces is disparate, ranging from a high of 70.5 years in Tehran to a low of 61.1 years in Sistan and Baluchestan.

Life expectancy among the provinces is disparate, ranging from a high of 70.5 years in Tehran to a low of 61.1 years in Sistan and Baluchestan (table 6.1). The gap points to the urgent need to expand health services in provinces where life expectancy is lower. Achieving further reductions in mortality in these provinces, especially among children under five, would raise life expectancy and reduce existing disparities.

Table 6.1: Life expectancy by province, 1996

Province	Life expectancy (years)
Tehran	70.5
Isfahan	70.3
Gilan	70.3
Yazd	68.5
Semnan	68.2
Qom	67.6
Fars	67.5
Mazandaran	67.4
Khuzestan	66.9
Markazi	66.7
Bushehr	66.6
East Azerbaijan	66.5
Hormozgan	65.9
Chahar-Mahal and Bakhtiari	65.9
Zanjan	65.8
Ardebil	65.7
Hamedan	65.5
Kerman	65.4
Kermanshah	65.0
West Azerbaijan	64.7
Lorestan	64.6
Khorasan	64.3
Ilam	64.0
Kohgilooye and Boyer-Ahmad	63.4
Kurdestan	61.6
Sistan-Baluchestan	61.1

The development of the national public health care system

The history of the public health care system in I. R. Iran since the revolution reveals the origins of life expectancy gains.

Because the constitution of the Islamic Republic of Iran states that good health is a basic right, the government is obliged to provide the facilities needed to make this right a reality. Society's commitment to good health starts in the family and extends to citizens' active participation in health-related activities; it also requires the establishment of health care centres.

At the macro level, health network is the foundation of the I. R. Iran's public health care system. The principle underlying it is the elimination of discrimination and the reduction of disparities among different groups, particularly people in poor and rural areas and those who are vulnerable, notably women and children.

Accordingly, the cornerstone of the government's policy on health system development was the creation and expansion of the health network. This system is completely decentralized and based on health networks

at the district level. Its organizational structure is shown in box 6.1.

Urban and Rural Health Centres and Health Houses meet the primary health care needs of people in the community they serve, referring patients as necessary to the District Hospital for in-patient or outpatient care. The District Health Centre is the headquarters of health promotion activities. Local staff receive their initial training and continuing education at Community Health Worker (Behvarz) Training Centres. The Network Management Unit plans and manages health care services in the urban and rural areas in its district. Finally, the Urban and Rural Health Centres, and the Health Houses, are the health care facilities closest to the people.

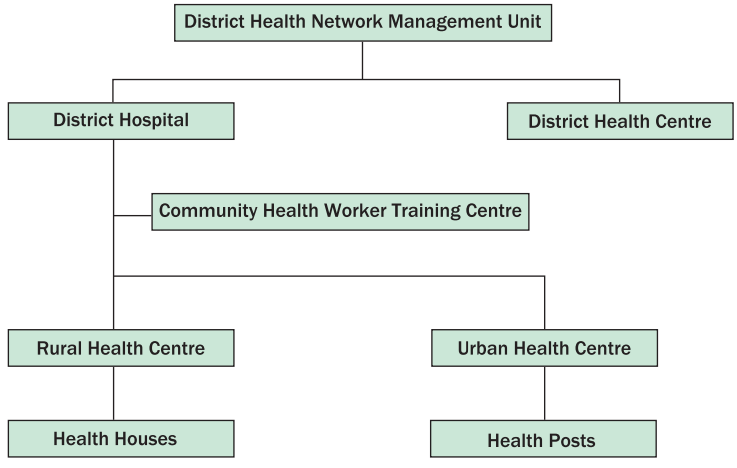
Health Houses provide primary health care in villages. Each is staffed by two trained behvarz (one male and one female) and contains the regulation equipment needed for primary care. Patients who require a higher level of medical attention are referred by the behvarz to the local Rural Health Centre which can, in turn, refer cases to the District Hospital where patients can be admitted. Specialized care is provided by university-affiliated hospitals in provincial capitals.

The creation of the health network means that 100% of the urban population and around 85% of the rural population now have access to primary health care. The parallel expansion of a universal health insurance system has been another major factor in improving people's health—as has growth in the number of doctors. In 1988, there were 49.9 doctors per 100,000 people in I. R. Iran; this had increased to 107.9 by 1997.

The Ministry of Health and Medical Education, the Food and Nutrition Council and health councils in urban and rural areas are among the leading contributors to health policy and decision-making on health care issues in I. R. Iran.

Box 6.1

Structure of the District Health Network



There is increasingly strong intersectoral cooperation in the PHC, particularly between government agencies such as the Ministry of Health and Medical Education and non-governmental institutions like urban an rural health councils, and this plays an important role in improving the quality and equitable distribution of health care services. The expansion of the "healthy towns and villages" project and the establishment of health councils in all the regions are considered to be necessary steps in the development of the national health care system.

General polices on health and medical issues are made at the national level and communicated to the provinces. Sectoral research and development committees for information dissemination in the provinces then formulate the sector's general programme. The District Health Networks are free to implement these programmes as they see fit.

Constant adjustment of the health information system is another aspect of health system development. Key components of a new strategy have been to revise the review lists in the health care system and

The creation of the health network means that 100% of the urban population and around 85% of the rural population now have access to primary health care.

Box 6.2

Goals and policies of the new health and medical information system

Goals

- Promote a culture of using health and medical information.
- Organize the dissemination of health and medical information, ensuring coordination among health information dissemination centres.
- Expand and institutionalize the activities of health information dissemination centres.
- Pave the way for I. R. Iran to join international health and medical information dissemination networks.

Policies

- Strengthen health information and health information dissemination centres.
- Upgrade the knowledge and skills of those working in the PHC.
- Developing national standards on the use of data networks and medical records centres.
- Develop the necessary computer programmes.
- Supply and/or upgrade materials and equipment needed to publish materials on health and medical issues.

The Islamic Republic of Iran welcomed the announcement by the World Health Organization of the "Health for All" objectives—but I. R. Iran will have to take a number of measures to realize them.

strengthen system management, notably by establishing training centres.

Work started in 1996 on developing methodologies for the collection of epidemiological, pharmaceutical, treatment and educational data, and regulating hospital records, and a two-year programme to build a health and medical information system was launched.

Policy-making and the health services delivery system

Health and medical policies and guidelines implemented under national development plans have played an important role in improving people's health status. The most important of these have been

- giving health promotion, sanitation and disease prevention priority over medical treatment;
- expanding the health network;
- encouraging public participation in the design and implementation of health programmes;
- pursuing population control policies;
- increasing the quantity and improving the quality of services delivered through the PHC;
- promoting applied health research;
- reforming and strengthening the health information delivery system;
- distributing health facilities and services more equitably;
- aiming at self-sufficiency in health services and medicines;
- increasing the number of people covered by the PHC by introducing a nationwide health insurance system;
- changing the pattern of consumption of medications;
- improving and strengthening the referral system to prevent unnecessary referrals;
- reviewing and reforming the country's pharmaceutical system while maintaining the generic system of prescription;
- controlling and monitoring the production, quality and use of pharmaceuticals; and
- adopting other policies under national development plans on social security, the environment, agriculture, housing, urban and rural development, general and physical education, which indirectly affect people's health status.

The Islamic Republic of Iran welcomed the announcement by the World Health Organization of the "Health for All" objectives—but I. R. Iran will have to take a number of measures to realize them, such as expanding primary health services in urban areas, particularly in the periphery of large cities; slowing rural to urban migration; monitoring the entry of nationals from neighboring countries; carefully

monitoring the health services provided by the private sector; encouraging greater cooperation between the government and non-government sectors; and making use of new technologies in the provision of health care services.

There is little doubt that health policies adopted under national development plans or as part of the national "health for all up to the year 2000" strategy have resulted in a remarkable expansion of health care services. Nonetheless, the PHC still faces a number of challenges.

One of the most important health policy issues facing I. R. Iran today is health funding and the relationship between resource allocation and service delivery.

Another important issue—and one that is becoming increasingly complex—is how to balance labour supply and demand in the health sector. Although the workforce in this sector has expanded considerably, notably over the last ten years, a lack of attention to the content and quality of educational programmes has created gaps in the provision of health care services. Adjusting the content of training for medical and para-medical personnel to meet sectoral needs and controlling the quality of that training is problematic because of the public sector's massive role in medical education. Deficiencies in physical infrastructure, hospitals and equipment, particularly in poorer areas of the country, need to be remedied, and new technologies introduced.

Improvements in the overall health status of Iranians are attributable both to the significant allocation of budgetary resources and to the establishment of the innovative health network. As the government scales down its presence in the economy, however, the private sector is expected to play a greater role in providing health care services—specialized medical services in particular.

Special health services: achievements and challenges

Reproductive health, immunization, prevention and control of endemic illnesses, and treatment of epidemic diseases were among the special services provided by the PHC in recent years.

Reproductive health

Reproductive health services have been provided within an integrated programme since 1984, but when the government adopted a birth control policy in 1990, activity in this area assumed new significance. Today, reproductive health services are delivered through the health network in both urban and rural areas. There are now 394 maternity units in operation, and some 6,300 rural midwives have been trained and deployed in rural areas to provide family planning services, prenatal care and safe childbirth. The major problem in providing services to pregnant women in rural areas is the shortage of trained local workers for assignment to rural maternal facilities.

Up to 1990, the country's family planning programme pursued three objectives: preventing pregnancy before age 18 and after age 35, spacing pregnancies by three-year intervals, and encouraging women not to have more than three children.

Up to 1990, the country's family planning programme pursued three objectives: preventing pregnancy before age 18 and after age 35, spacing pregnancies by three-year intervals, and encouraging women not to have more than three children. After the adoption of the population control policy, the programme focused on population goals as well as the provision of maternal and child health services. The success of the reproductive health programme was in large part attributable to the implementation of the special health services programme, but it did face obstacles such as difficulty providing services in densely populated neighborhoods on the perimeter of big cities, fallacious beliefs held in some sectors of the population, low literacy levels among rural women, inadequacies in marriage counseling programmes and family planning units, and the lack of participation by men in these programmes.

The Islamic Republic of Iran is proud that its blood transfusion service is entirely managed by the government and blood is provided exclusively through voluntary donations, in accordance with the standards set by the World Health Organization.

Despite these obstacles, 55.5% of married women of childbearing age in rural areas and 54.4% in urban areas are covered by the family planning programme. The general rate of fertility fell from 186 per 1,000 women in 1984 to 79.4 in 1997. Non-governmental organizations (the Iranian Family Planning Association in particular) which cooperated with the government on the family planning programme have made a very significant contribution to its success.

Immunization

I. R. Iran's immunization coverage rate in 1997 was as follows: polio, 97%; diphtheria-pertussis-tenanus, 97%; measles, 96%; BCG (tuberculosis), 99%; tetanus for pregnant women, 78%; hepatitis, 90%. National polio immunization days aimed at children under 5 years of age have been a yearly event since 1994; 7.5 million doses were administered to this age group in 1999.

In 1983, the Ministry of Health and Medical Education drew up an Expanded Programme on Immunization under which infants are vaccinated at prescribed intervals before age one, and then receive booster shots in later years to maintain their immunity levels. This programme is expected to reduce child mortality and disability from diphtheria, tetanus, whooping cough, measles, poliomyelitis, tuberculosis and hepatitis B. Another important project was the UNICEF-supported Child Survival and Development Campaign (1988–1989) which provided immunization, oral rehydration therapy, breastfeeding and growth monitoring.

In view of the remarkable success of I. R. Iran's immunization programme at the national level, three major immunization projects were launched in 1991 in cooperation with the World Health Organization and UNICEF. These projects aimed to eradicate infant tetanus through immunization of women of reproductive age, eradicate infant poliomyelitis and control measles.

Various strategies are being used to eradicate poliomyelitis, including ongoing immunization with high coverage by administering four rounds of droplets from birth to age 4.5 months and the booster vaccination between ages 4 and 6 years. Eradication of tetanus in infants has been achieved through immunization of pregnant women and women of reproductive age. The measles control programme, which is based on the injection of the measles vaccine in babies' ninth month and again in the fifteenth month, has also been remarkably successful.

Government support to producers meant that almost all the vaccines and biological materials needed from 1990 to 1996 were produced domestically. I. R. Iran is now self-sufficient in BCG, measles, diphtheria-pertussis-tetanus and poliomyelitis vaccines. All the vaccines produced inside the country are of very high quality, have World Health Organization approval, and are subject to rigorous quality control.

Blood transfusion services

The Islamic Republic of Iran is proud that its blood transfusion service is entirely managed by the government and blood is provided exclusively through voluntary donations, in accordance with the standards set by the World Health Organization.

Endemic and epidemic diseases

Control and prevention of endemic diseases and treatment of epidemic diseases are areas in which successes have also been scored. Five strategies have been applied in recent years in the fight against infectious diseases.

- Develop and strengthen the infectious diseases monitoring system.
- Implement national policies to upgrade the skills and quality of personnel involved in the prevention, control and management of infectious diseases.
- Provide the resources needed for caring for patients with infection.

- Develop national projects aimed at fighting infectious diseases.
- Preventing the incidence of infectious disease.

Through the application of these strategies, malaria, which long used to be the most widespread disease in the country, accounting for 30–40% of all deaths, has been more or less brought under control.

A UNICEF-supported programme to control acute respiratory infections in children under five years was launched in three areas in 1990 and was subsequently extended to the whole country. Its general objectives were to reduce mortality among under fives, curtail inappropriate use of antibiotics, reduce the intensity of the sequelae of these diseases, and prevent children from contracting them.

The programme for control of diarrhoeal diseases was designed to reduce the ratio of diarrhoea-related mortality to total mortality among children under five years from 17% to 12%, cut the incidence of diarrhoea from 3.5 times a year to half that figure, and reduce the incidence of malnutrition caused by diarrhoea.

The provision of these special health services has undoubtedly been effective in reducing mortality and increasing life expectancy in I. R. Iran. Further expansion of these services would improve the prospects for Iranians' health status in the future.

Agenda for reform and development of the health network

The government and the private sector need to adopt measures to tackle the issues and challenges involved in development of a dynamic and comprehensive health care system. Life expectancy in countries with high human development ranges from 75 to 80 years, indicating that there is still plenty of room for the improvement in Iranians' health status.

Progress in human development requires further development of the health network, particularly with respect to the provision of basic health services aimed at reducing mortality. Special emphasis has to be given to reducing mortality among children under five years old and mothers, cutting the mortality rate among children under 5 attributable to diarrhoea and acute respiratory diseases, and reducing deaths caused by cardiovascular disease and cancer. At the same time, qualitative improvements in health care services and universal health care coverage are also crucial to increasing life expectancy. A package of well-defined and effective measures is needed to achieve this. The most urgent of these measures are:

- Maintain the government's role in providing health care services for all as well as subsidy programmes in this area.
- Strenghten the PHC in provinces with sub-optimal coverage.
- Improve the quality of health services and client satisfaction.
- Expand and strengthen the medical information dissemination system in addition to research activities aimed at developing the health care system.
- Expand the role of the private sector in policy-making and health programme design.
- Increase cooperation between government organizations and private sector and public agencies involved in health-related activities.
- Train health specialists according to need and prevent unemployment in this sector.
- Eliminate management shortcomings in the PHC.
- Pay special attention to the prevention of depression and other psychological disorders.
- Take steps towards achieving self-sufficiency in the supply of basic and strategic drugs.
- Use computer-based systems to register and report cases being monitored in laboratories.
- Establish a comprehensive system of quality control for all of the country's laboratories.

Life expectancy in countries with high human development ranges from 75 to 80 years, indicating that there is still plenty of room for the improvement in Iranians' health status.

- Address deficiencies in the PHC referral system.
- Ensure that all pharmaceuticals producers meet national and international quality standards.
- Exercise more rigorous control over the production, distribution and consumption of medicines and health-related goods.
- Make increased use of new technologies in the PHC.
- Strengthen medical relief units that deal with emergencies, and take measures to reduce casualties of accidents and natural disasters.
- Establish realistic fees for medical services provided.
- Provide the equipment and staff necessary to establish outpatient services in all of the country's medical centres.
- Ensure that all women have access to safe childbirth.
- Give local councils more discretion in the allocation of social expenditures to health priorities.
- Expand the role of non-governmental organizations in the country's health system.

A comparison between dietary patterns in urban and rural areas shows that bread consumption in rural areas is about 40% higher than in urban areas, but rural people consume considerably less meat, fruits, vegetables and eggs than city dwellers.

Nutritional safety

A safe diet is a leading factor in good health. An examination of households' and individuals' dietary patterns illustrates the connection between food security and health and reveals their nutritional status in both quantitative and qualitative terms.

From 1991 to 1995, a typical Iranian consumed 128 kilograms of bread, 44.2 kilograms of rice, 7.7 kilogram of cereals, 25.5 kilograms of sugar, 171 kilograms of vegetables and fruits, 41 kilograms of various kinds of meat and eggs, 61 litres of milk and dairy products, and 14.2 kilograms of fats.

This diet amounts to 2,665 kilocalories of energy, 73.8 grams of protein, 616 milligrams of calcium, 31.4 milligrams of iron, 603 micrograms of vitamin A, one milligram of riboflavin, and 90.4 milligrams of vitamin C—120% of the recommended dietary allowance. The only deficiencies are in riboflavin (75% of the body's requirement) and, particularly in rural areas where the deficiency is very severe, vitamin A. Otherwise, Iranians are getting the nutrition they need, and more.

Judging by this breakdown, the main feature of Iranians' dietary habits is the consumption of large amounts of grains, particularly bread, which typically supply more than half their energy needs. A comparison between dietary patterns in urban and rural areas shows that bread consumption in rural areas is about 40% higher than in urban areas, but consumption of rice, cereals, dairy products and fats is about the same. On the other hand, rural people consume considerably less meat, fruits, vegetables and eggs than city dwellers.

Table 6.2: Average annual consumption of food items and a proposal for a desirable diet (kilograms per capita)

Food item	Current	Desirable
Total grains	176.7	155.1
Bread	128.1	100.4
Rice	44.2	43.8
Legumes	7.7	11
Vegetables	101.5	127.8
Fruits	69.7	91.2
Meat and eggs	40.5	45.5
Dairy products	61	87.6
Fats	14.2	11
Sugar	25.2	18.2

Source: Master project for the study of food consumption, 1991–1995.

Table 6.2 compares the current diet with a desirable diet that not only contains the nutritious substances the body needs but is also perfectly compatible with Iranians'

dietary habits. The desirable diet would include more vegetables and fruits of various kinds, dairy products, and meat and eggs.

Food security

According to the definition given by the International Conference on Nutrition held in 1992, food security is "access for all at all times to sufficient food needed for a healthy and active life." From this perspective, food security requires not only a sufficient supply of food, but also its equitable distribution. Another aspect of food security is its sustainability, which requires the establishment of a sustainable system of food production and distribution. Defined in this comprehensive way, food security can be undermined by fluctuations in agricultural production or shortfalls in food supplies caused by natural phenomena, fluctuations in market prices, inflation and unemployment, epidemic diseases, famine and war. This highlights the need for contingency planning and forecasting so that any emergency affecting the country's food system can be handled. It also points to the need for measures supporting food production and ensuring equitable food distribution.

The Islamic Republic of Iran considers food security to be one of its basic priorities; indeed, the government is obligated under the constitution, which emphasizes the need to provide food for all, to take the measures necessary to ensure it. The constitution also refers to many of the key prerequisites for food security, such as agricultural development, the development of science and technology, environmental protection, poverty eradication, and protection of the rights of men and women. The high priority accorded to food security in the general policies of the Third Development Plan (2000–2004) reflects its importance in I. R. Iran.

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The implications of an all-embracing approach to food security and its cultural, social, political and economic prerequisites are too complex to describe here. However, the government of the Islamic Republic of Iran has already adopted such an approach and, accordingly, has taken remarkable measures in the last 20 years towards achieving food security.

Table 6.3: Production of basic agricultural and horticultural items, 1988–1997 (thousands of tonnes)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Wheat	7,265	6,010	8,012	8,793	10,179	10,732	10,870	11,227	10,015	10,045
Paddy	1,419	1,854	1,981	2,357	2,364	2,281	2,259	2,301	2,685	2,350
Potatoes	1,443	2,033	2,516	2,612	2,709	3,222	3,185	3,074	3,140	3,284
Sugar beet	3,454	3,535	3,641	5,000	6,005	5,408	5,295	5,521	3,686	4,754
Sugar cane	1,574	1,557	1,538	1,374	1,856	1,868	1,857	1,859	1,833	2,059
Oil seeds	299	236	145	137	267	316	288	234	210	267
Legumes	299	264	324	577	674	643	627	676	704	546
Citrus fruits	1,988	2,148	2,306	2,406	3,071	2,757	3,051	3,051	3,168	3,484
Apples	1,351	1,245	1,524	1,364	1,463	1,624	2,008	1,990	1,925	1,998
Dates	559	538	516	578	578	716	774	780	855	877
Grapes	1,742	1,320	1,424	1,624	1,508	1,835	1,893	1,864	1,978	2,125
Pistachios	126	130	163	182	202	299	195	239	260	112

Source: Department of Statistics, Ministry of Agriculture.

A glance at the trend of per capita food production shows that despite the considerable growth in the country's population, the agriculture sector was able to achieve a remarkable increase in output

To get a picture of I. R. Iran's food security status at the macro level, it is useful to understand its nutritional needs, given its population and dietary patterns, and the scale of its food production and supply. Grains, cereals, vegetables, various kinds of meat, eggs, dairy products, fats and sugar are among the most important dietary items needed for a healthy and active life. A review of trends in national and per capita production of these items indicates that I. R. Iran is approaching self-sufficiency. It also reveals patterns of food supply and consumption in terms of major categories of food products, the energy they provide, and the macronutrients they contain.

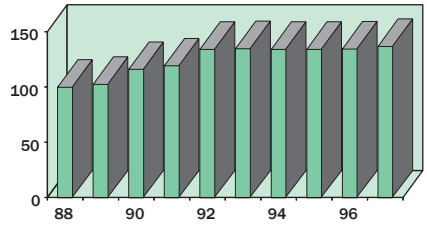
Trend of food production

In view of the area of arable land in I. R. Iran, the country's climatic diversity and the scale of rural employment generated by agricultural activities, the agriculture sector, as the sector responsible for meeting people's food requirements, enjoys an important position in the national economy. The past three decades saw a threefold increase in the country's overall agricultural output, in absolute terms, with steady growth in the production of most basic agricultural and horticultural items (table 6.3). This was due largely to an increase in the amount of land under cultivation, the expansion of water resources, improved productivity, increased use of modern technologies, and wider use of modern agricultural inputs such as fertilizers, high-yield seeds and machinery.

Output of animal products—especially white meat, honey and eggs—increased remarkably from 1988 to 1997 (table 6.4).

A glance at the trend of per capita food production shows that despite the considerable growth in the country's population, the agriculture sector was able to achieve a remarkable increase in output, reaching 137 on the per capita food production index from 100 in 1988, the base year (figure 6.3).

Figure 6.3: Per capita food production index, 1988–1997 (1988 = 100)



Source: Institute for Research, Planning and Economics of Agriculture (using definitions given in the 1998 Human Development Report)

The per capita supply of principal foodstuffs illustrates the significance of trends in per capita supply of agricultural products. Changes in the per capita supply of grains

Table 6.4: Production of animal products, 1988–1997 (thousands of tonnes)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Red meat	525	560	570	595	625	643	658	670	685	720
White meat	300	330	350	420	520	560	613	637	650	712
Eggs	660	250	315	340	390	450	516	467	520	470
Milk	3,440	3,827	3,929	4,035	4,145	4,281	4,450	4,540	4,705	4,895
Honey	13	14	15	17	18	19	21	23	22	24
Fish	253	258	258	358	355	369	351	382	400	385

Source: Ministry of Construction Jihad.

Table 6.5: International comparison of the share of macronutrients in energy supply (percent)

	World	Developed countries	Developing countries	Iran	WHO recommendation
Proteins	10.6	12.3	9.8	10.4	(10 – 12)
Fats	22.4	32.8	18.3	19.3	(15 –35)
Carbohydrates	67.0	54.9	71.9	70.3	(55 –75)

Source: Institute for Research, Planning and Economics of Agriculture

are an indicator of food security, particularly in developing countries. Wheat and rice are the principal grains consumed in I. R. Iran. Because the country is partially reliant on imported grains, per capita supply fluctuated somewhat from 1988 to 1997, but on the whole it had an upward trend, rising from 179.7 kilograms in 1988 to 220.9 kilograms in 1997—an average increase of about 28%. The per capita supply of wheat flour, which provides the population about half its daily energy supply, increased from 150.3 to 159 kilograms in the same period, while the increase for rice—the second most important foodstuff—was from 30.1 kilograms in 1988 to 37.8 kilograms in 1997.

From 1988 to 1996, the per capita supply of potatoes rose from 24.6 to 33 kilograms, while that of sugar increased from 19.5 to 26.6 kilograms. The per capita supply of cereals, which have a significant nutritional value, also went up, from 4.5 kilograms in 1988 to over 9.30 kilograms in 1996.

The per capita supply of vegetables and fruits generally rose, from 186.3 to 228 kilograms from 1988 to 1996. In the same period, per capita supply of all kinds of meats as well as eggs went from 29.4 to 38.6 kilograms, while there was a small decline in the per capita supply of milk, from 75.1 to 73.6 kilograms. Meanwhile, per capita supply of fats of various kinds rose from11.4 to 14.2 kilograms.

The trend of per capita supply of agricultural products shows that national production was sufficient to meet the nutritional needs of the population. However, when assessing the qualitative aspects of food security at the national level, it is important to consider the composition of the food supply in terms of food items and macronutrients.

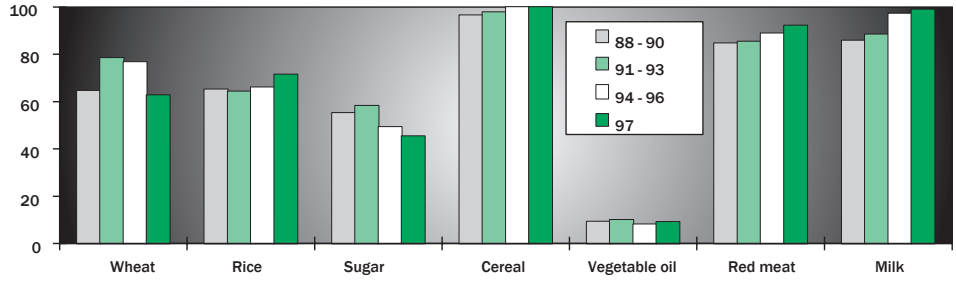
Food supply: patterns and composition

In every country, the pattern of food supply is closely related to the pattern of consumption. Factors such as climate, geography, culture, and social and economic conditions influence this pattern. The key features of Iran's food consumption pattern are high consumption of grains, particularly bread, moderate consumption of vegetables and fruits, and relatively low consumption of dairy products and meat. On the whole, this pattern is similar to most developing countries'.

It is possible to evaluate the quality of the food supply pattern by measuring the energy supplied through food intake and the share of different food groups and macronutrients in it, and comparing these with recommended dietary allowances. From 1988 to 1997, the per capita supply of energy in I. R. Iran was generally over 3,000 calories, exceeding the required amount at the macro level. The average supply of proteins and fats in this period rose, respectively, 2.26% and 3.53% annually. This rising trend in the consumption of fats and oils—steeper than for protein—may augur a higher incidence of chronic nutrition-related diseases in future. As table

The key features of Iran's food consumption pattern are high consumption of grains, particularly bread, moderate consumption of vegetables and fruits, and relatively low consumption of dairy products and meat.

Figure 6.4: Self-sufficient coefficient in basic agricultural products (1988–1997)



Source: Institute for Research, Planning and Economics of Agriculture

Acceleration in this upward trend in the self-sufficiency coefficients for basic agricultural products would strengthen the foundations of the country's food security.

6.5 shows, the macronutritional composition of Iranians' energy supply is similar to that in developing countries. Nonetheless, Iranians' energy needs are being supplied from proteins, fats and carbohydrates in the proportions recommended by WHO.

Trend of self-sufficiency in agricultural products

The extent to which the country's food requirements are supplied domestically is an important yardstick for measuring its food security at the macro level. The trend of the self-sufficiency coefficient in basic agricultural products from 1988 to 1997 is shown in figure 6.4. The self-sufficiency coefficient for wheat from 1991 to 1993 registered an increase compared with 1988–1990, but, because of a spate of successive droughts, it posted a decline in the following three years, finally dropping to 62.8% in 1997. The self-sufficiency coefficient for rice hovered around an average of 65% from 1988 to 1996, rising to 70.3% in 1997. From 1988 to 1990, the coefficient for sugar averaged 55.2%, rising to 58.3% in the following three-year period but dropping again to 45.6% in 1997.

Cereals have had an invariably upward trend, and have completely met domestic demand since 1997. Since a mere 8–10% of the country's oil seed requirements could be supplied domestically, it is important to identify the best conditions for cultivating this product and the most effective methods of increasing output per unit. Great importance has been attached to increasing self-sufficiency in red meat. In this connection; 92.2% of demand was met domestically in 1997. The self-sufficiency coefficient for milk also rose, to 99%. As for vegetables, summer crops and horticultural products, output exceeded domestic demand, leaving a sizable surplus for export. Acceleration in this upward trend in the self-sufficiency coefficients for basic agricultural products would strengthen the foundations of the country's food security.

Achievements in the area of food security

Improvements in foodstuffs production and self-sufficiency coefficients have been propelled by the implementation of national development plans. But before describing the role of the plans, it is useful to set food security in the context of the country's social and economic priorities. Prior to the Islamic Revolution, food policies were based on the supply of cheap food, particularly for city dwellers, and were implemented by preventing increases in the price of agricultural products, importing foodstuffs from abroad, and government intervention in the food market. These policies naturally reduced farmers' motivation to increase their output, restricted growth in the agriculture sector, exacerbated rural poverty, encouraged the rural population to migrate to cities, and caused food imports to rise sharply.

With the victory of the Islamic Revolution, self-sufficiency in agricultural production and sustainable food security were put at the top of the government's agenda. This change of policy, stipulated by the constitution, aimed at eliminating poverty and supplying sufficient quantities of food to meet people's needs.

The Second Development Plan focused on

- increasing agricultural production;
- reducing imports of agricultural products;
- improving the quality of the people's nutrition;
- monitoring catering and food processing facilities;
- improving the nutrition of pregnant women and nursing mothers;
- providing protection to farmers, with a view to increasing their income;
- enhancing the agriculture sector's value added, while emphasizing research and development and labour training; and
- strengthening social security in the sector.

All these policies were designed to realize the strategic goal of achieving food security. Some of the other policies adopted under the Second Development Plan, such as environmental protection and population control, indirectly supported this goal.

Successes scored in food production under the First and Second Development Plans have played an important role in improving the country's food security. Among other things, total farm and horticultural production rose from 37 million tonnes in 1988 to 58.5 million tonnes in 1997, with total farm, horticultural and animal products meeting 66–80% of the people's energy requirements. Total energy from food also increased, from 2,612 kilocalories in 1988 to 3,415 kilocalories in 1997. Table 6.6 clearly shows how the Second Development Plan achieved almost all its targets for the production of basic food items in its first four years.

.A qualitative evaluation of the food supply pattern at the macro level of course points to the large share of grains and the small

Table 6.6: Projected and actual performance and targets achieved in the production of basic agricultural and animal products under the Second Development Plan, 1994–1999 (thousands of tonnes)

Item		1994	1995	1996	1997	1998	1999	Target achievement rate, 1995–1998
Wheat	Actual	10,870	11,227	10,015	10,045	11,955		87%
	Projection		11,382	11,996	12,684	13,460	14,315	
Rice	Actual	2,259	2,301	2,685	2,350	2,770		94%
	projection		2,438	2,596	2,772	2,952	3,102	
Potatoes	Actual	3,185	3,074	3,140	3,284	3,430		97%
	projection		3,186	3,276	3,368	3,463	3,560	
Red meat	Actual	685	670	685	720	747		102%
	projection		670	685	700	715	735	
Chicken	Actual	613	637	650	712	699		100%
	Projection		620	650	685	730	785	
Milk	Actual	4,450	4,540	4,705	4,895	5,105		100%
	Projection		4,540	4,705	4,895	5,105	5,560	

Source: Department of Statistics, Ministry of Agriculture; statistical manuals, Ministry of Construction Jihad, and the General outlines of the Second Development Plan;

share of animal-based foodstuffs in total food energy—and consequently to the need to diversify the pattern of food consumption so that more energy is derived from meat and dairy products.

I. R. Iran's per capita food production increased by 37% from 1988 to 1997 and its self-sufficiency coefficient for agricultural products also rose steeply.

These achievements augur well for the country's food security at the macro level. Challenges remain, however, at the household and individual levels, and they require serious attention.

Food wastage is a chronic problem that needs to be seriously addressed in the context of food security.

Food security: challenges and opportunities

Food security is a function of natural, political, economic, social and cultural variables, and is affected by a host of factors such as agricultural production policy, the food distribution system, the natural resources available, prevailing patterns of consumption and nutrition, the state of employment, income distribution, foreign trade policy, and, finally, people's dietary culture.

Although food production has been on a generally upward trend in the past several years, it could face serious problems in the future, not least due to a shortage of water. Mostly arid and semi-arid, Iran has a chronic shortage of rainfall, resulting in scarce water resources and, consequently, a limited ability to put its low-yield dry farming lands to optimum use. A shortage of water reservoirs and dams means that a much of its scant rainfall is wasted—while the little rain that there is causes flash floods and soil degradation. All these factors restrict the scope of agricultural production. To make matters worse, rapid population growth translates into a commensurate expansion in the demand for water for domestic use, further limiting the agriculture sector's share in and access to water resources.

Iranians' consumption patterns and dietary health pose other food security challenges. Judging by the current trends, there are quantitative (energy intake) and qualitative (micronutrients supply) deficiencies that require special attention.

Demographic change could increasingly affect I. R. Iran's food requirements. Although I. R. Iran has succeeded in slowing down its population growth rate in recent years, the youth of the majority of Iranians means that the population is forecast to grow considerably in the coming years. The challenge here will be to produce enough food and distribute it equitably among a burgeoning population.

Food wastage is a chronic problem that needs to be seriously addressed in the context of food security. There is solid evidence to show that wastage of wheat, rice, fruits and dry fruits, citrus fruits, and potatoes amounts to 10%, 5%, 25%, 20% and about 25% of total annual production respectively, representing a substantial drain on the country's food resources.

Nonetheless, I. R. Iran has a wide array of possibilities and opportunities for achieving sustainable food security. One of its key assets is the availability of fertile land: of a total area of 165 million hectares, about 37 million (22.4%) hectares is suitable for agricultural production—and currently, only 18.6 million hectares is under cultivation, at 50–60% productivity. In other words, the equivalent of half the arable land is left idle, with another quarter lying fallow every year. Obviously, bringing this sizable amount of land under cultivation would provide an opportunity to expand food production by a large margin.

Climatic diversity is one of I. R. Iran's special advantages. In addition to enormous capacity in terms of fertile land, it possesses the potential for all-year-round production of both subtropical and subarctic crops—and the diversity of its flora vastly increases its ability to produce a wide variety of agricultural products.

I. R. Iran, with its two sea coasts, also has the potential for catching, processing and exporting fish and marine products—yet another opportunity for it to meet its food security needs.

Such natural opportunities, once coupled with effective management and proper policies, will contribute to the achievement of sustainable food security and play an important role in ensuring a higher level of public health and more productive employment, consequently leading to higher human development.

Actions and strategies for food security

One of the Third Development Plan's key objectives is food security, which it includes among its general policies. Developing the agriculture sector, establishing an all-embracing social security system, and expanding employment are prerequisites for the realization of this objective.

In addition to its general policy approach, the Third Development Plan envisages practical measures to achieve food security, the most important of which are:

- Continue to provide carefully targeted subsidies on basic goods and foodstuffs.
- Reform the guaranteed purchase system for basic agricultural products.
- Prepare for the application of food safety standards aimed at protecting food from contamination and other problems at all stages of production, processing and distribution.
- Identify a suitable mechanism for policy and decision making on issues relating to food security and nutrition, targeting subsidies appropriately, and establishing the necessary coordination among different sectors involved in food supply.
- Plan for reducing food wastage, and expand the food packaging and processing industries.
- Formulate and implement effective marketing polices at the national and provincial levels.
- Set up a nutritional monitoring system.
- Strengthen the role of women in ensuring nutritional health and safety in the family.

These measures are aimed at increasing the supply of food and its equitable distribution by protecting both consumers and producers. The findings of evaluations and surveys carried out to date on food security and the threats to its sustainability indicate that new initiatives are needed for the achievement of sustainable food security.

While domestic food production satisfies the needs of the country's entire population, water shortage and population growth mean that the adoption of effective strategies is imperative if sustainable food security is to be achieved in the future. Eliminating water shortages and putting agricultural lands currently lying idle to optimum use are two main strategies. At the same time, food supply and food consumption at the household level point to a considerable loss in energy between per capita energy supply (up to 3,000 kilocalories) and per capita consumption (2,700 kilocalories).

Looking at the food supply pattern, the large share of grains and the relatively small share of animal-based foods in the energy supply makes further diversification towards more meat, eggs and dairy products a necessity.

Distribution and consumption systems at the household level also present important challenges. At the household level, average consumption of food by Iranian families is sufficient to provide more than the required energy and micronutrients (except for riboflavin). However, the composition of dietary intake points to the need for more diversity and increased use of all kinds of vegetables and fruits as well as a variety of meat and dairy products.

New initiatives are needed to change food consumption patterns in urban and rural areas. During the past ten years, urban

The composition of dietary intake points to the need for more diversity and increased use of all kinds of vegetables and fruits as well as a variety of meat and dairy products.

dietary patterns have moved towards the consumption of more grains, sugar and fats and lower consumption of different kinds of meat, dairy products and vegetables, while the consumption pattern in rural areas has shifted towards less bread and meat. In urban areas, higher consumption of fats and starch could lead to micronutrient deficiencies and a less nutritious diet, resulting in an increased prevalence of obesity and the chronic illnesses associated with it; in larger cities, this dietary change could also raise mortality from diabetes and cardiovascular disease.

Fine-tuning the policy of allocating subsidies to food products to redress rural–urban food consumption imbalances and, especially, to eradicate malnutrition among children, could help improve food security in low-income households. Meanwhile, existing subsidies on basic food items such as bread, rice, sugar, cooking oil and meat must be maintained.

For these strategies to have the expected impact on the supply and consumption of food at both the household and national levels, the following measures are of great importance:

- Construct and complete irrigation networks fed by dams in order to prevent water wastage and use this water to make farm land more productive.
- Control household water consumption, notably by separating potable water from water used for other purposes.
- Develop the agriculture sector by bringing fertile lands currently lying idle under cultivation.
- Provide financial facilities to farmers and other job seekers to encourage expansion of the amount of land being used to cultivate basic food products.
- Allocate some food subsidies in such a way that they correct micronutrient deficiencies, particularly emphasizing the needs of low-income groups.
- Increase the share of all kinds of vegetables, dairy products and meat in the country's food supply pattern.
- Prevent food wastage and make efforts towards changing people's dietary culture so that consumption patterns become more balanced, while dissuading excessive consumption.

Among the strategies and measures aimed at achieving food security, those targeting the reduction of income poverty must take priority.

Among the strategies and measures aimed at achieving food security, those targeting the reduction of income poverty must take priority. As shown by surveys conducted in I. R. Iran and other countries, people who are unable to buy food are usually the worst hit by food poverty. Low consumption of nutritious foodstuffs, clearly traceable to the low purchasing power of some social groups, as well as a lack of nutrition

Box 6.3

Iran's approach to the World Food Conference

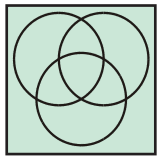
As one of the participants of the World Food Conference, and inspired by its constitution, the Islamic Republic of Iran has made great efforts to improve its food security.

The constitution stresses self-sufficiency in science and technology, industries, and agriculture to meet citizens' basic needs, particularly for food. To this end, it stipulates that efforts should be made towards the elimination of all kinds of deprivation, especially in nutrition, housing, employment and health. This emphasis is fully consistent with the recommendations made by the World Food Conference for the achievement of sustainable food security.

I. R. Iran's national development plans have focused on the development of mechanisms and executive measures to realize the qualitative and quantitative goals in the constitution, which are generally in line with the commitments of the World Food Conference. These commitments, and the measures designed to carry them through, are given even more emphasis in the Third Development Plan as it aims for the achievement of greater social justice as well as sustainable food security.

awareness, also undermines food security. From this viewpoint, the prospects for food security are closely linked with sustainable economic growth and equitable income distribution—much in the same way that human development is also inextricably connected to economic growth.

Chapter 7



Women

Introduction

Women's role in development has been widely recognized since the early 1970s. Empowering women to participate in various aspects of development and promoting their social, political and cultural status is now a global priority.

Available statistical data and considerable research point to the duality of the role and status of women in I. R. Iran today. Findings relating to health, education and social participation—and women's influential presence in the political arena—show Iranian women to be in a far better position than their counterparts in most developing, Islamic and neighbouring countries. In reality, however, Iranian women still have a long way to go to gain their rightful place in society. The cause of this ambiguity in women's affairs in I. R. Iran is that insufficient attention has been paid to gender issues, particularly in the First Development Plan but also in the Second Development Plan. This deficiency has been addressed to a considerable degree in the Third Development Plan.

This chapter, drawing on human development indicators, attempts to identify as far as possible the impact of each of the factors affecting Iranian women in terms of the role they play in society, their achievements, and the privileges and restrictions they face in terms of material welfare and spiritual blessings.

Institutional mechanisms for women's advancement in I. R. Iran

Today, almost all organizations and executive agencies in I. R. Iran have established special units for promoting the status of women. Some of these were set up after the victory of the Islamic Revolution, but most have been established in recent years. Different government bodies have also developed special mechanisms for planning, supporting and monitoring the advancement of women (figure 7.1).

Development of institutional mechanisms

There are two distinct sets of institutional mechanisms: special institutions, and organizations linked to the three branches of government (the judiciary, the legislature and the executive).

The special institutions are the Special Committee for Women and Youth (affiliated to the Expediency Discernment Council), the Cultural and Social Council of Women, the Women's Section of the Islamic Propagation Organization, the Advisory Section on Women's Affairs of the Islamic Republic of Iran Broadcasting Organization (IRIB), and the Section for the Mobilization of Women in the Islamic Revolutionary Guard Corps.

The Special Committee for Women and Youth, which was created in 1997, formulates national policies on women and youth, in consultation with experts, and submits them to the Expediency Discernment Council for consideration. The Cultural and Social Council of Women was established in 1987 as a specialized council affiliated to

Today, almost all organizations and executive agencies in I. R. Iran have established special units for promoting the status of women.

the High Council of the Cultural Revolution to coordinate the activities of the various bodies involved in women's cultural affairs. The Women's Section of the Islamic Propagation Organization deals with questions concerning women in Islamic jurisprudence and offers new Islamic ideas in this regard.

Institutional mechanisms for the advancement of women in all three branches of government have expanded considerably in recent years, notably those connected with the executive; these include the Centre for Women's Participation (affiliated with the Office of the President), commissions on women's affairs in the Ministry of the Interior, and special women's affairs units in ministries and government organizations.

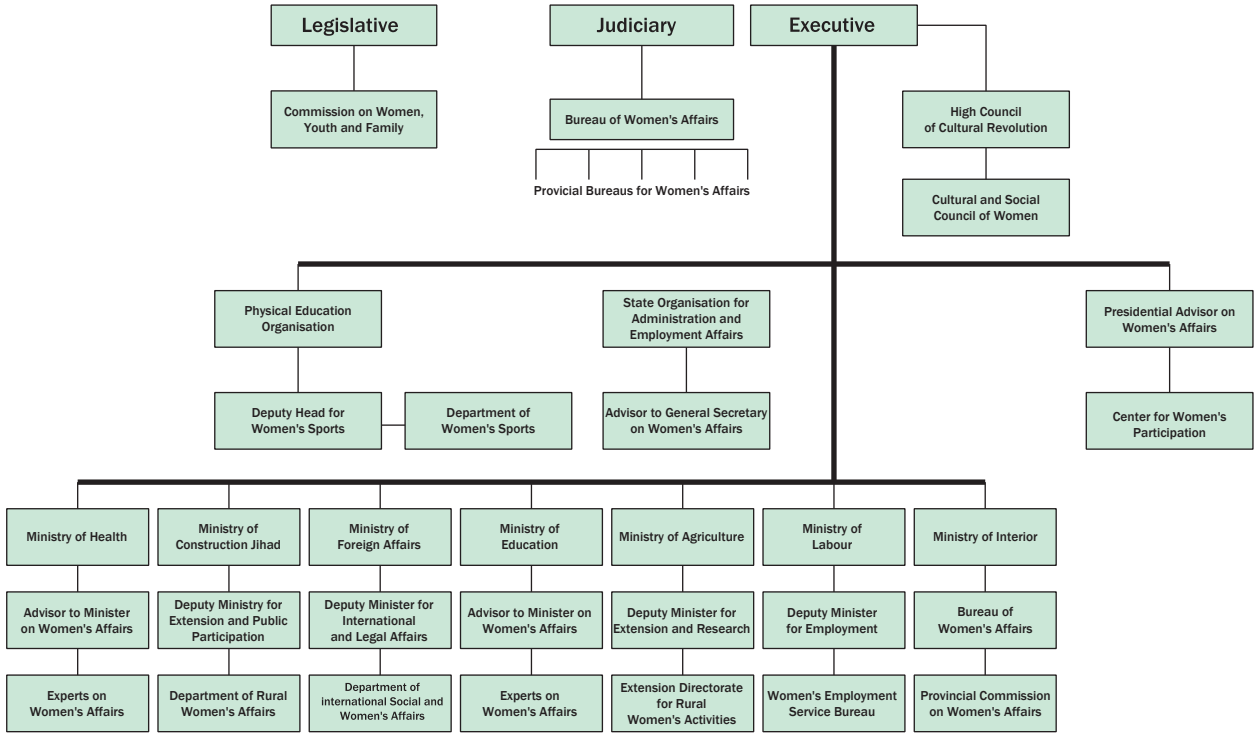
Institutional mechanisms for the advancement of women in all three branches of government have expanded considerably in recent years.

The Centre for Women's Participation replaced the Bureau of Women's Affairs by presidential decree in 1997. It focuses on increasing women's participation in various areas through conducting expert studies and making recommendations to government, the Islamic Consultative Assembly (majlis or parliament) and the Cultural and Social Council of Women on drafting and enacting appropriate laws and regulations.

Provincial commissions for women's affairs within the Ministry of the Interior began operating in 1990 under the Social Council of the Provinces. These commissions aim to create an environment conducive to women's advancement, identify problems specific to women, and promote women's social and political participation. In 1998, 14 posts on these commissions were allocated to women at Ministry of the Interior headquarters in Tehran and three were given to women in each of the provinces.

Special women's units have also been set up in other ministries and government

Figure 7.1: Structure of women's affairs organizations in the three branches of government



Source: Centre for Women's Participation, Office of the President.

organizations, the most important of which are listed in box 7.1.

The Islamic Consultative Assembly has also formed a special parliamentary commission for family, women and youth affairs, and a bureau for women's affairs has been established in its research centre. These two bodies play an important role in I. R. Iran's decision-making process through their deliberations on women's issues and their presentation of policy recommendations for women's advancement.

The women's affairs units instituted under the head of the judiciary were upgraded to general directorates in 1997. Their main role is to examine legal issues relating to women, identify women's legal problems and suggest appropriate means of resolving them.

The establishment of all these units is an important step towards expanding the institutional mechanisms for dealing with women's issues.

Box 7.1

Leading women's units in ministries and government organizations

Unit	Ministry or organization	Mandate
Women's Employment Services Bureau	Ministry of Labour	To eliminate obstacles to women's employment.
Headquarters for Women's Affairs	Ministry of Education	To campaign against undesirable gender attitudes.
Extension Directorate for Rural Women's Activities	Ministry of Agriculture	To protect and encourage rural women's participation in agriculture.
Department of Rural Women's Affairs	Ministry of Construction Jihad	To create and expand rural women's cultural and extension organizations and to focus public attention on women's role in development.
Advisory Unit on Women's Affairs	Ministry of Health and Medical Education	To improve women's health and to collect and analyze information on women's health promotion.
Department of International Social and Women's Affairs	Ministry of Foreign Affairs	To pursue issues relating to women in international forums.
Deputy Head for Women's Sports and the Department of Women's Sports	Physical Education Organization	To extend women's access to sports and to promote women's sport nationally.
Advisory Unit on Women's Affairs	State Organization for Administrative and Employment Affairs	To advise the General Secretary of on the promotion of women's employment and the improvement of women's working conditions.

The Iranian constitution provides the basis for defending women's rights and eliminating discrimination against them by setting out the role of women in an Islamic society.

Women's legal achievements

Some of the most significant legal achievements for women have been the adoption of laws and regulations which defend women's rights and pave the way for their participation in decision-making processes, and laws aimed at preventing violence against them. Increased public awareness of women's burgeoning role in society, promotion of women's legal knowledge, and Iran's accession to international conventions relating to women are other noteworthy achievements.

The Iranian constitution provides the basis for defending women's rights and eliminating discrimination against them by setting out the role of women in an Islamic society. This fundamental law states that the family is the basic social unit and the primary focus for human growth and spiritual progress. The cornerstone of spouses' growth and development as they found their new family is shared opinions and aspirations, which it is one of the duties of the Islamic system of government to nurture.

From this point of view, the family is regarded as a unit equipped and willing to assume the heavy responsibility of bringing up individuals who are imbued with and inspired by the great teachings of Islam, rather than machines at the service of consumerism.

Article 3(4) of the constitution requires the government to do all in its power to ensure the rights of all individuals—men and women alike—to provide legal protection for all and guarantee their equality before the law. In addition, under Article 21, the government is obliged to take the following actions to protect women's rights.

- Create favourable conditions for women to develop and realize their potential and reaffirm their material and spiritual rights.
- Provide support to mothers, particularly during pregnancy and for the care of children.
- Establish special courts to preserve the dignity of the family and to ensure its survival.
- Set up specific insurance schemes for widows, elderly women and women without means of support.
- To protect the children's best interests, give qualified mothers custody of their children when no other legal guardian, as defined in Shari'a law, exists.

As these provisions illustrate, the constitution stresses the equality of men and women while requiring the observance of Islamic tenets and principles. Steps have already been taken towards achieving the qualitative objectives set out in the constitution regarding the revision, on the basis of Islamic criteria, of existing laws to guarantee the truly human position of women.

Certain laws and regulations enacted before the revolution that were in keeping with Islamic principles were retained and enforced as before. These are: the Civil Law (enacted in 1928) and its later addenda; the Law of Torts (1960); the Non-litigious Jurisdiction Act (1940); the Social Security Act (1975); the Marriage Abnegation Act (1932); and the State Civil Service Act and its bylaw on leave of absence (1967).

A series of laws and regulations pertaining to women were enacted after 1979, the most important of which are listed in box 7.2. These laws are aimed at protecting the social, cultural and economic rights of women and preventing violence against them by stipulating Islamic punishment.

Women's participation in decision-making

Women's participation in the decision-making process has expanded considerably since the revolution. Women from all walks of life participated in massive numbers in the revolution itself, and since then have been active in all types of elections and professional groups and associations. On another level, women are represented in

Box 7.2

Principal laws and regulations enacted after 1979 to protect women's rights

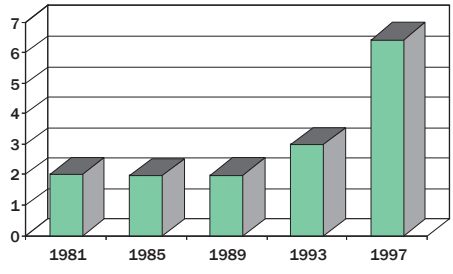
- Law for the establishment of the special civil tribunal (1979)
- Law transferring custody of minors and incompetent children to mothers (1981)
- Women's half-time service act (1983)
- Regulations enforcing note 2 of the law permitting the payment of pensions to the heirs of government employees (1959) and the establishment of lifelong pensions for female children and grandchildren (1985)
- Decree concerning the duties of the executive agencies regarding the enforcement of the government's birth control policy (1985)
- Law permitting women to take early retirement with 20 years of service and a minimum age of 45 (1988/89 and 1990/91)
- Law regarding security for women and children without any means of support (1992)
- Equality of the sexes for all types of punishment and restrictive measures; and the mitigation of penalties, the suspension of punishment and conditional freedom from prison in accordance with the Islamic punishment act (1991). This law, while observing the principle of equality between the sexes, provides for the mitigation of punishment in certain cases for pregnant and breast-feeding women.
- Regulations relating to medical and economic support for the families of prisoners of war and the establishment of pensions for them in the event of the prisoner's death while in captivity (1989)
- Allocation of quotas for the admission of women medical residents (1993)
- Family Planning and Population Control Act (1993)
- Law for the promotion of breast-feeding and protection of breast-feeding mothers (1995)
- Rural Midwife Training Act (1995)
- Executive regulations for the implementation of the social security law for women and children without any means of support (1995)
- Amendment to the act relating to the conditions for selecting and appointing judges (1995), giving the head of the judiciary the authority to appoint women with the qualifications approved in 1982 as advisers to the Court of Administrative Justice and the Special Civil Law Tribunals. They can also be appointed as examining magistrates, as consultants to bureaus of legal studies and bureaus that draft laws on the administration of justice, and to judge-level positions in legal departments and departments responsible for minors and other units with judge-level posts.
- Decree on executive measures for providing support to women on their release from prison (1995)
- Law decreeing that a number of the tribunals set up under Article 21 of the constitution (relating to the creation of qualified courts) should be allocated to the protection of the dignity and survival of the family (1997)
- Law providing for the establishment of guidance and relief units attached to the Special Civil Tribunals (1991)
- Law granting family allowances to divorced or widowed women or women whose husbands are occupationally disabled (the Coordinated System of Payments to Government Employees Act, article 9, paragraph 2, 1991)
- Amendment to divorce regulations ratified by the Expediency Discernment Council as well as the criteria and restrictive regulations on divorce obliging the husband to pay his wife a sum determined by the court in compensation for her domestic and childcare work during their marriage. This single-article act also stipulates that couples considering divorce shall file a suit to have their cases heard and decided by the court (1992).
- Addendum to the law of half-time service for women (1997) that permanent female government employees may choose to work three quarters of the regular working hours instead half the normal hours, provided their requests are approved by the highest ranking officials in their respective agencies.
- Law on the payment of the marriage portion at the current rate (1997) and its executive bylaw (1998) which stipulate that payment of the marriage portion (mehriyeh) to brides, if contracted in current money, shall be subject to recalculation on the basis of the price indices prevailing at the time of divorce.
- Amendments to employment laws and armed forces regulations require that women are given priority in campaigns against social vices for positions related to crimes committed by women and for positions in the administration of women's sections in prisons (1998).

parliament and there are female executives and decision-makers in a wide range of administrative and judicial positions.

The growing proportion of women selected in parliamentary elections (figure 7.2) reflects the increased participation of women in legislative and decision-making bodies.

Indeed, the number of women deputies in the Islamic Consultative Assembly rose about 150% from the first to the fifth election.

Figure 7.2: Women standing as candidates in parliamentary elections (percent)



Source: Election Headquarters, Ministry of the Interior

Indeed, the number of women deputies in the Islamic Consultative Assembly rose about 150% from the first to the fifth election.

The appointment of women to top administrative and decision-making posts reflects increased participation by women. Examples of this trend include women in the roles of

- Vice President (Head of the Department of the Environment and member of the Cabinet of Ministers);
- presidential advisor (Head of the Centre for Women's Participation and member of the Cabinet of Ministers);
- political advisor to the President;
- press advisor to the President;
- Deputy Minister for legal and parliamentary affairs in the Ministry of Culture and Islamic Guidance;
- Director General of the Office of the Head of the Department of the Environment;
- Director General of the country's administrative divisions in the Ministry of the Interior; and
- university chancellor.

In addition, all government ministries have women advisors. These examples illustrate how women are present at high levels of decision-making.

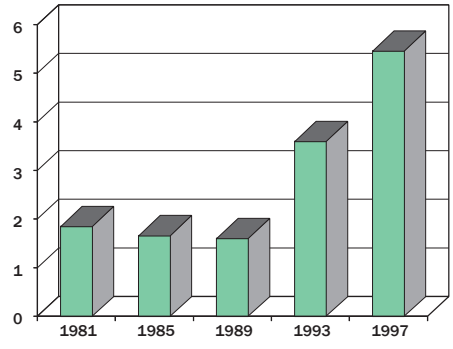
The presence of women on city and village councils is also of great importance. In the recent Islamic Council elections in urban and rural areas, 114 women won first or second place in 109 cities. Of 28 provincial capitals only three—Kohgilooye, Kurdestan and Ilam—elected no women councillors.

Violence against women

Women all over the world experience violence in the family, and I. R. Iran is no exception. Consequently, I. R. Iran has been determined to develop and implement a plan of action to combat violence against women and to introduce the measures needed to eliminate it altogether. The cornerstones of its approach are legal procedures, preventive cultural and educational campaigns and protective measures.

Citizens and the government both can avail themselves of a number of effective legal mechanisms for addressing violence against women. The incidence of rape, sexual abuse and prostitution is low in I. R. Iran because of the severe penalties for such crimes. There is, however, the need for new and effective laws to deal with other forms of violence against women. A package of legal measures to address this problem is under consideration, while amendments have already been made to some existing measures (box 7.3).

Figure 7.3: Women elected in parliamentary elections (percent)



Source: Election Headquarters, Ministry of the Interior

Given the importance attached to preventing violence against women, a set of preventive

Box 7.3

Legal measures to prevent violence against women

- Consider legislation relating to male aggression.
- Consider revising the age of puberty for girls.
- Consider certain requirements permitting a man to take a second wife, including equal treatment and financial means.
- Consider a total prohibition of marriage by minors (below the age of puberty).
- Consider revising the provisions relating to a wife's inheritance from her husband.
- Considering the question of setting an age of majority.
- Consider reviewing the criteria for dissolution of marriage on grounds of the deficiency of the wife.
- Examine effective and practical ways of preventing compulsory and early marriages.
- Discuss certain aspects of the Islamic penal code and deterrent penalties.
- Eliminate physical punishment, including lashing.
- Attempt to reactivate juvenile courts, especially for young girls.
- Amend existing laws to allow women to be employed in campaigns against social vices.
- Approve the establishment of a qualified court to hear family cases.
- Ratify the mandatory payment of fair compensation to the wife in cases where the husband files for divorce.
- Approve the obligation to pay the marriage portion *(mehriyeh)* to the wife at the current rate in the event of divorce.
- Employ more women in courts dealing with women's affairs.
- Attach support and guidance units to family courts.

The incidence of rape, sexual abuse and prostitution is low in I. R. Iran because of the severe penalties for such crimes. There is, however, the need for new and effective laws to deal with other forms of violence against women.

cultural and educational measures is currently being developed. The most important of these are:

- to raise sensitivity to and awareness of violence against women and the violation of their human rights through public education and other measures aimed at changing society's general attitude to the issue; and
- to impose legal restrictions on and encourage the mass media to limit its use of violent material, and to promote peaceful solutions to interpersonal problems and disputes.

A number of protective measures are being planned as well, including:

- setting up and strengthening existing institutional mechanisms, including advice centres for girls and women where they can talk about the violence they have been subjected to and receive help in starting legal proceedings;
- establishing direct telephone hotlines for victims of violence where they could obtain the information they need to find appropriate solutions;
- establishing specialized libraries for women and compiling an encyclopedia for women (this last project was started in 1997 by the Centre for Women's Participation);
- having the provincial commissions on women's affairs set up legal advice centres in provincial capitals to address women's legal problems;
- compiling a charter by the Cultural and Social Council of Women on the position of women in the Islamic system that would also define the pivotal role of the family in this system;
- providing financial and other support for victims of violence;
- establishing special police stations staffed by women;
- creating national committees for the elimination of violence against women;
- introducing a scheme for the prevention of wife abuse;
- introducing a scheme for marital reconciliation (this project, led by the State

Welfare Organization and the Ministry of Justice started in 1997);
- conducting an in-depth examination of violence against women through nation-wide seminars attended by members of the judiciary;
- establishing a post-graduate course on family issues; and
- introducing a national distance-education course on general family law issues.

The approach to women's rights, freedoms and equality taken by the Islamic Revolution is fundamentally different from the one taken in the Western intellectual tradition.

Iran's accession to many international conventions on women's rights illustrates its commitment to the protection of these rights (box 7.4). I. R. Iran has yet to accede to the UN Convention for the Elimination of All Forms of Discrimination against Women, however. There seems to be no consensus amongst UN member states on this convention, and in I. R. Iran, the High Council of the Cultural Revolution's refusal to accede to it has sparked heated debate among various groups. Caught in the midst of a stream of opposing views, the relevant government and non-governmental organizations and experts are discussing the most appropriate approach to this convention. The aim of these discussions is to ensure that without denying women the opportunity to enjoy the privileges and rights set out in this convention, the principles of the Islamic legal system are respected.

Legal issues and challenges facing institutional mechanisms

The approach to women's rights, freedoms and equality taken by the Islamic Revolution is fundamentally different from the one taken in the Western intellectual tradition. This difference can be explained by the crucial requirement that in an Islamic society all reforms and amendments of laws and regulations relating to women, particularly those that concern their legal

Box 7.4

International treaties and conventions on issues relating to women to which Iran has acceded

- The International Convention for the Suppression of Trafficking in Women and Children, 1921.
- The International Convention for the Suppression of the Circulation of and Trafficking in Obscene Publications, 1923.
- The International Convention for the Suppression of Trafficking in Women of Full Age, 1933; amended 1947. The first article of this convention provides that anyone recruiting a woman or a girl of the age of majority for prostitution in another country, even with her consent, shall be subject to punishment.
- The Additional Protocol to the Geneva Convention Relative to the Protection of Civilian Persons in Time of War, 1949.
- The Protocols Amending the International Agreement on the Suppression of the White Slave Traffic, 1904, and the International Convention for the Suppression of the White Slave Traffic, 1910.
- The Supplementary Convention on the Abolition of Slavery, the Slave Trade and Institutions and Practices Similar to Slavery, 1956.
- The International Convention on Discrimination in Education, 1960.
- The International Convention Concerning Equal Remuneration for Men and Women Workers for Work of Equal Value, 1972.
- The International Covenant on Civil and Political Rights, 1966, aimed at protecting the rights of women and female children as society's future mothers. The Islamic Republic of Iran acceded to this convention with two general reservations regarding consistency with the principles of Islam and national statutes.

status, must be carried out in an Islamic context. In an Islamic framework, every principle—including the principle of equality between men and women—is governed by the principle of justice. Nevertheless, Islamic Shari'a does not ignore the centrality of the natural and inherent rights of human beings. From the Islamic viewpoint, men and women are equal and identical in the esssence of their humanity, but they have different kinds of responsibilities, duties and rights which require a division of labour based on their physical, psychological, emotional and behavioural differences. Consequently, any punishment meted out to them has to be different as well. This difference, however, should never be used as an excuse to violate the inherent dignity of women or to justify the denial of their rights.

Many leading authorities and intellectuals in I. R. Iran's theological seminaries and universities favour revision of decrees, laws or regulations that may be in some way unjust and discriminatory towards women, on the grounds that modern realities have rendered some notions irrelevant. An important legal discussion at the moment is the feasibility, in the framework of Islamic jurisprudence, of amending the rules and regulations concerning women that are not religiously incontrovertible. If this necessary work is not carried out, limitations will be placed on the rights and protection of women. Unless women are given the opportunity to participate in these serious legal and doctrinal discussions, however, many of the present problems are unlikely to be resolved.

The legal problems of Iranian women also stem from the fact that I. R. Iran's economic, social and political systems are undergoing transformation as the country makes its transition from a traditional to a modern society. A similar transformation is not being wrought in the legal system, however, especially where women's rights are concerned, leading to a certain inconsistency in social relations.

Two key shortcomings in I. R. Iran's institutional mechanisms are duplication in many national institutions' activities, and inattention to the problems of young girls and concentration on those of young boys.

The discussion on violence against women still lacks a definition of violence, an understanding of which groups are vulnerable to violence, the different ways in which violence is inflicted, a reliable means of measuring it and the most effective ways to counter it. What makes the fight against violence particularly difficult in I. R. Iran is the sad reality that it is mostly a hidden social phenomenon. It is not openly discussed in the family and is all but denied by the relevant authorities. It is hardly surprising that the issue of violence, particularly domestic abuse, is rarely reported or discussed in the media and, except in extreme cases, is not officially discussed or condemned.

An age-old culture of male domination, coercion and violence against women—generally regarded as chastisement—is mostly taken for granted by society. The existence of discriminatory laws and the ambiguity of other laws compound this attitude and make women vulnerable to violence, particularly domestic violence. It should therefore come as no surprise that apart from a few measures applied in extreme cases and some reasonably effective programmes designed to identify the cultural, social and legal roots of violence against women, no notable action has been taken to change prevailing attitudes or reform the pertinent laws and regulations.

Two key shortcomings in I. R. Iran's institutional mechanisms are duplication in many national institutions' activities, and inattention to the problems of young girls and concentration on those of young boys.

Recommendations for improving women's rights and relevant institutional mechanisms

The following initiatives would improve the institutional mechanisms influencing the status of women.

- Encourage women to establish non-governmental organizations.
- Give governmental institutions dealing with women's issues more coherence

and a sharper focus and eliminate institutional duplication.
- Encourage research centres and theological seminaries to participate more closely with women's non-governmental organizations.
- Create opportunities within organizations for women and girls to use their skills in civil defence and disaster relief.
- Accelerate legislative reform and enact new laws to provide institutional protection for women and girls.
- Raise awareness among women, particularly of women's rights in law.
- Increase the number of experienced and highly qualified women judges and legal advisors in family courts.
- Establish independent reform schools and rehabilitation centres for girls, and reactivate juvenile courts, particularly for young girls.
- Sensitize and train all types of law enforcement personnel as well as judges and lawyers to investigate and deal effectively with crimes and violence against women.
- Attribute greater importance to research on women's issues, particularly on women's rights and problems.
- Establish a centre with legal jurisdiction composed of experts in law, psychology, socio-pathology and sociology to compile recommendations and opinions on legislative reform.

Other recommendations on the prevention of violence against women might include:
- Accede to the Convention for the Elimination of All Forms of Discrimination against Women, with reservations about any provisions considered to be in contravention of incontrovertible Islamic principles.
- Draft new laws on the investigation and elimination of violence against women which include more severe penalties.
- Educate women on their legal and human rights using the mass media, and encourage open discussion of violence, particularly domestic violence.
- Conduct more discussions on women's rights in Friday prayers and gatherings in mosques.
- Set up telephone hotlines in all town and city law enforcement centres.
- Train and deploy a female police force, particularly to deal with violence against women and to run telephone hotlines.
- Establish shelters for victims of violence and child abuse.
- Expand counseling centres using social workers, lawyers, psychologists and educational counselors.
- Provide vocational training facilities for women vulnerable to violence.

Economic participation by women: opportunities and obstacles

As half the population, women are not only the subject and object of development but they are also important players in the process of economic and social development itself. However, precise statistical data on women's economic participation are not easily available. Identifying women's employment status is complicated and ambiguous for the reasons discussed below.

The diversity of social structures means that women's employment in activities such as agricultural production and handicrafts usually fall within the informal sector and are generally unreported in I. R. Iran's official statistics as a result.

Among the most important of these factors are traditional and ethnic prejudices, the cultural and social diversity of Iranian society and the absence of any mechanism for accurately assessing female employment in traditional small businesses. Traditional and ethnic prejudices usually make both women and their husbands reluctant to divulge information about their employment to survey or census enumerators. The diversity of social structures means that women's employment in activities such as agricultural production (in the northern provinces) and handicrafts (in the central provinces) usually fall within the informal sector and are generally unreported in I. R. Iran's official statistics as a result. This is in a context where, in reality, few rural and tribal households do not have a loom. Similarly, there are not many rural households where wives do not have an

important role in the family's livestock and agricultural activities. Many women also work as seasonal workers in small, unregistered production or service enterprises. Despite this, official statistics showed that female economic activity rate amounted to 14.3% in 1997.

Figure 4.7 shows that women's share in total employment has not changed in the last 20 years, even though the number of women of working age increased considerably over this period—a trend that indicates an overall decline in women's economic participation.

Figure 7.4: Women's employment, 1976–1996 (millions)

Economic recession during the Imposed War and certain cultural traditions were among the major factors in this downward trend in women's employment. It is useful to review the most important features of women's employment in I. R. Iran in order to understand the trends of the last 20 years. Research indicates that

- women's share of unemployment in total unemployment is twice as large as their share of employment in total employment;
- women who work in the agricultural sector are not counted as employed;
- women lack the necessary skills to be employed in the manufacturing sector;
- the value added of women's handicraft production is not properly calculated;
- there is little diversity in women's employment in the service sector.

This situation prevails despite the fact that the constitution provides women with the necessary employment protection. Article 43(4) of the constitution stipulates that all Iranian citizens shall, with a view to achieving full employment, be given the facilities and opportunity to secure employment, and those who are able to work but lack the means to do so will be provided with training and other employment support. Despite such legal provisions, the proportion of women in employment remains low. I. R. Iran's economic and social development planners must not lose sight of this explicit constitutional provision when they set employment goals.

Official statistics showed that female economic activity rate amounted to 14.3% in 1997.

In addition to this constitutional obligation to provide full employment—which obviously includes women—other legislative and regulatory provisions guarantee equality between men and women. I. R. Iran signed the International Convention Concerning Equal Remuneration for Men and Women for Work of Equal Value in 1972 and I. R. Iran's 1990 Labour Law also stresses equality in wages and prohibits wage discrimination on the basis of age, gender, race, ethnicity and religion. The Social Security Law also contains provisions that protect women's equality with men in employment. Amongst these provisions are:

- payment of a marriage allowance and family support allowance to insured male or female employees;
- early retirement for women aged 45 with a minimum service period of 20 years;
- payment of pensions to survivors of deceased female government employees and the establishment of pensions for their children and grandchildren;
- reduction in the working hours of women in government employment; and
- introduction of a family support allowance for widows and divorced women or women with disabled spouses.

Issues affecting employment opportunities for women in the agricultural sector are of great importance to the Iranian economy. I. R. Iran's female rural population is around 11.4 million, divided among some 60,000 villages. According to available statistics, about 42% of this population is under 15, 21.3% are in the 15–24 age group, 13.11% are in the middle age group and 4.9% are 65 or over.

Informal employment of women in rural areas provides an opportunity for initiatives aimed at expanding organized economic participation of women. The Ministries of Construction Jihad and Agriculture have already taken some steps in this direction.

Studies show that more than half the labour force engaged in farming and livestock raising is female, particularly in the northern and southern regions. Informal employment of women in rural areas provides an opportunity for initiatives aimed at expanding organized economic participation of women. The Ministries of Construction Jihad and Agriculture have already taken some steps in this direction, including organizing rural training and extension activities; organizing carpet weavers; setting up rural women's production networks; launching women's self-employment programmes; and expanding women's cooperatives and non-governmental organizations.

Training and extension activities were officially launched in 1993 to improve rural women's economic and social situation. Women are given training on how to improve the quality of foodstuffs and the health and quality of livestock, environmental issues, home economics and productivity management. They are also trained in vocational and technical skills such as carpet and kilim weaving, sewing and other traditional Iranian industries.

Hand-woven carpets are one of I. R. Iran's most important non-oil exports. There are currently 282 carpet weaving cooperatives and trade unions with a combined membership of over 6,000 weavers, 70% of whom are rural women. This illustrates how organizing female weavers can be an extremely effective means of expanding rural women's economic participation. There are indications that the establishment of 1,000 workshops and rural women's cooperatives has helped increase employment among women heads of household in handicrafts and home-based and small enterprises. The Ministry of Construction Jihad has so far succeeded in setting up 80 rural women's cooperatives all over I. R. Iran. With the help of low-interest loans from Iranian banks, these cooperatives have been able to establish production units for women in various industries.

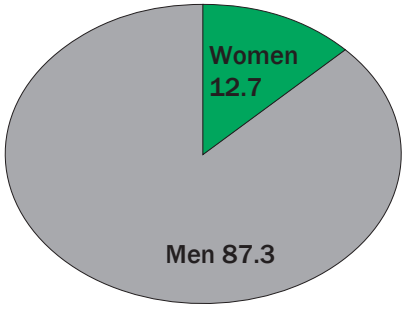
To date, 46 women's production networks have been set up in clothing, handicrafts, dairy and animal products, forestry and herding, and 663 job skills centres have also been set up nationwide. Construction Jihad's rural women's groups have also been active in preserving and rehabilitating the natural resources and watersheds so crucial to women's employment.

The Agriculture Bank launched a new initiative in 1994 to provide banking facilities to female heads of household; this group of women is among the most vulnerable in the country, especially in rural areas. The scheme provides easy credit facilities to rural women to support their productive activities.

The First and Second Development Plans also recognized the issue of women's self-employment. Banking facilities aimed at strengthening self-employment among women were included for the first time in the 1993 budget. The Islamic Consultative Assembly also approved the establishment of a fund to support job opportunities for women. Three units are currently active within the Ministry of Labour and Social Affairs to provide protection for women's self-employment: the Women's Self-employment Unit; the Women's Job Placement and Self-employment Loans Unit; and the Vocational and Technical Training Organization. In addition, the Ministries of Agriculture, Construction Jihad, Cooperatives and Commerce are also supporting women's self-employment schemes.

The establishment of women's cooperatives and non-governmental organizations within the Ministries of Agriculture, Cooperatives and Construction Jihad has helped expand women's participation. The 92 non-governmental organizations mostly engaged in economic or charitable activities have also been effective in addressing some of women's most acute needs.

Figure 7.5: Participation of women in cooperatives under the Ministry of Cooperatives, 1996 (percent)



Despite all these measures and the opportunities created for women's economic participation, certain historical, cultural, legal and economic obstacles have caused women to have a much lower share of total income than men. This calls for the adoption of new initiatives.

Recommendations for the enhancement of women's economic participation

Because the impediments to women's economic participation in I. R. Iran are diverse and complex, policy initiatives to counter them need to be comprehensive. These are some important initiatives:

- Review the cultural and social traditions that hinder the expansion of women's employment on religious or ethnic grounds.
- Review and reform existing laws and regulations to increase the proportion of women in the workforce.
- Expand home-based employment for women and increase women's participation in small industries.
- Improve women's technical skills and education in the sciences so that they have greater access to employment in specialized and new-technology fields.
- Encourage non-governmental organizations to offer vocational and technical training, particularly training in home-based industries, in poor rural and tribal regions.
- Support development of the agriculture-related industries with a view to increasing rural women's employment.
- Promote a gender-oriented approach to formulating national development plans.
- Support female-headed households and women without other means of support, particularly in rural areas.
- Increase women's involvement at higher levels of decision-making on employment issues.
- Establish a balance between supply and demand in the female labour force, emphasizing merit and qualifications as the basis for recruitment.

The establishment of women's cooperatives and non-governmental organizations within the Ministries of Agriculture, Cooperatives and Construction Jihad has helped expand women's participation.

The health status of women: achievements and challenges

Some of the most important factors in the improvement of women's health in the last 20 years have been

- the implementation of population control programmes, including reproductive health and family planning services;
- expanded popular participation in the provision of health services;
- the new laws, regulations and schemes brought in to reduce occupational health hazards for working women; and
- the development of mechanisms giving women full access to health care services.

There is no doubt that the population control programmes of recent years have greatly contributed to women's well-being. Because women are having fewer children,

the maternal mortality rate has fallen, and married women's health has improved. The government attaches special importance to premarital counseling, which, because it has a reproductive health component, improves women's health remarkably. There are currently 478 premarital counseling centres in I. R. Iran, where brides-to-be attend classes on reproductive health and family planning after they have taken the necessary medical tests.

Increasingly, though, non-governmental organizations (NGOs) are involved in health promotion—particularly the promotion of women's health.

The Ministry of Health and Medical Education is responsible drafting and implementing family planning policies and programmes. Increasingly, though, non-governmental organizations (NGOs) are involved in health promotion—particularly the promotion of women's health—and are establishing and running health services centres, raising public awareness of health issues and making recommendations on how to improve Iranians' health status. Organizations include the Iranian Society of Midwives, the Woman and Family Association, the Islamic Association of Iran's Medical Community, and the Kahrizak Group of Charitable Women. Importantly, the government is very positive about the expanded role these organizations are playing in the development process.

The Labour Law of I. R. Iran has also contributed to the reduction of occupational health hazards by

- banning women and all workers under 18 from working at night;
- proscribing the assignment of heavy work to pregnant women;
- requiring employers to transfer pregnant women to lighter work at the same pay when their regular work is deemed heavy or otherwise harmful in their condition;
- prohibiting women from carrying heavy loads during pregnancy and for 10 weeks after giving birth;
- emphasizing the right of pregnant women to use all the insurance services necessary during pregnancy; and
- entitling women to maternity leave for the first three children.

Special programmes have also been designed to improve the nutritional status of pregnant women since malnutrition during pregnancy is considered a threat to the expectant mother's health. Pregnant women are also provided with iron supplements because of the general iron deficiency in the Iranian diet.

The achievements of women in gaining full and equal access to health care services should be seen from a broader perspective. Following the victory of the Islamic Revolution, primary health care has been the cornerstone of the new public health care system, a nationwide network that is the focus of all health care planning and management.

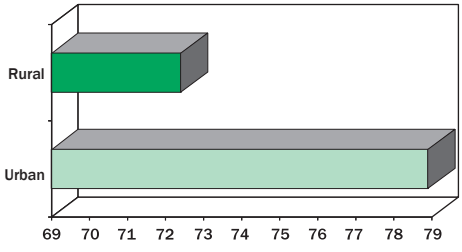
Under this public health care system (commonly called the PHC), Rural Health Centres offer a wide range of health services, while Urban Health Centres provide Iranian families with health information and training, particularly on women's health issues. Since 1990, the Ministry of Health and Medical Education has employed the services of women Community Health Volunteers to strengthen its health programmes in the poor urban communities. This network is essentially a non-governmental organization offering health services, especially to women, in cooperation with the responsible government agencies.

Another achievement in the health status of Iranian women is the remarkable improvement in family health indicators. Of particular importance in this regard have been the provision of access to safe drinking water and sanitary toilets for the entire urban population and most rural households; an increase in the number of safe deliveries; a decline in maternal mortality; immunization against diphtheria and tetanus; and progress in the treatment of infertility.

The Health Houses in rural areas and Urban Health Centres keep files on all households under their care. The files all

contain a special form concerning the care of pregnant women (figure 7.6).

Figure 7.6: Pregnant women in rural and urban areas visited by a health care professional more than twice during their pregnancy, 1997 (percent)



Source: Multiple Indicator Cluster Survey (MICS), Ministry of Health and Medical Education, 1997

These statistics, which report health care provided to pregnant women aged 15 to 49 who have given birth during the last five years, indicate that about 80% of urban mothers and 73% of rural mothers have been attended to more than twice during their pregnancy. Trained professionals assist at 86% of births in I. R. Iran, although the number of deliveries attended by untrained people is six times higher in rural areas than it is in cities (figure 7.7).

The provision of health care—coupled with other factors such as higher female literacy, the supply of safe drinking water and improved communications—has reduced the maternal mortality rate from 140 per 100,000 live births in 1985 to 37.4 per 100,000 live births in 1997.

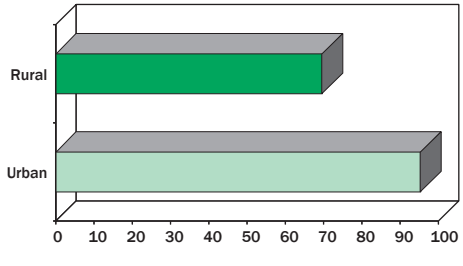
Pregnant women in I. R. Iran must be immunized against diphtheria and tetanus. The Multiple Indicator Cluster Survey (MICS) in 1997 showed that around 77% of pregnant women had been vaccinated against tetanus. No reliable figure was available for immunization against diphtheria. As far as infertility treatment is concerned, I. R. Iran's first in-vitro fertilization (IVF) unit opened in 1989 in Yazd, where the first IVF baby was born in early 1990. More than 22 public-sector IVF units are now operating in I. R. Iran and the private sector is also highly active in this field.

Despite these achievements in women's health, I. R. Iran faces a number of challenges, including malnutrition and maternal health deficiencies (leading ones being low iron and calcium intake); the spread of certain infectious diseases; limited treatment facilities for infertility; inadequate health care for older women, particularly treatment for the effects of menopause; and insufficient reproductive health programmes for young women.

There is no reliable data on malnutrition in women of reproductive age. Surveys carried out by the Ministry of Health and UNICEF indicate that, based on their haemoglobin count, 33.5% of urban mothers and 33.3% of rural mothers are suffering from anaemia. Using standards recommended by WHO, 16.6% of all Iranian women—14% of urban women and 18% of rural women—suffer from anemia and iron deficiency. Even though a startling proportion of I. R. Iran's women are suffering from anemia and iron deficiency, the programme for providing iron supplements has been confined to pregnant women. Deficiencies in calcium and vitamins A and B_2 are similarly serious—some women are more than 50% deficient in these nutrients.

About 80% of urban mothers and 73% of rural mothers have been attended to more than twice during their pregnancy.

Figure 7.7: Deliveries attended by untrained people, 1997 (percent)



Source: Multiple Indicator Cluster Survey (MICS), Ministry of Health and Medical Education, 1997

In addition, research related to the nutrition of expectant mothers has demonstrated that a large amount of folic acid ingested before conception reduces the incidence of neural tube defects and other congenital anomalies in newborns. However, no concrete action has yet been taken to supply expectant mothers with folic acid supplements or to inform them of its benefits. Similarly, the importance of adequate levels of retinol in preventing illness in pregnant women and newborns has yet to receive due attention.

Basic measures for improving women's health

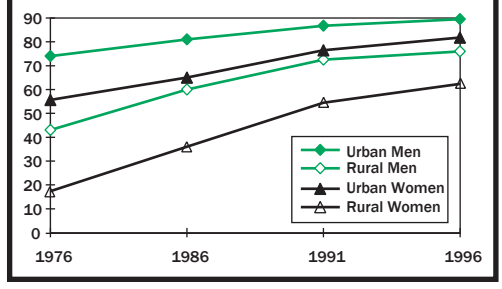
Although I. R. Iran has made remarkable progress in promoting women's health over the last 20 years, some of the remaining challenges require urgent action.

- Create suitable opportunities for training women and employing them in various health programmes.
- Design a curriculum for a serious educational programme on reproductive health (sex education and sexually transmitted diseases in particular) which takes I. R. Iran's cultural context into consideration.
- Strengthen the involvement of women's non-governmental organizations in the provision of health services to women.
- Encourage and empower men to take more responsibility in married life.
- Provide more sports facilities for women.
- Extend social security networks in order to provide protection for women, especially housewives and vulnerable women.
- Expand programmes that deliver iron, calcium and vitamin supplements to women.

Educational achievements and challenges

The remarkable increase in the female literacy rate since the revolution is one of I. R. Iran's major achievements. Female literacy was only 35.6% in 1976, but ten years later it had risen to 51.0%, continuing its steep upward trend to 67.1% in 1991 and 72% in 1996. In the same period, the literacy rate for rural women rose from 17.4% to 62.4%, even more than for urban women among whom it grew from 55.7% to 81.7%. Literacy among women grew even faster than it did among men (figure 7.8).

Figure 7.8: Female and male literacy rates in rural and urban areas, 1976–1996 (percent)



The 21% increase in the female literacy rate can be attributed to the literacy policies and measures adopted under the First and Second Development Plans, and to the efforts of the Literacy Movement.

The 21% increase in the female literacy rate can be attributed to the literacy policies and measures adopted under the First and Second Development Plans, and to the efforts of the Literacy Movement. However, despite this remarkable improvement, 18.3% of urban women and 37.6% of rural women are still illiterate. I. R. Iran therefore still faces a daunting challenge particularly in rural areas, where improved literacy rates would have a considerable impact on women's human development.

I. R. Iran therefore still faces a daunting challenge particularly in rural areas, where improved literacy rates would have a considerable impact on women's human development.

The female literacy rate in some provinces, particularly Kurdestan and Sistan-Baluchestan, is much lower than it is nationally. If special measures were taken to enhance female literacy in these provinces, their gender-adjusted HDI could be improved considerably.

The educational progress of women over the last 20 years has by no means been confined to literacy. Women have also made remarkable progress in terms of secondary education. The ratio of female to male students increased from 66% in 1976 to 90% in 1996 at primary level, from 57% to

83.5% at guidance level, and from 59% to 99% at high school level.

The advances made by women in secondary education, particularly during the second decade of the revolution, can be ascribed to the educational goals and policies of the First and Second Development Plans. Noting the relative lack of girls in secondary education, the First Development Plan called for an increase in the ratio of female to male students from 45% to 48% at primary level, from 39.8% to 41.3% at guidance level, and from 43% to 45% at high school level. These targets were almost completely met at the primary and high school levels—and at the guidance level the plan's target was exceeded by 1.7%, due largely due to the expansion of educational facilities, especially in rural areas.

By the end of the First Development Plan, a number of challenges facing the provision of secondary education for girls were recognized. These included villagers' reluctance to send their daughters to school; too few guidance and high schools, particularly in rural areas; a shortage of female teachers; and the wide gap between the number of male and female students in rural and poor areas, due to a lack of suitable facilities for girls.

In response, the Second Development Plan focused on balancing the gender distribution of students in the poorer regions and attracting girls of school age to school. The plan set a number of targets, including raising the ratio of female to male students in poorer regions from 48.1% in urban areas and 46.3% in rural areas in 1993 to around 48.5% by 1998; increasing the ratio at guidance level from 46.8% in urban areas and 37.4% in rural areas to 47.5%; and, in high schools, bringing the ratio up from 42% to 45.1%. All these targets had been met by the end of the Second Plan period.

Women's development in I. R. Iran is a process that involves development in the most comprehensive sense of the word, embracing the whole range of its cultural, political, economic and social dimensions, while especially emphasizing Islamic spirituality.

Box 7.5

The Islamic dimension of women's development

From the Islamic viewpoint, men and women are of the same essence. In Islamic thought, spiritual development consists of a journey of enlightenment leading men and women ever closer to the Almighty's grace and benevolence. From this perspective, exclusively material indicators fail to measure the different stages of men and women's spiritual development. We should search, therefore, for an all-encompassing and balanced process of development—a paradigm of development that pays equal attention to the all-important spiritual facets of development as well as its material aspects. In such a paradigm, women's development would not only embrace the full range of cultural, economic, political and legal components of human development, but also the conditions necessary for the full realization of their Islamic identity. In the cultural sphere, women's development should be defined by a number of indicators such as cultural creativity (the creation of cultural products and ideas), equal access to information and education, respect for national identity and cultural authenticity, and religious and human values. In the economic sphere, the paradigmatic indicators would reflect the expansion of women's economic participation; recognize women's economic presence and role; measure equity in the management of the economy and the distribution of income; gauge equal access to opportunities, particularly credit and employment; and reveal the reduction of women's economic dependence on men. In the political and legal spheres, the paradigm would be based on the recognition of the principle of women's political participation and involvement in decision-making processes in all areas of national life, and their equal right to development. From this viewpoint, women's development in I. R. Iran is a process that involves development in the most comprehensive sense of the word, embracing the whole range of its cultural, political, economic and social dimensions, while especially emphasizing Islamic spirituality. This, in our view, is a paradigm that avoids the pitfalls of an unevenly balanced process of development.

Imam Khomeini's progressive views, based on a new definition of the Muslim woman's role, have helped pull down the walls of ignorance and superstition found in some traditional Islamic societies.

Nonetheless, there are still problems in secondary education for girls, chief among them being the limited number of women at management and decision-making levels; a shortage of female teachers at guidance and high schools; the lower rate of female enrolment at these levels, particularly in the poorest regions; and insufficient attention paid to girls' vocational and technical education.

Although the higher education sector has grown considerably over the last 20 years, women have not made the gains expected of them at this level. The First Development Plan had no specific policy for the quantitative and qualitative advancement of young women in higher education. Indeed, the ratio of female to male tertiary level students had declined from 28.7% in 1989 to 28.1% by the end of the plan, due in part to restrictions on the admission of women to I. R. Iran's universities and other institutes of higher education. Providing talented students equal opportunity for access to higher education was one of the policies of the Second Development Plan.

By 1997 and 1998, after a number of the restrictions on university admission for women had been lifted—and families had become more interested in higher education for their daughters—women accounted for more than 52% of the new entrants to higher education. It was a significant increase over previous years. The healthy cultural environment in I. R. Iran's universities and institutions of higher education resulting from the observance of Islamic values in all their activities encouraged most Iranian families to support their daughters' quest for higher education. Special measures to support the enrolment of women in a number of fields such as midwifery and obstetrics and gynaecology have also played a part in increasing the number of young women seeking higher education.

The following measures are recommended to further the achievements of girls and women at various levels of education:

- Make efforts to reduce women's illiteracy rates, particularly in rural areas.
- Increase girls' access to education at all levels, emphasizing rural areas.
- Adopt a gender-sensitive approach to secondary education planning.
- Increase women's participation in planning and setting education policy and increase their presence at management levels.
- Improve the match between the subjects studied by women at the tertiary level and the job market.
- Formulate a long-term, gender-oriented human resource development policy that will expand the presence of women specialists in the Iranian job market.
- Increase the proportion of women on the faculty of universities and other institutes of higher education.

Women's Islamic identity: cultural challenges

The Cultural and Social Council of Women was established to carry out the Islamic Republic's cultural policies. In 1996, it formulated a number of national policies on women, notably to improve the general cultural environment of I. R. Iran; enhance the level of women's culture and knowledge; revive the dignity of women; develop women's activities and education; and pave the way for women to attain the highest possible positions in the scientific and religious spheres.

The achievements of women following the victory of the Islamic Revolution are wide-ranging, and include their decisive role in the victory of the revolution itself and their support for the system's cultural policies, particularly those that relate to women's rights in Islam and emphasize the elimination of false and unjustifiable customs that violate women's rights. Imam Khomeini's progressive views, based on a new definition of the Muslim woman's role, have helped pull down the walls of ignorance and superstition found in some traditional Islamic societies. The numerous cultural studies on women's issues that

supported the women's reformist movement, the remarkable increase in the number of female researchers, and the growing number of women's publications all evince these achievements.

Women also face cultural challenges. After the victory of the Islamic Revolution, practices such as the Islamic dress code were more rigorously applied to women than to men with the aim of moulding Iranian society to Islamic principles. As a result, certain misconceptions grew about the role of women in the Islamic Republic, causing other countries to underestimate the outstanding achievements of Iranian women in different aspects of their personal and public lives. Consequently, a great and sacred challenge facing Iranian women is to correct the erroneous images that prevail about them by introducing the true face of Islamic women to the world—not only to the West, but also to Eastern and even other Islamic societies. The role of I. R. Iran's cultural institutions is made more onerous by their need to present the important role of women in I. R. Iran.

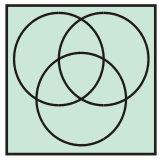
In the face of these challenges, there needs to be interaction between an understanding of the true identity of the Muslim woman and recognition of the exigencies of the modern world. It is an interaction that should make it possible for women to preserve the essence of Islam while assuming a role—particularly in the economic and social spheres—that is compatible with the global environment today. A reaffirmation of this compatibility will contribute not only to broadening women's choices but also to creating favourable conditions for a comprehensive process of development in I. R. Iran.

Working within this framework, some important cultural initiatives—initiatives that take the religious, cultural and socio-economic dimension of women's role into account—could be taken to advance women's development in I. R. Iran.

- Develop an applicable model for women's cultural development that makes reference to criteria such as cultural creativity, equal access to information and education, and the preservation of cultural originality and authenticity.
- Adopt an integrated approach to cultural decision-making at the macro level and coordinate macro-level policies aimed at improving the status of women.
- Assure the flexibility and dynamism of cultural policies concerning women by emphasizing, particularly, the expansion of cultural research activities conducted jointly by religious centres and universities.

The role of I. R. Iran's cultural institutions is made more onerous by their need to present the important role of women in I. R. Iran.

Chapter 8



The Environment

Introduction

A precondition for human development is the creation of a safe environment, particularly when it is pursued as part of efforts to protect and improve people's health. In the human development approach, environmental protection is the basis of sustainable human development.

In the face of the challenges posed by unbridled economic growth, the need to deal with the various environmental dimensions of development has emerged as a major international issue. The international community has developed a number of measures to cope with environmental crises, the most important of which is Agenda 21, now seen as the environmental charter for the next century. The Islamic Republic of Iran is among the states that have committed to Agenda 21 to improve their citizens' lives by preserving a safe environment, and has already acted in line with its provisions. A review of I. R. Iran's environmental achievements and challenges and the management issues they raise not only reveals the connection between the environment and human development, but also underlines the pressing need for action.

Box 8.1

Sustainable development in a nutshell

Sustainable development is a process of development that, while meeting the needs of the present generation, does not impair the ability of the coming generation to meet its needs.

Rapid urbanization and the environment

Rapid population growth in I. R. Iran over the last 20 years dramatically changed the composition of urban and rural populations and resulted in accelerated urbanization. This development has harmed the environment in a number of ways, particularly in large cities. These adverse effects are clearly observable in many areas of life such as air and water quality, human settlements, noise levels, energy consumption, communications and the state of natural resources.

I. R. Iran's urban population has more than doubled in the last 20 years, from 15.85 million in 1976 to 36.8 million in 1996, while the rural population rose at a somewhat slower rate from 17.85 million to 23.24 million. In the same period, the number of cities and towns jumped from 373 to 616.

The rapid growth in the size and number of Iranian cities has hindered the adoption of measures to protect the urban environment. This deficiency is most clearly noticeable in relation to air and water pollution, the lack of environmental standards in urban settlements, and noise pollution. As well as posing a direct threat to the environment, rapid urbanization has also contributed to environmental pollution by accelerating industrialization.

Because insufficient attention has been paid to their environmental effects, rapid urbanization and the industrialization associated with it have become the leading threats to the environment in I. R. Iran.

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The environmental effects of industrialization

Rapid industrialization began in Iran in the 1950s, gaining momentum as oil revenues increased, and resulted in industrial districts springing up in the vicinity of large cities.

Four old industrial centres, housing a total of 600 industrial units, are located in the industrial regions of Qazvin, Kaveh (in Saveh), Semnan and Rasht. In the last ten years, 32 new industrial centres have become operational and another 36 will be under construction by the year 2004. Currently, some 402,000 industrial establishments operate in Iran; table 8.1 shows the number of large industrial units in various provinces.

A more systematic approach to dealing with environmental pollution caused by industrialization has been adopted in the last ten years.

Industrialists do not seem to have evolved very much in their attitude towards applying environmental standards to production.

Table 8.1: Distribution of large industrial units

Province	Number of large industrial units
Tehran	5,204
Isfahan	1,649
Khorasan	1,219
East Azerbaijan	712
Mazandaran	500
Gilan	473
Fars	414

A programme was devised in the 1970s for the construction of industrial parks as a means of mitigating the negative impact of industrialization. However, only a small number of industrial parks were ever actually established under this programme.

A more systematic approach to dealing with environmental pollution caused by industrialization has been adopted in the last ten years. This approach takes the management of environmental pollution seriously, and aims at using natural resources and energy more efficiently and minimizing pollution. The plan now is to build industrial estates outside most Iranian cities in order to enforce the policy of confining industries to city outskirts and preventing the spread of industrial pollution to urban settlements.

Many industrial units have been constructed in close proximity to each other; some industrial regions have hundreds of factories. Although government policy in recent years has been to move factories to the edge of cities in order to reduce industrial pollution, its implementation will face obstacles. The increasing volume of toxic industrial effluent continues to be a significant environmental concern for I. R. Iran.

Industrialists do not seem to have evolved very much in their attitude towards applying environmental standards to production, despite increased public awareness of the adverse environmental effects of industrialization. For this reason, there is a need for new laws and regulations requiring environmental impact assessment of every development project and imposing pollution control measures. The Department of the Environment is responsible, amongst other things, for identifying polluting industries, imposing measures to minimize the level of the pollution they cause, and granting environmental approval to new industries. The Ministry of Industry also houses an environmental unit charged with the task of providing relevant environmental information to industries operating under its authority.

Industries are also encouraged to acquire ISO 1400 certification. Although the rate of certification has not been particularly fast, it is likely—because of increasing public awareness in I. R. Iran and around the world—that the ISO qualification will become a requirement for goods exported to international markets in coming years.

One of the most important sources of pollution in I. R. Iran is liquid industrial effluent which tends to be released into the sea, rivers, reservoirs and streams. Pollution

from the oil industry, water treatment processes and port operations can also be observed in the Persian Gulf. Farmland is contaminated as well by agricultural processes and livestock rearing, notably as a result of both changes in agricultural land use in villages following land ownership reforms and increased use of herbicides, pesticides and other chemicals to combat crop and animal diseases.

Since the agricultural sector is the primary user of land in I. R. Iran, its environmental impact is very significant. Greater use of land for farming in order to increase agricultural output has led to the eutrophication, acidification and depletion of ground water. It is therefore indispensable for sustainable development that the land use is planned properly to minimize the adverse impact of agricultural activities on water and soil.

The remarkable growth in the use of chemical fertilizers in I. R. Iran suggests that agricultural land is increasingly at risk of pollution (table 8.2). Fertilizer residue also flows into the Caspian Sea and the Persian Gulf through I. R. Iran's surface waters; the Caspian Sea is at greatest risk of pollution from these sources.

Pesticides and herbicides, as is well known, have a tremendous capacity for polluting water and soil when they seep directly into surface and ground water, circulate in the air during crop spraying and leak from storage areas. These problems have become more widespread in recent years as pesticide and herbicide use has expanded in the quest to augment agricultural output. Indeed, it is estimated that I. R. Iran uses 300 g of pesticidal and herbicidal chemicals per capita every year. This calls for effective measures to prevent further pollution by these substances.

Table 8.2: Use of chemical fertilizers, 1976–1997 (thousands of tonnes)

Year	1976	1981	1986	1991	1997
Quantity	630	1,279	1,699	2,114	2,425

Water pollution

With an average annual rainfall of 250 mm, one third lower than the global average, most of I. R. Iran is arid or semi-arid. Rapid population growth and increased urbanization along with industrial and agricultural development are major factors in increased demand for water (particularly fresh water) and the depletion of water resources. Indeed, use of ground water and coastal water table resources has become unsustainable.

The main sources of water pollution in I. R. Iran are household sewage and industrial effluents; herbicides, pesticides and chemical fertilizers; and solid waste.

Rapid urbanization and industrial and agricultural expansion are also the root causes of water pollution by household sewage and industrial effluent, particularly in areas without water collection and treatment systems.

The main sources of water pollution in I. R. Iran are household sewage and industrial effluents; herbicides, pesticides and chemical fertilizers; and solid waste. As more water is supplied for household consumption and the volume of household sewage increases, water wastage and water pollution can both be expected to rise in the years ahead.

A major cause of water pollution is the release by large industrial units of effluent into rivers and absorbent wells. Currently, more than 7,000 large industrial units consume more than 800 million cubic meters of water each year. Because the vast majority of factories do not have their own water treatment facilities—or if they do, their capacity is insufficient—most of their effluent is returned directly to water sources.

I. R. Iran's surface and ground water are also polluted through improper disposal of solid waste and environmentally unsound use of nitrogen-based artificial fertilizers. Since ground waters move very slowly, these foreign materials can persist in water

tables for decades, not only damaging the country's water resources as a whole, but also taking years to clean up. Every day, I. R. Iran's urban areas produce 38,000 tonnes of solid waste, most of which is made up of biodegradable materials. Hospitals alone produce more than 253 tonnes of infectious and non-infectious waste daily.

The pesticides, herbicides and chemical fertilizers used increasingly in the agricultural sector in recent decades to combat plant pests and diseases and to increase crop yields have become important polluters of I. R. Iran's water sources. As they enter the surface and ground water, they degrade its quality by increasing the level of oxygen in the water and accelerating plant growth. Chemical pollution of ground waters—particularly by nitrates, detergents and heavy metals—has also reached serious levels in I. R. Iran. Studies indicate that the level of nitrate concentration in potable water is rising in some of the larger Iranian cities, including Tehran, Mashad, Sari, Babol, Shiraz, and parts of Isfahan. Detergents have been found in potable water in some districts of the capital city. It is also highly likely that water sources near I. R. Iran's 115 active iron ore, manganese, aluminum, arsenic and fluoride mines are becoming polluted. This particularly problematic if the water is used for drinking.

Natural water resources are used for drinking water and so they have a direct effect on people's health—and therefore human development—making it imperative that these environmental issues be seriously addressed.

It is estimated that 413–450 billion cubic metres of water comes from rainwater every year and that rivers can supply an additional 82 billion cubic metres.

Daily per capita household water consumption is 165 L. In the past 30 years, there has been a fourfold increase in the amount of fresh water obtained from rivers, streams, water tables and other sources. Water pollutants remain a serious threat to the continued availability of fresh water and place increasing limitations on its supply. Nonetheless, drinking water in I. R. Iran is generally among the best in the Middle East—but there is huge waste of this vital resource, partly due to its low price and its use for purposes other than drinking.

Table 8.3: Water resources and use, 1998 (billion m^3)

Water resources	Volume
Average annual precipitation	413
Average annual renewable water	130
Average surface water	105
Average ground water seepage	25
Annual wastage	112
- surface water	51
- ground water	61
Annual use	87.5
- Agriculture	82
- Drinking water, urban areas	4.1
- Drinking water, rural areas	0.6
- Manufacturing and mining	0.8

Recent studies show that the exposure of water resources to pollutants—caused largely by the flow of industrial effluents into rivers and other sources, chemical contamination of ground water, and the widespread use of pesticides and chemical fertilizers—means that the likelihood of potable water being contaminated has increased somewhat.

A number of measures have already been taken to improve water resources management and to reduce water pollution, particularly of fresh water. In addition, the National Disaster Task Force is in the process of developing plans to control water wastage. Thirty sewage treatment plants are currently implementing programmes to remove chemical pollutants during the treatment process. Consideration is also being given to undertaking more fundamental programmes within the framework of a national plan of action.

A number of measures have already been taken to improve water resources management and to reduce water pollution, particularly of fresh water.

Threats to the soil

Population growth, rural to urban migration, and the low level of technology used in agricultural production have all contributed to soil erosion and degradation over the last 30 years. Major factors threatening the soil are scant rainfall; a reduction in the content of organic matter; increased salinity and alkalinity; changes in land use; and increasing volumes of industrial pollutants.

Unbalanced rainfall distribution and sudden showers causing devastating flash floods in various regions of I. R. Iran have contributed to soil erosion, rendering considerable areas of land unfit for production every year. Dry weather and increased evaporation also increase the salinity of the soil. Soil erosion in I. R. Iran is now equal to 20 tonnes per hectare, up from 10 tonnes per hectare only ten years ago; total soil erosion is estimated at 1–2 billion cubic metres a year.

Unsuitable agricultural management is largely to blame for the reduction of the soil's organic content, a diminution that has also led to increased soil salinity and alkalinity. Rapid urban expansion has reduced the area of land used for agriculture and grazing, and has led to further decline in the quality and sustainability of the soil. Industrial and domestic sewage speed up degradation by adding heavy elements such as cadmium, lead and zinc to the soil.

The absence of a comprehensive plan for soil preservation—and particularly of measures to address environmentally unsound mining practices and excessive use of herbicides, pesticides and chemical fertilizers—is a serious challenge to the protection of this important environmental asset.

Air pollution, communications and energy consumption

Air pollution poses a serious threat to human health, particularly as the causal factor in higher prevalence of respiratory disease. More than 5 million tons of pollutants were released into I. R. Iran's atmosphere in 1996, 65% of which came from motor vehicles. Another major source of air pollution is the combustion of various fossil fuels for domestic, industrial, agricultural and other uses. In 1995, domestic and commercial consumption of fossil fuels was equivalent to 211.6 million barrels of crude oil, with oil derivatives accounting for 55% of this total, natural gas 33.1%, electricity 10.6% and solid fuels 1.3%.

Table 8.4 shows the amount of emission of air pollutants from consumption of oil derivatives by immoile source in 1995. The leading industrial sources of air pollution are cement factories, steel foundries, non-ferrous metal foundries, chemical industries, brick kilns, lime furnaces and asphalt production facilities. Table 8.5

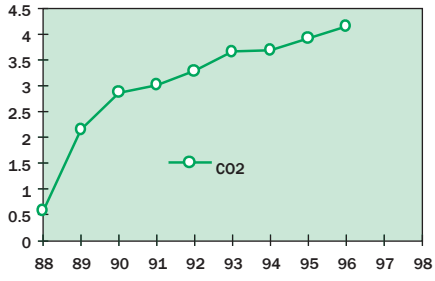
The absence of a comprehensive plan for soil preservation is a serious challenge to the protection of this important environmental asset.

Table 8.4: Emission of air pollutants from oil derivatives (immobile sources), 1995

		Pollutants (tonnes)				
Source	Consumption (thousands m^3)	Sulfur dioxide (SO_2)	Particles	Nitric oxides ($NO_{2)}$	Hydrocarbons (HC)	Carbon monoxide (CO)
Fuel oil	14,828	815,540	40,777	88,968	7,858	7,414
Gas oil	11,082	188,394	19,947	88,656	2,773	5,541
Kerosene	10,484	24,113	14,677	15,726	2,096	4,193
Total	36,394	1,028,047	75,401	193,318	12,724	17,147

Source: National plan of action for the protection of the environment, *Department of the Environment, 1999*

Figure 8.1: CO_2 emissions per capita, 1988–1997



The increasing level of CO_2 emissions in particular calls for the adoption of special measures.

shows the nature of the pollutants emitted by these industries.

Energy consumption by vehicles and the domestic, commercial and industrial sectors is one of the major sources of pollution in I. R. Iran and is particularly responsible for increasing levels of carbon monoxide, carbon dioxide, sulfur, sulfur dioxide, nitric oxides, hydrocarbons and halogens.

Air pollution, especially from motor vehicles, in Tehran (Table 8.6) and some other large cities in I. R. Iran normally exceeds the standards set by the World Health Organization and the World Bank, particularly for pollutants such as sulfur dioxide, nitric oxides, and total suspended materials (TSM).

Chlorofluorocarbon (CFC) emissions, greenhouse gases (GHG) and carbon dioxide (CO_2) also threaten air quality (figure 8.1). The increasing level of CO_2 emissions in particular calls for the adoption of special measures—especially on energy consumption and transportation—to prevent air pollution.

Because of the magnitude of the air pollution problem in Tehran, special measures have been adopted to control air quality there. For example, permanent stations have been set up by the Department of the Environment to monitor Tehran's air quality and an air quality control company has been set up by the Ministry of Oil.

Another related measure is the requirement that motor vehicles observe environmental standards on emissions. For example, the Iran Vanet Company is currently manufacturing its vehicles to the 5/04 ECE standard and has taken steps to replace its 2000 cc engines in the FE series with engines that comply. The Iran Khodro Company applies the 5/04 ECE standard and vehicles manufactured by Nissan in I. R. Iran are approaching full compliance.

More fundamental measures still have to be taken to improve the pollution situation. Such measures might include increasing the share of public transport in the transportation system—particularly through a triple system of subways, electric trolley buses and city buses—while decreasing the use of private vehicles in cities, converting public and private vehicles to propane,

Table 8.5: Major industrial activities causing air pollution

Industry	Pollutants
Steel foundries	CO; SO_2; particles
Non-ferrous metal foundries	CO; SO_2; particles
Chemical industries	CO; HC; particles; SO_2; fluorine
Casting industries	particles
Cement factories	CO; HC; SO_2; NO_2
Brick kilns and lime furnaces	CO; HC; SO_2; NO_2; fluorine; particles
Asphalt production	SO_2; particles

Source: National plan of action for the protection of the environment, *Department of the Environment, 1999*

Table 8.6: Sources and content of air pollution in Tehran, 1996 (tonnes)

Source of pollution	Total suspended materials (TSM)	Nitric oxides (NO_2)	Sulfur dioxide (SO_2)	Hydrocarbons (HC)	Carbon monoxide (CO)
Vehicular pollution	21,994	47,479	95,775	73,542	615,628
Industrial pollution	8,359	18,261	36,836	28,258	636,780
Domestic pollution	3,383	70,304	14,734	11,314	94,712

Source: Study of the country's environmental situation, Department of the Environment, 1996

and phasing out old, exhaust-emitting vehicles.

Noise pollution, a serious source of psychological distress for city dwellers, has also risen as a result of urban population growth, escalating traffic and increased industrial activity. Measures to reduce air pollution will obviously lead to a reduction in noise pollution as well, but neither can be reduced without adopting effective measures. Identifying the sources of air and noise pollution and developing a plan of action to deal with them would definitely contribute to a better quality of life, particularly in urban areas. Significant progress could be made if educational programmes geared to preventing and reducing these two types of pollution were launched, and the necessary laws and regulations were implemented.

Recommendations for improving the human environment

Tackling these threats to the human environment—notably water, soil and air—is a complex problem. A comprehensive approach is needed to take into account a wide range of issues relating to management, legislation, education and institution-building, and would have to comprise two sets of measures. Macro-level measures would address the complete range of issues involved in I. R. Iran's human environment problem as a whole, while sectoral-level measures would focus on making improvements in sectors related to water, soil and air.

Macro-level measures

A number of measures are recommended at the macro level to strengthen environmental management in I. R. Iran so that the challenges the country is facing can be tackled effectively.

- Restructure and strengthen the Department of the Environment and its affiliated institutions and committees in order to increase their ability to carry out the provisions of Articles 43 and 50 of the constitution as well as Agenda 21.
- Conduct comprehensive studies aimed at developing the laws, regulations, and quantitative/qualitative standards needed to achieve the environmental goals of the Third Development Plan.
- Assess the environmental impact of current and future development projects.
- Adopt an "ecosystemic" approach to urban development, particularly in planning municipal services and infrastructure such as transportation, housing, communications, sewerage systems and commercial areas and industrial parks.
- Use economic tools such as imposing taxes to reduce water, soil and air pollution; raising prices to curb excessive consumption of fossil fuels; and fining polluters.
- Use educational programmes and media campaigns to enhance public awareness of environmental pollution.

A comprehensive approach is needed to take into account a wide range of issues relating to management, legislation, education and institution-building.

I. R. Iran's natural environment is remarkably diverse, even though it is largely made up of deserts and arid and semi-arid plateaus and generally has scant precipitation.

Sectoral-level preventative measures

Special measures to prevent and reduce pollution also need to be applied in sectors directly related to water, soil and air.

- Expand and increase the number of air quality monitoring stations in urban areas.
- Require vehicles to meet exhaust emission standards.
- Implement pollution controls on old vehicles that emit heavy exhaust fumes and strictly enforce existing emission regulations.
- Use clean technologies in industrial activities.
- Expand natural gas delivery networks and convert vehicles to propane fuel.
- Develop and implement a national waste management programme.
- Take environmental considerations into account when locating industrial units and planning land use.
- Recycle methane gas from landfills.
- Make combustion systems more efficient.
- Improve construction and insulation techniques.
- Expand green spaces in urban areas.
- Gradually phase out subsidies on fossil fuels.
- Use natural gas and other renewable energy sources in power plants.
- Conduct environmental impact assessments for any new power plants.
- Provide facilities for developing and using solar energy systems such as discounts on customs duty, tax deductions, consumer subsidies and credit facilities for producers of these systems.
- Increase the use of public transport and reduce private car use in urban areas.
- Establish provincial water conservation councils with the participation of government officials and members of non-governmental organizations.
- Require municipalities and housing and urban development offices to respect well boundaries when preparing urban master plans and pilot plans for the construction of housing complexes, and health and sanitary facilities.
- Require farms to construct proper drainage systems for agricultural waste water.
- Draw up and implement a national plan for reducing the consumption of pesticides and chemical fertilizers, promoting the use of organic fertilizers and monitoring the import and application of agricultural chemicals.
- Require industrial units, housing complexes and hospitals to construct and use water treatment systems.
- Prevent pollution from solid waste disposal by locating landfill sites appropriately.
- Draft appropriate laws and regulations and apply innovative farm management techniques to ensure the sustainable exploitation of soil resources and farmlands.
- Prevent the conversion of fertile agricultural lands and forests to construction and industrial uses.
- Prevent direct percolation of pollutants through the soil.
- Educate the users of soil resources, particularly farmers, about the causes of soil degradation.

The natural environment and factors that threaten it

Although people—and their health and well-being—are more closely connected to the human environment than the natural environment, the importance of the latter in providing the necessary conditions for a long and healthy life cannot be ignored.

Land and marine ecosystems, an amazing variety of animal and plant species, seas, rivers, lagoons, wetlands, forests and pasture land are all elements in the natural environment and each plays an indispensable part in creating the conditions necessary for sustaining life on earth. I. R. Iran's natural environment is remarkably diverse, even though it is largely made up of deserts and arid and semi-arid plateaus and gener-

ally has scant precipitation. It has one of the richest collections of flora of the world and its lagoons are also a rich environmental resource, with a wide variety of amphibians and marine creatures, reptiles, marine birds and mammals, as well as marine plants.

The Department of the Environment, as the national authority for safeguarding the natural environment, has afforded special protection to areas that are of particular importance in terms of biodiversity in order to prevent their destruction or further degradation. These protected areas—equal to eight million hectares or about 5% of the total surface area of I. R. Iran—are shown in table 8.7.

The Department of the Environment manages ten national parks, 25 wildlife reserves and 48 protected areas. Biodiversity in these protected areas has steadily declined, however. For example, 1.2 million hectares of forest in I. R. Iran's temperate zone have been destroyed in the past 30 years. The Department of the Environment has insufficient resources to prevent this degradation effectively.

Policies and programmes for biodiversity preservation go back several years, but it was the special importance given to lagoons that led to I. R. Iran's accession to the Convention on Lagoons in 1996. This government decision could strengthen preservation of the country's biodiversity considerably in coming years, provided I. R. Iran respects the commitments it made under the convention.

Forests, pasture land and seas are three of the country's major natural resources, but the trends affecting them call for special attention.

Forest and pasture land

The area covered by forest has shrunk over the last 20 years, but I. R. Iran still has 12.4 million hectares of forest covering 7.4% of its total surface area. There are about 90 million hectares of pasture land; its total annual output is estimated at 30 million tonnes although its potential output is thought to be at least 50 million tonnes.

Table 8.7: Protected natural areas in I. R. Iran (millions of hectares)

	Area	% of total area
National parks	1.1	0.7
Wildlife reserves	1.9	1.2
Other protected areas	5	3
Total	8	4.9

Source: National report, *Department of the Environment.*

There are about 34 million hectares of desert in I. R. Iran. Increasing aridity over the long term has resulted in a steady process of desertification that threatens most parts of the country—a process that is exacerbated by land degradation and soil erosion. Although desertification is mostly the result of climatic conditions, the human factor cannot be discounted. Population growth has increased demand for agricultural products, leading to the conversion of forests and pasture lands to agricultural use. Because forests and pasture lands are natural barriers against the desert, their removal has accelerated desertification throughout I. R. Iran. Furthermore, as need for animal products has grown, herds have become larger and grazing practices more intense and less well rotated, in turn causing the country's pasture lands to degrade and shrink.

Following the victory of the Islamic Revolution, the Forests and Range Lands Organization took serious steps aimed at reversing this trend, and implemented a number of projects to improve the development and management of I. R. Iran's pasture land. Under a new pasture land management system, 11 million hectares have so far been transferred to pasture land developers—a measure that has proved remarkably effective in terms of preservation. However,

Following the victory of the Islamic Revolution, the Forest and Range Organization took serious steps to improve the development and management of I. R. Iran's pasture land.

more initiatives are still needed to preserve forests and pasture land.

Seas

The Caspian Sea in the north and the Persian Gulf in the south are important natural environmental resources for I. R. Iran. The Caspian Sea is a closed marine ecosystem under constant environmental pressure by pollutants from the coastal regions as well as offshore oil installations. Pollution from coastal sources is due mainly to the lack of sewerage systems in some of I. R. Iran's northern cities and the consequent release of domestic and industrial effluent into the sea through coastal rivers. The Caspian Sea also faces numerous environmental threats from oil extraction in the littoral states. Preventing oil pollution in the Caspian Sea is one of the major challenges to be addressed through regional cooperation. Microbial pollution caused by fluctuations in the sea level is also of great environmental importance and requires attention.

The responsible authorities need to take serious measures to prevent further environmental degradation in the Persian Gulf.

The Persian Gulf also suffers from pollution because of the high volume of oil exploration and extraction operations and the number of tankers sailing its waters. Pollution of this important waterway was aggravated by attacks on oil platforms and offshore oil installations during the Imposed War. In 1980 alone, some 144,000 tonnes of oil spilled into the Persian Gulf; 60% of this came from maritime accidents, 22% from offshore operations, and 9.6% from natural oil leakage. Oil pollution has stunted the growth of hard-shelled creatures and other forms of marine life and destroyed coral and other seabed plants in parts of the Persian Gulf. Pollution from industrial waste and chemical fertilizers entering the sea through coastal rivers adds to the problem. The responsible authorities need to take serious measures to prevent further environmental degradation in the Persian Gulf.

The widespread destruction of forests and pasture land has already sounded alarm bells.

Recommendations for the protection of the country's natural environment

Environmental threats, particularly to biodiversity, forests, pasture lands and the seas, require serious measures to be adopted. Some of the most important of these are:

- Increase public awareness of the threats to the natural environment and their impact on the people's lives and, in particular, those of future generations.
- Strengthen the Department of the Environment's powers to implement the national biodiversity programme, and promote cooperation among agencies and organizations dealing with natural resources to this end.
- Prepare a comprehensive inventory of I. R. Iran's flora and fauna, identifying rare plant and animal species.
- Extend protected areas to cover up to 10% of the surface area of I. R. Iran to protect genetic resources and biodiversity.
- Control and monitor the exploitation of endangered species.

The widespread destruction of forests and pasture land has already sounded alarm bells. If serious protective measures are not taken soon, future generations of Iranians may be deprived of the contribution these resources make to prolonging their life and protecting their health. The worrying environmental situation calls for new initiatives to preserve forests and pasture lands and prevent pollution in the Caspian Sea and the Persian Gulf. Some of the most important policies for achieving this are:

- Prohibit the use of forests or pasture lands for industrial projects without prior environmental impact assessment.
- Conduct necessary studies on the proper siting of industrial units and on road and dam construction to prevent further destruction of forests and pasture land.
- Implement watershed development projects to prevent destruction of forests and pasture lands by flooding.

- Encourage public participation in forest preservation, particularly by local communities.
- Prepare a national plan to counter oil-related marine pollution and provide coastal areas with the necessary equipment to combat oil pollution.
- Deploying a coastal guard corps for the protection of the country's marine environment.
- Formulate and strictly enforce the standards needed to safeguard I. R. Iran's marine environment.
- Construct and expand domestic and industrial waste collection and treatment systems in the Caspian Sea and Persian Gulf basins.

Management of environmental affairs

Proper environmental planning and control are the most effective tools the government can use to tackle the numerous environmental challenges facing I. R. Iran, but these require capacity-building in policy-making, planning, institution-building and human resource development.

Institutional mechanisms and legal frameworks

The development and implementation of the National Plan of Action for Environmental Protection reflects the importance accorded to environmental issues in I. R. Iran. The National Committee for Sustainable Development, which comprises eight sub-committees, is the lead institution in environmental strategy and policy development. The committee is made up of sixteen officials from the Ministries of Housing and Urban Development, Industry, Agriculture, Foreign Affairs, Education, Health and Medical Education, Oil, Energy and Construction Jihad; the Academy of Sciences and Communications; and the Plan and Budget Organization. Its principal responsibilities are to:

- review the National Strategy for Sustainable Development and make policy proposals to the High Council of the Environment;
- establish and develop a databank and documentation centre in accordance with the provisions of Agenda 21 and in cooperation with other countries of the region;
- design and propose projects to implement the National Strategy for Sustainable Development; and
- provide executive planning for joint projects related to international environmental conventions and the provisions of Agenda 21, in cooperation with other countries of the region.

The Department of the Environment is the national authority responsible for protecting and improving I. R. Iran's environment and preventing environmental pollution. This organization is charged by law to issue standards on air, water and soil quality and noise levels. The High Council of the Environment is the country's highest policy-making institution for environmental issues.

If I. R. Iran's environmental affairs are to be managed properly, the structure and powers of these institutions need to be reinforced so that they can carry out their responsibilities, particularly in relation to the provisions of Agenda 21. An effective step in this direction would be to change the relationship between these institutions and other agencies involved, one way or another, in environmental issues, making it obligatory for the latter to observe and implement their decisions.

Environmental laws and regulations are also important elements in the management of environmental affairs, and these have been evolving rapidly since 1971. The Environmental Protection Act was ratified in 1974 and enacted the following year. Since the victory of the Islamic Revolution, greater importance has been accorded to environmental laws and regulations; indeed, I. R. Iran is one of the few countries

Indeed, I. R. Iran is one of the few countries in the world to have a special article in its constitution on environmental protection.

in the world to have a special article in its constitution on environmental protection.

Article 50 of the constitution states that it is a public duty to protect the environment in order to assure the well-being of present and future generations. Accordingly, all activities that pollute or irreparably damage the environment are prohibited.

The "Development of a Green Economy" initiative announced by the Islamic Republic in 1990 illustrates the link that environmental legislation makes between the environment and the economy. The First and Second Development Plans also took this integrated approach.

The "Development of a Green Economy" initiative announced by the Islamic Republic in 1990 illustrates the link that environmental legislation makes between the environment and the economy.

One of the most effective legal measures to harmonize economic growth with environmental protection—a fundamental requirement for sustainable development— is the formulation of legislation on environmental impact assessment, an effective tool for measuring the environmental impact of a project before it is actually launched. Article 50 of the Constitution states that all development projects must undergo environmental impact assessment. Likewise, Decision 138 (1995) of the High Council for the Environment requires an "environmental assessment report" on all major development projects to be submitted before they are implemented. Although some projects have already complied with this decision, further binding regulations and standards are required to ensure its universal application. Legislation in this area should facilitate access to necessary information, provide for training of specialized personnel, and clearly define the penalties for violations of the law.

The Islamic Republic has also developed legislation and executive mechanisms to protect the human environment (box 8.2).

Existing regulations on air, water and noise pollution and waste and sewage disposal have contributed to the creation of a body of legislation for managing the human environment. There is still a critical need for additional legislation, however, particularly in connection with new technologies.

The efficiency and effectiveness of I. R. Iran's environmental management system undoubtedly would be improved if new laws were developed and enacted, but the only way to guarantee practical results is to encourage participation by the public and non-governmental organizations in environmental affairs.

Popular participation in environmental affairs

The public's participation in environmental affairs and the help it can give the

Box 8.2

Laws and executive mechanisms to protect the human environment

Target area	Scope	Relevant legislation	Agency responsible
Pollution as a whole	Planning for pollution control; development of environmental quality standards; formulation of environmental pollution control programmes	Environmental Protection and Improvement Act and its executive bylaws	Department of the Environment; Ministry of Health
Air pollution	Formulation and implementation of standards on factory emissions	Clean Air Act	Department of the Environment
Water pollution	Formulation and implementation of the Qualitative Standards Act for Factory Sewage; control of water pollution by sewage	Water Pollution Control Act and regulations relating to oil pollution and sanitation	Department of the Environment; Ministries of Energy, Oil, and Health
Noise pollution	Development and implementation of standards on factory, vehicle and construction-site noise, and measures to control noise from aircraft.	Noise Adjustment Act and the relevant regulations	Department of the Environment

government are tremendously important in environmental management today. In I. R. Iran, youth, women, the owners of production and industrial units and non-governmental associations are all involved in efforts to protect the environment.

Youth participation embraces the "Young Cooperators" scheme, school meetings on environmental issues and the work of environmental activists in I. R. Iran's schools. Women's participation in environmental affairs has been less significant, however. There are many opportunities to enlist women's involvement by raising their awareness of environmental issues such as the hazards caused by detergents and other domestic products and by improper use of agricultural chemicals in rural areas.

The role of industrial and production units in reducing environmental pollution has not been institutionalized, but managers of these units could, by rigorously applying environmental standards, play an important part in decreasing the inappropriate discharge of industrial effluent as well as limiting harmful factory emissions.

Although non-governmental organizations (NGOs) concerned with environmental issues are not yet sufficiently developed in I. R. Iran, there are signs that they are on the increase. Existing environmental NGOs include the Green Front, which was established in 1991, the Association of Environmental Specialists, and the Women's Society for the Campaign against Environmental Pollution, founded in 1994. These groups have been engaged primarily in educational and publicity activities.

Given the enormity and nature of the environmental challenges facing I. R. Iran, it is essential for ordinary people to get involved in preventing pollution and managing environmental issues. Indeed, it will simply be impossible to solve many of the current environmental problems without the enthusiastic public input.

The active participation and cooperation of the industrial and manufacturing sectors is also vital, given the role of industrial pollutants in pollution as a whole. The commitment of producers and manufacturers to observing environmental standards strictly is a basic requirement of enforcing laws aimed at preventing air, water and soil pollution and protecting I. R. Iran's natural environment. The establishment and expansion of environmental consultancy firms to advise producers and manufacturers on their compliance with these standards is of special importance here.

Since public awareness of environmental issues plays a crucial role in preventing pollution, NGOs involved in awareness-raising need to be supported by the government—and particularly by the Department of the Environment. Another way to secure NGO participation in environmental affairs is to have NGOs include environmental objectives in their national terms of reference. The mass media also have an absolutely key part to play in heightening public awareness of environmental issues and promoting public participation in environmental protection.

International cooperation

The environmental challenges facing I. R. Iran cannot be addressed without regional and international cooperation. This is particularly true of the problems facing the marine environments of the Persian Gulf and the Caspian Sea. Foci of international cooperation in other areas might be phenomena like climate change and global warming.

I. R. Iran has taken several measures to enhance international cooperation. In 1998, for example, it hosted an international conference on lagoons and marine birds in Ramsar that cleared the way for international studies on Anzali Lagoon, one of the most important ecosystems in the world. I. R. Iran's signature of the Rio Statement at the 1992 Earth Summit in Brazil was another of its contributions to international

Although non-governmental organizations (NGOs) concerned with environmental issues are not yet sufficiently developed in I. R. Iran, there are signs that they are on the increase.

environmental cooperation. The country has implemented numerous environmental projects in cooperation with international agencies, and has also been working within the Global Environmental Facility and the Montreal Protocol to curb desertification and protect both the ozone layer and biodiversity.

I. R. Iran has a number of ongoing and pipeline projects in these areas, the most important of which are:

- Preparation of a framework strategy for sustainable development and environmental protection.
- Design of national guidelines for environmental impact assessment of development projects in preparation for the drafting and implementation of executive guidelines.
- Establishment of the Ozone Layer Protection Centre under the auspices of the Department of the Environment to monitor and coordinate activities carried out under the terms of the Vienna Convention and the Montreal Protocol.
- Study of vehicular pollution in Tehran.
- Updating technical know-how on refrigerator and sponge production.
- Protection, preservation and appropriate use of a number of I. R. Iran's important lagoons.
- Exploitation of natural energy resources and aeolian power.
- The Carbon Sequestration Project aimed at preventing desertification by planting native forests in desert areas.

I. R. Iran is engaged in international cooperation at the regional level through its membership of the Economic Cooperation Organization (ECO) and the Economic and Social Commission for Asia and the Pacific (ESCAP). Cooperation at this level is mainly conducted through workshops, short-term training courses, seminars and conferences.

Even though international cooperation on environmental issues has been expanding in recent years, challenges remain that require urgent action; cooperation on the Caspian Sea's environmental problems is particularly vital.

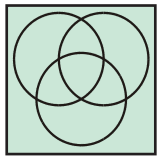
I. R. Iran has cooperated with the littoral states of the Persian Gulf and the Oman Sea under the auspices of the Regional Organization for the Protection of Marine Environment (ROPME) on a number of projects aimed at the protection and sustainable development of the region's sensitive and endangered ecosystems.

Increasing pollution of the Caspian Sea and the Persian Gulf is mostly related to oil exploration and extraction and pose an important challenge for the littoral states.

Increasing pollution of the Caspian Sea and the Persian Gulf is mostly related to oil exploration and extraction. Plans to lay seabed pipelines in the Caspian Sea to carry regionally-produced oil and gas raise the possibility of additional environmental problems and pose an important challenge for the littoral states. There is scope for expanded regional and international cooperation in this sphere.

- Work towards developing regional programmes and agreements on the protection of the Caspian environment.
- Cooperate within the relevant convention on tackling oil pollution.
- Update and reinforce the equipment needed to combat oil pollution and contain and mop up any oil spills.
- Participate actively in regional and international organizations dedicated to protecting the marine environment in order to establish relations with neighbouring littoral states to share experience and prepare the necessary regulations.

Chapter 9



Narcotic Drugs

Introduction

The spread of drug abuse, especially among young people, is detrimental to human development because of its deleterious effect on health, social life and education. The coordinated effort of the global community to combat drug abuse and deal with its consequences under numerous international agreements reflects the collective will to control this phenomenon—one which poses a formidable obstacle to the development of the individual and society alike.

In keeping with the high ideals of Islam and humanity, and in order to create the best possible conditions for young people to realize their potential, the Islamic Republic of Iran considers the struggle against drug abuse to be a national priority.

Because of its geographic proximity to the major drug production centres, I. R. Iran has become a transit zone for traffickers, giving Iranians easy access to narcotic drugs—one of the chief reasons for the spread of drug abuse in the country. Another factor is the youth of the population, immigration, expanding urbanization, a paucity of leisure activities, and economic hardship. Peer pressure, simple curiosity and an urge to take risks also underlie the desire to experiment with narcotic drugs.

Drug abuse: the situation in I. R. Iran

There are no precise figures on how many drug abusers there were in Iran before the revolution, and available data paint a contradictory picture. Nonetheless, a report published in 1943 by the Association for Campaigning against Opium and Alcohol estimated the number of addicts at 1.5 million (11.7% of the population at the time).

According to reports by the Drug Control Headquarters, data such as the number of people convicted of drug-related crimes and the number of addicts using the State Welfare Organization's treatment units and information supplied by rehabilitation centres, there were 1.2 million addicts in I. R. Iran in 1997.

The State Welfare Organization conducted a survey of drug abuse in 1998–1999 in cooperation with the United Nations Drug Control Programme (UNDCP). Preliminary results of *A Quick Assessment of the State of Drug Abuse in Iran* indicate that 93.4% of the addicts were 23 to 44 years old, 56.7% were married, and 94% lived either with their own families or their parents. Most abusers had not obtained a high school diploma, and 12.4% were illiterate. The most prevalent drugs of abuse were opium (73.3%) and heroin (39.4%). The study also pointed to a shift in the traditional pattern of drug abuse in I. R. Iran away from opium and towards heroin: 16% of the survey respondents had used injected drugs in the previous month. Intravenous heroin use was more prevalent among addicts who lived in urban areas, and who had convictions or prison records. Half of those who used injected drugs reported sharing needles.

Twenty percent of the respondents were unemployed and 25% were labourers.

In keeping with the high ideals of Islam and humanity, and in order to create the best possible conditions for young people to realize their potential, the Islamic Republic of Iran considers the struggle against drug abuse to be a national priority.

The track record of legal policy aimed at curbing drug abuse in Iran shows that they have not been particularly successful. This may be attributable either to their failure to address demand reduction or to their concentration on bans and penalties, with only limited provision for addiction treatment.

Urban addicts were generally older and mostly employed, although 25% of them depended on illegal income to support their habits. The vast majority—94.4%—of the addicts were tobacco smokers, having started smoking between the age of 13 and 24.5.

The youngest age of addiction reported by respondents was 15; the oldest was 30. These thresholds were higher for women.

Most of the addicts started with opium, usually smoking it in parties and family gatherings and, in some cases, in public places or at work. The reasons the respondents cited for beginning to use drugs were the influence of friends, curiosity and a desire to have fun, with pain relief and family, educational, and social problems also playing a part. All the respondents said that easy access to drugs and a lack of family or parental control were precipitating factors.

Generally speaking, drug abuse in I. R. Iran does not seem to follow a particular pattern in terms of age or socio-economic status. Although some social groups are at more risk than others, national-level research is needed to identify accurately the factors leading to addiction.

Laws to combat drug abuse

In August 1997, in line with the priority accorded to combating drug abuse and drug trafficking in I. R. Iran, the Cabinet of Ministers established the Drug Control Headquarters, giving it responsibility for all measures—including formulating policies and guidelines, and planning—aimed at reducing the supply of and demand for narcotics.

The first Iranian anti-narcotics law was enacted in 1910. All the laws adopted in the last 90 years have been aimed at restricting the cultivation, production, import, export, distribution, trade and consumption of narcotic drugs.

The economic and social effects of a ban imposed by the previous regime on poppy cultivation—an increase in illicit opium and heroin trafficking, a rise in the addiction rate and a shift in the traditional pattern of abuse towards heroin use, all of which had health, economic and social fallout—forced the government of the time to allow cultivation to resume on a limited scale (the quota was 33,000 hectares of land) and permit the Ministry of Health to distribute opium rations to addicts. The regime also imposed heavier penalties for drug trafficking. The new law was adopted solely in response to the economic and social effects of the total ban, however, and failed to take the country's health care and rehabilitation facilities into account.

The net effect of the law was that by the advent of the Islamic Republic, 170,000 addicts had been issued ration cards—but while the minimum age required to obtain a ration card was 60, most addicts were actually between 40 and 45 years old. This suggests that rather than limiting addiction, the rationing policy might have helped increase it.

In 1979, just after the victory of the Islamic Revolution, the Revolutionary Council ratified the Aggravation of Penalties of Drug-related Offenders Act. The Act terminated the system of ration cards and government distribution.

The track record of legal policy aimed at curbing drug abuse in Iran shows that they have not been particularly successful. This may be attributable either to their failure to address demand reduction or to their concentration on bans and penalties, with only limited provision for addiction treatment.

A new law against drug abuse was ratified by the Expediency Discernment Council immediately after the end of the Imposed War and in November 1997 an amendment defining addiction as a criminal act was adopted. Nonetheless, all addicts have the opportunity to be admitted to rehabilitation

centres licensed by the Ministry of Health and Medical Education, and as long as they are under treatment they are exempt from prosecution.

This amendment was the first legal measure to take a preventive approach to addiction, and it included the terms of reference of the Drug Control Headquarters. Article 33 of the law had provided for the establishment of a drug control entity under the chairmanship of the president; it would be responsible for all measures aimed at preventing addiction and combating the drug problem in all its guises—including trafficking, production, distribution, sale and use—as well as executive and judicial affairs, preventive programmes, public education and anti-drug campaigns.

To ensure a comprehensive response to the drug abuse problem, the Drug Control Headquarters comprised the Ministers of the Interior, Health and Medical Education, and Culture and Islamic Guidance, Information, Education; it would also include the Public Prosecutor, the Head of the Islamic Republic of Iran Broadcasting Organization, the Commander of the Mobilization Forces, the Commander of the Police, the Head of the Prisons Organization and Security Affairs, and the Head of the Revolutionary Court.

Two key challenges in demand reduction are first, to clearly define the mandate and responsibilities of the agencies involved, and second, to ensure consistency in educational institutions' demand-reduction programmes, particularly those in medical universities.

Measures to reduce demand for narcotic drugs

The first steps to reduce demand were taken in the 1970s when measures for the treatment of opium addicts were adopted, but after the revolution I. R. Iran lacked a clearly defined and cohesive demand-reduction programme.

The State Welfare Organization was the first to take a comprehensive approach to preventing and treating drug abuse when it developed its programme in 1994. Since then, the State Welfare Organization has rapidly expanded its operations by recruiting specialized staff, implementing preventive programmes in a number of provinces, expanding self-help services among addicts, publishing printed materials and producing educational films. All of these activities highlighted the importance of demand reduction and led the country's planners, the Drug Control Headquarters among them, to consider a similar approach.

The first five-year plan to reduce demand for narcotic drugs was formulated in 1998 by the deputy ministers of the Ministry of Health and Medical Education in cooperation with the Drug Control Headquarters and the State Welfare Organization. The plan provides the framework for the work of all the agencies involved in demand-reduction activities. The plan contains specific strategies aimed at improving the quality and inclusiveness of preventive activities at all levels of society and, on the basis of a comprehensive approach to the drug-abuse problem, improving the quality of treatment and rehabilitation programmes for drug abusers and addicts.

The first five-year plan to reduce demand for narcotic drugs was formulated in 1998 by the deputy ministers of the Ministry of Health and Medical Education in cooperation with the Drug Control Headquarters and the State Welfare Organization.

The five-year plan focuses on the following policy measures to upgrade its demand-reduction efforts:

- Adopt of a comprehensive approach to the phenomenon of drug abuse that takes its physical, psychological and social aspects into account and recognizes the need for both preventive and curative measures. At the same time, emphasize educational and awareness programmes, especially for adolescents, which are sensitive to the ethnic, cultural, economic and social issues affecting their target groups in various regions.
- Apply sound economic management to programme implementation, ensuring

that available resources are distributed among the regions according to need. Also encourage people to subscribe to programme goals by increasing capacity in health care centres by applying the latest, proven techniques for drug-abuse prevention and treatment. Finally, continually evaluate programme performance.

- Use existing capacity to the maximum in order to raise awareness and skills among at least 50% of those considered to be vulnerable, and ensure programme coverage of at least 50% of those at risk.
- Raise the awareness and skills of 50% of the Ministry of Education's teaching staff, 20% of parents whose children are of school age, and 100% of the country's health instructors, health liaison personnel and other health workers so that they are able to give prevention education to the groups with whom they work.
- Identify drug abusers and provide them with the necessary services.
- Raise the awareness of all prison inmates about the disastrous consequences of intravenous drug use (and the possibility of spreading them to the population outside prisons), particularly emphasizing killer diseases such as AIDS, hepatitis and tuberculosis, and the importance of health and sanitation.
- Since carefully designed crisis-intervention measures are economically justifiable and have the added benefit of boosting prevention activities, incorporate them into demand-reduction programmes. I. R. Iran is planning to offer 100% crisis intervention coverage.
- I. R. Iran estimates that it will, through its various programmes, be able to provide treatment and rehabilitation services to all addicts who request them—probably about 10% of all addicts every year. In order to achieve this, it is bringing the number of its 24-hour outpatient treatment and rehabilitation centres to 60 and is taking measures to allow the establishment of private addiction treatment centres.
- In addition, arrangements are now in place to provide retraining and specialized seminars on addiction for psychiatrists, general practitioners, medical specialists, and paramedical personnel. The twin aim of these seminars is to give health care professionals the skills they need to help drug abusers give up their addiction, and to prevent the prescription of inappropriate medication. So far, the State Welfare Organization has held more than ten seminars and workshops on addiction prevention, treatment and rehabilitation in cooperation with medical universities and associated institutions.

At the moment, though, one of the major obstacles to reducing demand for narcotic drugs is the sheer shortage of facilities.

At the moment, though, one of the major obstacles to reducing demand for narcotic drugs is the sheer shortage of facilities. Although the government is legally required to provide addicts with treatment and rehabilitation services as rapidly as possible, the number of addicts needing help and the country's limited medical and rehabilitation capacity means that this expectation is far from realistic. The absence of the private sector and civil society organizations in programmes aimed at reducing drug abuse is another limitation.

Today, self-help groups are considered to be one of the most effective components of treatment and rehabilitation programmes and are used as a yardstick of their quality. Bringing people who are trying to free themselves of drug addiction into self-help groups might bring the treatment success rate to 100%. In contrast, the absence of such groups might well condemn treatment efforts to failure. Consequently, the expansion of self-help programmes is one of the key objectives of the overall demand-reduction strategy.

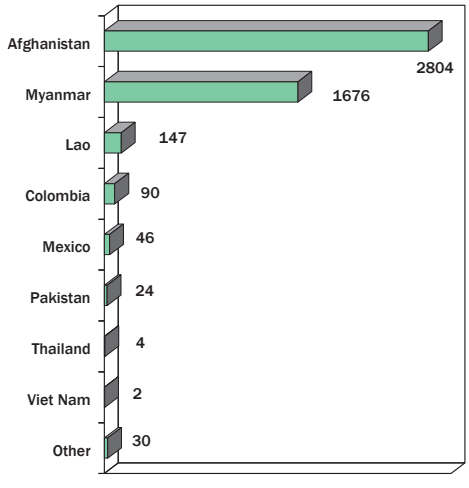
Recognition of the effectiveness of non-governmental organizations in encouraging people to adopt a drug-free lifestyle prompted the establishment in 1998 of the

Sun Society, whose goal is to promote a drug-free society. Another non-governmental organization called The Society for the Struggle against Addiction recently launched its activities in Tehran and the provinces with the slogan "a better tomorrow built on a better understanding between you and me."

Results of controls on narcotic drug supply and trafficking

The fight against the supply and trafficking of narcotics has been high on I. R. Iran's agenda for 20 years. Anti-drug activities in this period has led to a dramatic decline in domestic supply of narcotic substances. Meanwhile, however, Iran's neighbours to the east—Afghanistan and Pakistan—have become the principal sources of supply and trafficking , and I. R. Iran is now a transit route to European markets. The position of Afghanistan and Pakistan in global drug production lends context to I. R. Iran's achievements in controlling the supply and transit of narcotic drugs at the regional and international levels.

Figure 9.1: International rankings in illicit opium production, 1997 (tonnes)



Source: UNDCP, 1997.

Afghanistan is the world's leading opium producer. After a sixfold increase between 1986 and 1998, its annual production is now more than 3,000 tonnes (figure 9.1).

Pakistan was also one of the world's top producers of illicit opium; by 1998, its total production had fallen to 24 tonnes from 800 tonnes in 1980. In addition to opium, Pakistan and Afghanistan also produce about 150 tonnes of heroin between them.

Tackling the transit of narcotic drugs through I. R. Iran is a complex problem, because

- the largest source of production of narcotic drugs happens to be on I. R. Iran's eastern border;
- the eastern part of the country is a vast desert;
- Afghanistan and Pakistan have a common border;
- the people living in the areas bordering on Pakistan and Afghanistan have a close-knit tribal relationship;
- gangs of drug traffickers have a wide array of weaponry and telecommunications equipment as well as a large pool of cheap labour; and
- transiting narcotics to European markets involves huge profits.

The fight against the supply and trafficking of narcotics has been high on I. R. Iran's agenda for 20 years.

Simply by virtue of its geographic location, I. R. Iran is the chief transit route for narcotic drugs from Afghanistan and Pakistan to Europe. In 1988, to prevent these shipments entering the country and being carried further abroad, I. R. Iran began erecting physical barriers along 1,925 kilometers of its borders with Afghanistan and Pakistan—at tremendous cost to the country. In addition to this enormous financial investment, as many as 30,000 troops and law enforcement personnel have been deployed along the eastern frontier—and more than 2,800 have been martyred in the battle against drug trafficking.

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Drug seizures made by the Islamic Republic clearly reflect its efforts to control regional and international supply and transit. According to Interpol, European drug

seizures were 30% down in 1997, but they were up 100% in I. R. Iran that year—at a time when Afghanistan's production was growing substantially. Ever since the victory of the Islamic Revolution, drug hauls have generally been increasing, but because of volatility in the region, and especially in Afghanistan, it has not been a stable trend.

Since the revolution, the volume of drugs seized from traffickers increased from 348,450 kilograms (1979–1988) to 1,182,386 kilograms (1989–1998), indicating I. R. Iran's remarkable success in staunching the flow of illicit drugs to European countries. It is noteworthy that from 1990 to 1996, 70% of contraband opium and 90% of illicit morphine seizures were made in I. R. Iran.

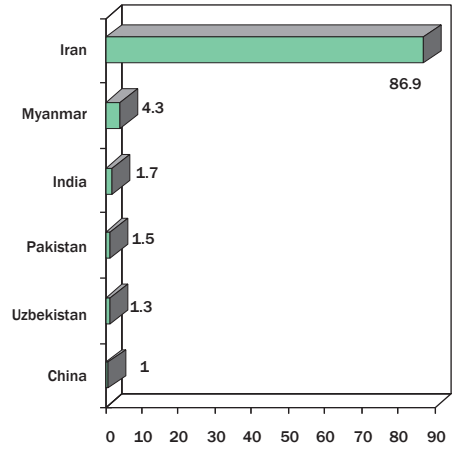
Indeed, the Islamic Republic of Iran's first-place international standing in terms of opium seizures—86.9% of the total haul in 1998—throws the country's achievements in controlling drug trafficking into relief.

Indeed, the Islamic Republic of Iran's first-place international standing in terms of opium seizures—86.9% of the total haul in 1998—throws the country's achievements in controlling drug trafficking into relief (figure 9.2). Another indicator of its efforts is the upward trend in the number of drug traffickers arrested in I. R. Iran (figure 9.3). Of course, this trend also points to an increased level of drug trafficking activity.

The most important challenges in tackling the problem of narcotic drugs trafficking through I. R. Iran are massive poppy cultivation in Afghanistan, booming drug markets in European countries, long borders with Afghanistan and Pakistan, and the high cost of maintaining nearly 2,000 kilometers of physical barriers along them.

Creating a comprehensive, national and provincial-level data system and properly equipping border guard and law enforcement bases in frontier areas are two crucial initiatives to be taken to meet these challenges and prevent narcotic drugs from entering and then transiting through I. R. Iran. But these initiatives will be simply inadequate to deal with the problem unless extensive regional and international cooperation is achieved.

Figure 9.2: International rankings in seizures of illicit opium, 1998 (percent)



Source: UNDCP, 1998.

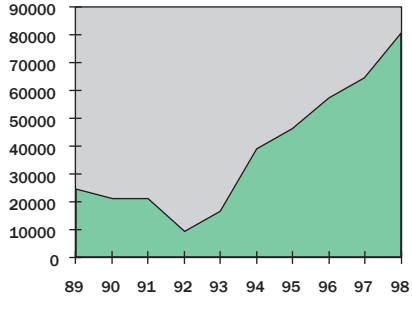
Expanding regional and international cooperation

Addiction is a health and social problem that affects the entire world, even if its root causes and its consequences may vary from country to country. Governments are now making serious efforts towards curbing the production and smuggling of narcotic drugs, but the most effective way to counter the scourge is to coordinate and balance measures aimed at reducing demand and supply. National efforts to prevent drug use and treat and rehabilitate drug addicts are most effectively served by pursuing the policies outlined in short-, medium- and long-term plans, and faithfully carrying out the strategies adopted under the auspices of international conferences and institutions. This perseverance will also contribute to the overall success of the fight against the abuse and trafficking of narcotic drugs.

Iran acceded to international conventions in 1961 (Single Convention on Narcotic Drugs), 1971 (Convention on Psychotropic Substances) and 1988 (United Nations Convention against Traffic in Narcotic

Drugs) and also participated in the United Nations General Assembly meeting on drug abuse in 1998. As an Interpol member, the Islamic Republic also coordinates with various countries in the fight against drug trafficking and continually exchanges information with them. Effective cooperation is also taking place regionally in the Economic Cooperation Organization (ECO) and among I. R. Iran, Pakistan and Tajikistan.

Figure 9.3: Arrests of drug traffickers in I. R. Iran, 1989–1998



In view of I. R. Iran's geographic location, the hundreds of millions of dollars the country has invested in its eastern border areas and the additional millions of dollars it shoulders every year to resist drug trafficking, the United Nations Drug Control Programme (UNDCP) is helping I. R. Iran establish a security zone along its eastern frontier. UNDCP and I. R. Iran have also concluded agreements on the provision of educational and research programmes that, it is hoped, will increase the participation of different social groups in I. R. Iran's campaign against the use of narcotic drugs.

The international community, in recognition of I. R. Iran's important role in checking the passage of narcotic drugs from Afghanistan to other countries, has started to pay serious attention to the need to create a security zone around Afghanistan to control the supply and transit of these substances.

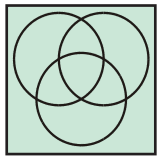
Important strategies in which international support would be valuable are to strengthen the physical barriers along the eastern border, and to step up I. R. Iran's anti-drug campaign.

Other areas for regional and international cooperation are to neutralize drug gangs and arrest their leaders by the four mechanisms proposed in the 1998 International Convention on Drug Control, namely exchange of information, judicial cooperation among countries, confiscation of assets acquired through illicit drug trafficking and controlled delivery.

Regional and international cooperation is also of great importance in preventing narcotic drug use and reducing demand. Comparative studies on drug consumption patterns in ECO member states and appraisals of nearby countries' experience in combating substance abuse would both contribute to the formulation of national anti-addiction plans. Other items on the agenda for cooperation with international organizations involved in the fight against illicit drugs might be educational programmes to train required specialists and, in cooperation with the World Health Organization, research on the role of addiction in the spread of infectious diseases like AIDS and hepatitis.

The international community, in recognition of I. R. Iran's important role in checking the passage of narcotic drugs from Afghanistan to other countries, has started to pay serious attention to the need to create a security zone around Afghanistan to control the supply and transit of these substances.

Chapter 10



Political Development and Economic Reform: A New Agenda for Human Development

Introduction

The approach used in this report to the analysis of human development trends was based on a redefinition of the concept of human development which emphasizes the role of an enabling social environment in enlarging human choices. Scrutiny of the Islamic Republic of Iran's human development over the past 20 years shows that an enabling environment for citizens' educational attainment and improved health was created largely through high expenditure—primarily by government—in these areas. Significantly, progress in health and education has been the primary reason for human development gains in I. R. Iran. In the meantime, however, per capita income has failed to grow enough in the last 20 years to have a major impact on human development indices. It is clear, therefore, that the most crucial factor in the advancement of human development in I. R. Iran in the coming years will be the creation of an environment conducive to economic growth.

Political development and economic reform are the two indispensable elements in the creation of such an enabling environment—but to be effective, the one must be integrated with the other. Experience in I. R. Iran and around the world shows that economic reform is contingent on political and legal reform. Moreover, political development has to be harnessed to economic reform so that they can compensate for the social costs inherent in the transition to a competitive economy.

Coordination, then, between political development and economic reform could be seen as the cornerst one of the new agenda for achieving a higher level of human development in I. R. Iran. The identification of the conditions needed for this integration draws first, on the cultural background of democratic development in I. R. Iran; second, on a description of the mechanisms for political development that were introduced after the Islamic Revolution and their relation to the country's economic and social performance; and third, on the background to the developments of the last two years, particularly the public's enthusiastic approval of the programmes put forward by the new government, and the role of the Third Development Plan in them.

Finally, recommendations are made on how to achieve integrated political economic reform aimed at improving the country's overall and adjusted human development indices.

Historical background

Social change in Iran over the last century has been shaped by the numerous ups and downs in the country's modernization process. Two major cultural tendencies—one emphasizing the importance of maintaining Islamic values and national identity, the other taking advantage of the achievements of modernity—have had a profound influence on the country's political and economic structures. These two tendencies were able to attain a modicum of convergence with the establishment of the Islamic Republic. Now, though, new challenges have to be

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met to increase it—notably the creation of a model based on a transparent relationship between the rights of the state and the rights of the citizens, and a clear definition of the internal relationship among the three branches of government.

Cultural changes and the development of a democratic society

The growing compatibility between religion and democracy has been the most important aspect of democratic development in I. R. Iran over the last 20 years.

It is now a universally accepted principle that a society's political development must be attuned to its cultural identity. The 1996 report of the World Commission on Culture and Development emphasizes that concepts of development and modernization should be based on cultural values and social science. It is to be inferred from the report that only though constructive interaction with national and religious values will the establishment of democratic institutions result in the creation of an enabling environment.

The growing compatibility between religion and democracy has been the most important aspect of democratic development in I. R. Iran over the last 20 years. Indeed, early acknowledgement of the harmony between these two models influenced the formulation of the constitution, enabling the creation of a state whose keystones are Islam and republicanism. The creation of such institutions as the presidency and the Islamic Consultative Assembly and the separation of the three branches of government sprang from the interaction between the political doctrine of Islam and the achievements of modernity. It is now keenly important for the development of democratic society in I. R. Iran to attend to the role democracy is to have in correcting government policy and assuring the transparency of the state as a whole.

Political development after the victory of the Islamic Revolution

Cultural and especially political developments in I. R. Iran in the last 20 years have profoundly affected the country's social and economic performance, and this, in turn, has influenced the course of human development. Political development is realized by mechanisms such as the rule of law, free elections, freedom of association, a free press, and transparent governance. An evaluation of the achievements and shortcomings of these mechanisms in I. R. Iran requires acquaintance with the country's legal and political structures.

In April 1979—after the victory of the Islamic Revolution—98.2% of Iranians who voted in a national referendum supported the creation of an Islamic republic. The legal and political structures of the new republic were based on the constitution adopted in another referendum in December the same year.

In accordance with article 56 of the constitution, God Almighty has absolute sovereignty over man and the universe. Citizens exert their sovereignty through

- the election of the Supreme Leader by the Assembly of Experts;
- the election of the president;
- the election of deputies to the Islamic Consultative Assembly (*majlis* or parliament);
- the right to approve legislation by referendum;
- the right to approve constitutional amendments by referendum;
- the election of jurists to the Council of Guardians by the Islamic Consultative Assembly; and
- the election of members to local Islamic Councils.

Figure 10.1 shows the structure of government in I. R. Iran. **The Supreme Leader** is the highest authority in the land, and is responsible for coordinating the executive, the legislative and the judiciary, and determining the country's general policies and plans, notably the five-year development plans.

The **president**, who is directly elected by the people for a four-year term, is the second highest official; one of his important responsibilities is to safeguard

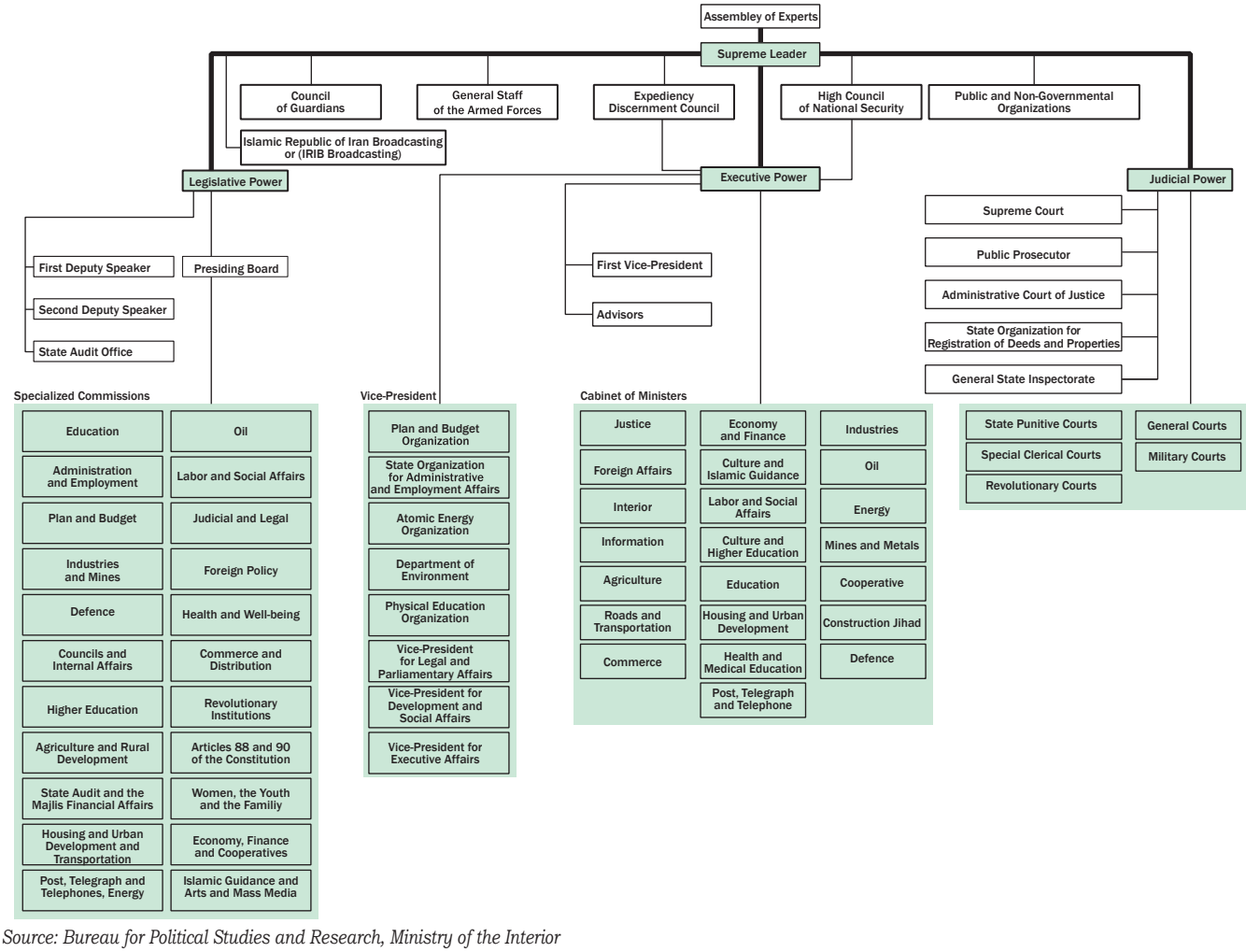
the constitution and ensure that it is fully implemented. His other key responsibilities are to oversee the executive, decide on the government's policies and plans, and approve the programmes put forward by government ministries and other state organizations within the framework of those general plans and policies.

The legislative branch is made up of the deputies of the **Islamic Consultative Assembly**, who are directly elected by the public. It is tasked with enacting new laws within the framework of the constitution and in accordance with Islamic tenets. It also approves the Cabinet of Ministers though a vote of confidence, dismisses ministers if necessary, and approves the country's national development plans.

The **judiciary** is authorized by the constitution to hear and settle complaints and legal cases, ensure the proper execution of the laws of the land, administer justice, implement the Islamic penal code, and adopt crime-prevention measures. The Supreme Leader appoints the head of the judiciary for a five-year term.

Another important component of the country's legal and political structure is the **Council of Guardians**. Its principal responsibility is to ensure that the laws enacted by the Islamic Consultative Assembly

Figure 10.1: Structure of government in I. R. Iran



Source: Bureau for Political Studies and Research, Ministry of the Interior

do not contravene the tenets of Islam and the provisions of the constitution. It also interprets the constitution, monitors presidential and parliamentary elections and the election of deputies to the Assembly of Experts, and oversees referendums.

According to the constitution, the **Expediency Discernment Council** has responsibility for settling any disputes that may arise between the Islamic Consultative Assembly and the Council of Guardians. This council also advises the Supreme Leader on overall policy formulation. Constitutional amendments, except those that relate to the system's Islamic foundation and the supremacy of jurisprudential guardianship (velayat-é-faqih), are subject to the Supreme Leader's approval and a majority vote by the people in a referendum specifically held for this purpose.

The new constitution determined the relationship between state and citizens, and became the foundation of the rule of law

The Islamic Consultative Assembly examines all bills and draft laws, particularly the national development plans, following careful consideration in each and every case by the relevant specialized parliamentary committee. The judiciary also ensures that government policies are put into effect in its areas of responsibility.

Political participation has generally risen over the past 20 years. Political participation peaked in the referendum on changing the country's political system in the earliest days of the Islamic Revolution, and in the seventh presidential election on May 23, 1997.

Figure 10.1 shows the internal organization of the three branches of government in I. R. Iran. The government draws on the whole range of organizations under deputy presidents, in particular the Plan and Budget Organization and presidential advisors, as well as the line ministries and government organizations for both drafting and implementing national development plans.

The political, legal and government structures in place in I. R. Iran for the last 20 years are such that the mechanisms for political development are generally operating in favour of the creation of an enabling environment for human development.

The rule of law and the implementation of the constitution

With the establishment of the Islamic Republic, a new legal system took shape. The new constitution determined the relationship between state and citizens, and became the foundation of the rule of law, notably by affirming the independence of the three branches of government, imposing legally decreed limitations on power, and guaranteeing the equality of all citizens before the law.

Since the constitution contains all the mechanisms required for rule of law, rule of law can be achieved simply by implementing of all its provisions. Indeed, except for paragraph 2 of article 168, which stipulates the establishment of a political court with a jury, all the provisions of the constitution have been implemented.

The election of the principal branches of government by the people; the adoption of legislation within the provisions of the constitution by the Islamic Consultative Assembly; the examination of the laws by the Council of the Guardians to ensure that they do not contravene Islam and the constitution; and the careful application of laws by the judiciary—all these are among the most important requirements of the constitution and show that the constitution is being duly observed. At the same time, however, full implementation of the constitution faces certain challenges. The most important of these relate to citizens' political participation, and ambiguities in the relationships between the executive agencies and other branches of government. This latter shortcoming has reduced transparency and caused overlaps of responsibility, duplication in the decision making process, and some weaknesses in the application of the law.

These challenges led President Khatami to appoint a commission in 1997 to follow up and monitor the implementation of the constitution, especially the third chapter on citizen's rights. This initiative by the

President is undoubtedly an important step towards the realization of the rule of law in I. R. Iran.

Elections

In I. R. Iran, members of the Assembly of Experts, the president, deputies to the Islamic Consultative Assembly, and members of the Islamic Councils in cities and villages across the country are all elected by public ballot. Since its foundation 20 years ago, I. R. Iran has seen numerous elections, including seven presidential elections, five parliamentary elections, three elections for the Assembly of Experts, a referendum for the approval of a constitutional amendment, and an election for the Islamic Councils.

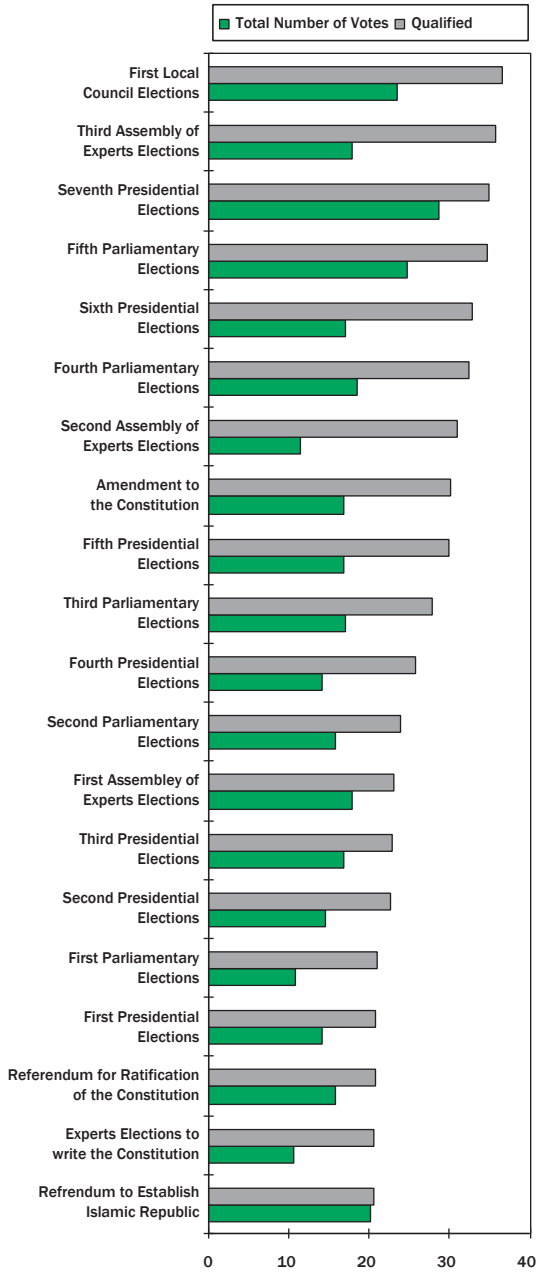
The level of political participation and trends in the country's overall political development can be discerned by comparing the number of voters with the number of those eligible to vote in various elections.

Political participation has generally risen over the past 20 years. It is interesting to note, though, that whenever there were obstacles to participation, the upward trend stalled, but as political pluralism increased, so did the scale of popular participation. Political participation peaked in the referendum on changing the country's political system in the earliest days of the Islamic Revolution, and in the seventh presidential election on May 23, 1997 (Figure 10.2).

In contrast to the presidential election of 1989, when 56.7% of eligible voters took part, the 1997 presidential election attracted 83.3% voter participation—an increase of 26.6%. Similarly, voter participation in the elections for the Islamic Consultative Assembly rose from 63.2% in 1992 to 71.1% in 1995, a 7.9% gain, and the number of people who voted in the Assembly of Experts election grew 9.2% from 37.1% in 1990 to 46.3% in 1998. Another election that had an important impact on the country's political development was for the local Islamic Councils in March 1999, thanks to the efforts of President Khatami's government.

A key strategy in the advancement of the country's political development is considered to be the application of legal

Figure 10.2: Elections and political participation after the Islamic Revolution (millions)



Source: Bureau of Elections, Ministry of the Interior

procedures to eliminate some obstacles to people's participation in elections.

A key strategy in the advancement of the country's political development is considered to be the application of legal procedures to eliminate some obstacles to people's participation in elections.

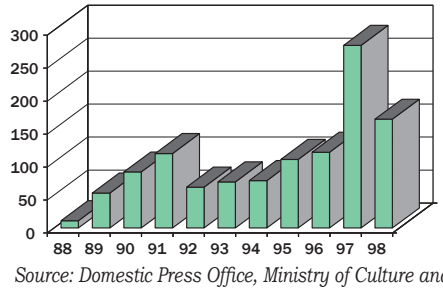
Freedom of the press and parties

The press, by critically examining government policies, representing public opinion and reflecting the viewpoints of civil society institutions, plays a crucial role in the process of political development. Article 24 of the constitution affirms the freedom of the press, providing it does not violate basic Islamic principles or contravene public rights. In March 1985, the Islamic Consultative Assembly passed, and the Council of Guardians approved, a law comprising 36 articles and 23 notes granting the press the right to publish opinion, proposals and constructive criticism as long as it respected Islamic principles and the country's best interests.

It is true that violence by anti-revolutionary elements and the Imposed War prevented the press from making full use of this right during the Islamic Republic's first ten years. Nonetheless, this law and the general atmosphere in which the press and publishers operate have helped create favorable conditions for press freedom. This is reflected in the increase in the number of licenses issued for various types of publications after the end of the Imposed War (figure 10.3).

This upward trend has gained momentum in recent years, to the extent that out of a total of 1,222 newspapers and periodicals that received licenses for publication from 1988 to 1998, 565 licenses were issued from 1996 to 1998 alone.

Figure 10.3: Licenses issued for newspapers and periodicals, 1988–1998



Source: Domestic Press Office, Ministry of Culture and Islamic Guidance

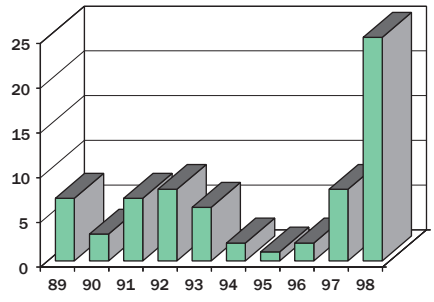
The press in I. R. Iran does face challenges, however: some ambiguities prevail with respect to grants of licenses for newspapers and periodicals, and the conditions under which these licenses can be annulled are also problematic. Elimination of existing obstacles to press freedom will certainly contribute to accelerating political development in I. R. Iran. It is important to note, though, that political development requires that newspaper owners, publishers and editors respect both the boundaries defined by law and society's capacity for critical discussion.

The freedom of political parties and trade unions, by creating a competitive environment, also contributes to the responsiveness and transparency of the political process. According to articles 26 and 27 of the constitution, political parties and groups are allowed to be active. In September 1981, the Islamic Consultative Assembly passed a law with 19 articles and 9 notes on the activities of political parties, societies and associations, trade unions, Islamic associations, and organizations formed by religious minorities. According to this law, all groups holding licences from Commission 10 of the Ministry of the Interior can engage in their chosen activities.

Since the dawn of the revolution, many groups have been issued licences by Commission 10, although their activities were somewhat affected in the first years after the revolution by conditions prevailing during the Imposed War and the period of anti-revolutionary violence. The situation more or less stabilized once the Imposed War ended.

After President Khatami was elected, there was an increase in the formation of political groups (figure 10.4) and the number of licences issued surged (figure 10.5).

Figure 10.4: Licensed political groups, 1989–1998



Source: Political Department, Ministry of the Interior

Although the increase in the number of licences issued to trade and professional associations was smaller than to political groups, it has risen enough to suggest a growing interest in collective activities. Even though there are no legal restrictions whatsoever on their collective activity, religious minorities have shown little interest in obtaining licences so far. There is no doubt that if it were made easier for political parties and other groups to obtain licences, and if "political crimes" (article 168 of the constitution) were clearly defined, political development would accelerate and public participation in the political process would become institutionalized.

A transparent and accountable government

The constitution clearly defines the role of the various levels of legal, political and financial checks and controls. The legislative branch has the authority to bring the government to book by formally questioning ministers (even dismissing them if necessary) and inspecting executive agencies' performance. The judiciary is also authorized to investigate accusations brought against executive officials. In addition, the critical spirit developing nationwide since the Islamic Revolution has led to the emergence of an investigative press as well as a greater interest by political parties and the press in monitoring government performance.

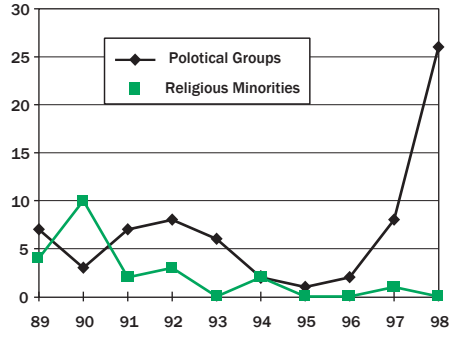
Nonetheless, the government's ability to attain a desirable level of accountability and transparency has been weakened by the lack of an efficient system for evaluating executive agencies, administrative organizations' weak legal behavior, and failure to provide citizens with necessary information on legal procedures and their legal rights.

It is to meet these challenges that the government has declared one of its most important policies to be the improvement of the country's administrative and executive systems. To this end, the State Organization for Administrative and Employment Affairs has designed an "administrative transformation scheme." It is important to underline here that the new government has shown a strong willingness to be straightforward with the public on the progress being made in administrative reform.

An analysis of I. R. Iran's achievements and the challenges it faces in terms of political development lends context to their impact on economic and social performance—particularly in terms of income, education and health.

The critical spirit developing nationwide since the Islamic Revolution has led to the emergence of an investigative press as well as a greater interest by political parties and the press in monitoring government performance.

Figure 10.5: Licences issued to political groups and associations run by religious minorities



Source: Political Department, Ministry of the Interior

By correcting political decisions, a competitive environment makes it possible for economic decisions taken by both government and individuals to be corrected as well.

Political environment, economic performance and social services

The "competition" paradigm explains the connection between political development and economic and social performance: if democracy is the key to correcting political decisions and performance, then the market system is the key to correcting inconsistency between consumers' preferences and producers' goods. "Competition," in this context, is a device used to detect and rectify mistakes and inconsistencies. In this paradigm, the creation of a competitive environment creates a link between the country's political environment and its economic and social performance. By correcting political decisions, a competitive environment makes it possible for economic decisions taken by both government and individuals to be corrected as well.

Central governments with extensive powers are one of the conspicuous features of Iran in the last 100 years. In the decades preceding the revolution, political centralization in government invariably took precedence over economic centralization—a trend that accelerated in the 20 years leading up to the revolution. Increased oil revenues injected tremendous wealth into the Iranian economy without the social environment playing any role at all in its formation—a development which resulted in further centralization of economic power in the government. The despotic structure of the Shah's regime turned this centralization into a tool for the creation of a kind of state capitalism which was dependent on the armed forces and the accumulation of personal wealth. As the government's power in the political and economic spheres expanded, the competitive market environment weakened.

After the victory of the Islamic Revolution, the government once again assumed an extensive presence in the country's legal structure. This eventuated in article 44 of the constitution requiring the government to intervene in the economy to such an extent that it had to take control of most of the country's industries, factories and economic enterprises. The Imposed War, which required a huge mobilization of national resources to defend I. R. Iran's borders, reinforced this trend. With the expansion of government's role, the economic position of the private sector weakened as obstacles to competition grew.

After the end of the Imposed War, there was a change of attitude to the government's role in the economy, and the First, and then Second, Development Plans were prepared on the basis of privatization and economic liberalization. This about-turn was not accompanied, however, by attention to the mutual relationship between political development and economic reform.

National development plans

In the ten years following the victory of the revolution, crises resulting from the Imposed War and the change of political regime deprived I. R. Iran of the opportunity to formulate and implement comprehensive plans for the country's development. When the war ended, however, the government formulated and implemented its development plans.

Because the country's social and political priority after the Imposed War was reconstruction, the First Development Plan (1989–1993) had economic growth as its primary goal. Consequently, the government's agenda contained a set of economic and social policies based on liberalization, privatization, expansion of the share of taxes in the government's budget, strengthening of the national currency, growth of non-oil exports, administrative reform, provision of social services, and reduced population growth.

There were a number of reasons why the state's economic commitments were not scaled back and a competitive market failed to take root. Key among them were the failure to pursue successfully certain policies adopted under the plan, and the insufficient attention paid to the social and

political prerequisites for economic reform. Policy changes meant that privatization was poorly planned, projects to optimize use of production capacities were not put into full effect, emphasis was placed on new investments, and efforts to achieve the necessary expansion of non-oil exports failed. Nonetheless, GDP posted an average annual growth of 7.3% at constant prices during the First Development Plan.

Because of the revolution's collectivist and equity-oriented approach, the political system gave priority to assuring the people's basic needs. This resulted in enhanced provision of social services, particularly in health and education. Notably, under the First Development Plan, the adult literacy rate rose from 59.7% to 68.1%. While life expectancy rose from 62.9% to 65.8%, the population growth rate dropped from 3.5% to around 2%. At the same time, however, the large volume of liquidity and rising inflation on the one hand, and the elimination of some subsidies and higher prices resulting from the establishment of a unified exchange rate on the other, meant that the portion of the population living below the poverty line rose from 17.8% in 1989 to 19% in 1993.

The Second Plan (1995–1999) kept the policy of liberalization and privatization in the monetary, fiscal and external sectors of the economy on its agenda. In taking the same approach to economic reform as the First Development Plan, the new plan continued to underplay the importance of the legal and political prerequisites for transition to a market economy. Nonetheless, the Second Development Plan did place greater emphasis on such social and cultural objectives as social justice, higher moral virtues, reform of the country's monitoring, executive and judicial structures to achieve the plan's goals, greater popular participation, respect for law and order, and greater accountability.

The failure of privatization and liberalization under the First Development Plan, coupled with the social effects of rising prices, dwindling foreign reserves and burgeoning external debts led to a social and political situation which, despite the declared goals and policies laid out in the document of the Second Development Plan, forced policies to be redirected towards economic stabilization. This particularly affected the exchange rate, monetary policies and import and price controls.

This strategic turnaround mid-way through the plan period caused economic growth to decline, with average annual GDP growth not exceeding 3.8% from 1995 to 1998. Other real economic trends (at constant prices) show that the annual growth rate in government revenue, forecast to be 15.2%, was actually only 2.9% and that government expenditure had grown at an annual rate of 1.8% when it should have shrunk 9% every year. At the same time, despite approved current and development expenditure ratios of 56% and 44% respectively, the actual ratios were 70% and 30%. In addition, government tax revenues at constant prices were less than projected from 1995 to 1998. Payments on foreign debts were made on schedule during the plan period, however.

These trends show that the failure to reduce government expenditure commensurately with the fall in its revenue was rooted in unsuitable fiscal policies—notably in the disproportionate growth of current expenditure. Clearly, the government failed to scale down its economic involvement as it had planned. The fall in tax revenue and its reduced share in total government revenue can be traced back to inefficiencies in the tax system and a general lack of commitment to declared tax policies. It is also attributable to monetary policy shortcomings, particularly the failure to increase interest rates on savings—aimed at encouraging private sector investors—and reform the capital market as outlined in the Second Development Plan.

After the end of the Imposed War, there was a change of attitude to the government's role in the economy.

The Third Development Plan establishes a relationship between the four domains of domestic politics, economic reform, cultural policy and foreign policy.

Social indicators, however, generally improved under the plan. Adult literacy increased from 69.7% in 1994 to 74.5% in 1997, while life expectancy at birth rose from 66.3 years to 69.5 years. Likewise, the portion of the population living below the poverty line fell slightly from 19.9% in 1994 to 18.6% in 1997.

The growth achieved in health and education indicators was attributable to significant resource allocations to the social sector under the Second Development Plan. The highest rates of growth in current credits were to health care and nutrition (14.2%), primary and secondary education (13.2%) and social security (12.7%).

Prospects for human development in I. R. Iran

The experience of recent years underlines the importance of the following in efforts to improve human development:

- emphasizing a human-centered approach to development;
- adopting a balanced and holistic approach to development;
- not losing sight of the importance of the government's role in guiding the development process;
- recognizing the role of civic society organizations in the creation of an enabling environment for development; and
- stressing the fundamental role of cultural and political development in economic and social development.

The Third Development Plan and human development

The Third Development Plan, to be launched in March 2000, establishes a relationship between the four domains of domestic politics, economic reform, cultural policy and foreign policy. Rather than concentrating on government resources, it focuses on mechanisms, laws, and the process and mechanisms of legal and economic regulation.

Drawing on lessons learned from the first two plans, the Third Development Plan tries to reduce the possibility of failure by changing the planning system, primarily by creating the highest possible level of understanding among the principal government organizations involved in the various stages of policy and programme development. The hope is that more attention to the interconnectedness of the social, legal and cultural dimensions of development and increased executive capacity will together increase the plan's chance of success. However, just as important as the establishment of a relationship between political development and economic reform is the challenge of creating a stable political and judicial environment and building the executive, information and technical capacity needed to implement the plan's policies.

The general policies of the Third Development Plan have already been approved. The most important of these polices with respect to human development are given in box 10.1. Among these, policies 1, 2, 3, 5, 6 and 8 on creating conditions conducive to economic growth and polices 4, 6, and 9 on improving of health and education pave the way for improving I. R. Iran's human development index.

Policies 2, 4, 9 and 10 would improve the human development index adjusted by income distribution as well as the human poverty index. Policies 1, 2, and 7 would contribute to the improvement of gender-adjusted human development, while policy 10 would help reduce HDI disparities among the provinces.

A new agenda for human development in Iran

The integration of political development and economic reform requires institutions and mechanisms such as the rule of law and popular participation to be strengthened. It also requires adjusting the scope and extent of reforms to institutions' capacities. The following measures would support

the government's efforts to achieve this integration:

- Monitor the implementation of the constitution, by making recommendations on how to improve implementation, developing educational and research programs aimed at enhancing people's awareness of their rights, and proposing effective ways of applying and enforcing the country's laws.
- Take steps to improve, and remove obstacles to, public participation in elections.
- Institutionalize freedom of association, freedom of the press and freedom of parties, and strive for greater government transparency and accountability.
- Harmonize the scope and various aspects of privatization policies with existing laws, particularly article 44 of the constitution.
- Reduce legal obstacles to full implementation of the privatization policy.
- Reform the structure of the executive branches of government, with a view to reducing the multiplicity of decision-making centres and creating a logical relationship between responsibility and accountability.
- Emphasize the state's commitment to providing judicial, political and social security to support the realization of economic reforms.
- Adopt sound social policies to protect vulnerable groups during the liberalization and privatization process, notably by maintaining subsidies on basic goods.
- Maintain the level of social expenditure, giving health and education highest priority, even when economic growth is low.

An integrated process of political and economic reform will not only clear the way for higher economic growth and, consequently, an improved human development index, but will also expand people's capabilities through the enlargement of their social and political choices. By providing more opportunities for women's participation in social, political and economic activities, integration will also improve the gender-adjusted HDI, much as improved income distribution will have a positive impact on its index. Another outcome of integration is an expanded role for the provinces in resource allocation, which, coupled with decentralization, will help narrow the wide gaps between the provinces on the various human development indices.

While making these structural reforms, the government could also take special measures to increase the equity of human development, the most important of which are:

- Improving the HDI adjusted by income distribution by increasing middle-income and low-income groups' access to opportunities and economic resources. This could be achieved by helping them participate in the management of small and medium-sized enterprises that are in the process of privatization.

An integrated process of political and economic reform will not only clear the way for higher economic growth, but will also expand people's capabilities through the enlargement of their social and political choices.

Box 10.1:

General policies of the Third Development Plan relating to human development

1 Change regulations that might lead to the creation of monopolies in economic activities, with due consideration to constitutional provisions and the country's best interests.
2 Strive to contain inflation, preserve the purchasing power of low- and medium-income groups and generate employment for these groups.
3 Refrain from preferential treatment of the government and public sectors over the private and cooperative sectors in terms of privileges and access to information.
4 Create a comprehensive system for social security and poverty alleviation.
5 Preserve the security of investment and private ownership.
6 Provide labour training and retraining; pay more attention to education and developing human potential; encourage creativity and technological innovation; strengthen the country's scientific and research capabilities.
7 Strengthen the institution of the family and the status of women in the family and in society, and defend the religious and legal rights of women in all areas.
8 Reinforce law and order.
9 Ensure food security and pave the way for self-sufficiency in basic goods.
10 Pay attention to spatial planning as a long-term framework for social justice and regional balance.

Civil society organizations can also have an important role in a process of integrated political development and economic reform.

- Reducing human poverty through the reduction of income poverty. Key steps would be to give employment opportunities to people living below the poverty line and to maintain subsidies on health and education services.
- Raising the human development status of women by increasing their share of total income. This could be achieved by eliminating cultural, legal and economic obstacles to their economic participation and employment, and by expanding opportunities for them to work at management level and in the political, social, scientific and technical sectors.
- Reducing human development disparities among the provinces by giving those with low human development priority in terms of resource allocation and job creation.
- Raising the rate of adult literacy for women to improve the gender-adjusted HDI in provinces with a low level of human development, particularly by overcoming the traditional attitudes of certain cultural groups that prevent the education of girls and women.

Civil society initiatives

Civil society organizations can also have an important role in a process of integrated political development and economic reform. These organizations could

- provide a locus for dialogue and research on the fundamental challenges to development, with particular reference to the role of social reforms;
- critically evaluate economic and social policies and present constructive proposals;
- enhance people's awareness of their human and social rights;
- contribute to society's capacity for critical evaluation of government policies, thus stimulating a higher level of transparency and accountability;
- encourage the formation of trade unions, especially unions organized by entrepreneurs, the middle class and the poor;
- participate in the provision of health and educational services, particularly in primary health care and primary education; and
- participate in the provision of various kinds of insurance and non-insurance protection to vulnerable social groups.

Research priorities in human development

The issues raised in I. R. Iran's first National Human Development Report—particularly the new agenda for human development—provide foci for future studies and research, the most important of which are

- governance reforms in Third Development Plan and prospects for human development in I. R. Iran;
- the root causes of HDI disparities among the provinces and effective methods of reducing them;
- the factors contributing to human poverty and the formulation of a national poverty-reduction strategy;
- the role of job-creation strategies, with special emphasis on jobs for women, in human development;
- reforms in the social security system to reduce poverty and promote human development;
- the role of qualitative improvement of the education system in improving human development;
- the role of non-governmental organizations in human development;
- quality improvements in health care services and their role in increasing life expectancy and accelerating human development;
- the effects on the country's human development status of changing the structure of income distribution.

Statistical Annex

Notes:

Human development indexes and indicators provided in this annex have been calculated in accordance with the technical notes of the Human Development Reports, in particular HDR 1998. Attention to the following notes will contribute to a clearer understanding of the HDI tables included in the Annex:

1 The data on occupations included in the General Census of Population and Housing of 1996 have been classified according to the International Standard Classification of Occupations (ISCO) 1988. The classification of the same data in the General Census of Population and Housing of 1986 and the Multi-round Population Survey of 1991 was based on ISCO 1968. Calculation of comparable occupational percentages in tables N.3 and N.8 on the basis of the latter ISCO was, therefore, impossible.

2 Due to the relative stability of the indicator related to underweight children aged 5 and less during the survey period and the unavailability of reliable data for all the years covered, in calculating the human poverty index (table N.5) this indicator was taken to be 15.7% for all the relevant years.

3 Due to unavailability of a distribution model for the students of the Islamic Azad University by their major fields of study, in calculating the indicator for the ratio of female students in natural and applied sciences to the total number of female students (table N.7), only data relating to the distribution of tertiary students in Ministry of Higher Education-affiliated institutions by major fields of study have been used. Meanwhile, the entirety of the major fields of study in medicine, basic sciences, engineering, agriculture and veterinary medicine have been taken as 'natural and applied sciences'.

Calculation of the enrolment rates in tables N.1, N.2, N,4, N.6, N.7, N.12, P.1, P.2, P.5, and P.10 for the primary level is based on the total number of students of this level under the Ministry of Education and the Literacy Campaign Movement. With regard to secondary education, the total number of students of the guidance and high school cycles (including general secondary, technical and vocational secondary, pre-college students and students of teachers training centers) has been the basis of calculation. At the tertiary level, the total number of students of universities and institutions of higher education (including teachers training colleges, the nationwide branches of the Islamic Azad University and all institutions of higher education under the Ministry of Culture and Higher Education) has been used.

4 Cigarette consumption (table N.10) is equal to the total sale of cigarettes by the Tobacco Company of Iran, which includes domestic production plus imported cigarettes and confiscated contraband cigarettes supplied to the market.

5 In table N.21:

- The figure given for the country's area refers to its terrestrial area.

- The Ministry of Energy has estimated the country's renewable water resources on a long-term basis at 117 billion cubic meters. The indicator for average renewable water resources per capita is based on this figure and the country's population in any of the related years.
- The figures for water withdrawal indicate the potential withdrawal (rather than the actual withdrawal). In any given year, the real volume of water withdrawal could be somewhat more or less than the potential withdrawal, depending on the volume of precipitation.

6 The rial-dollar parity is based on different exchange rates in the different tables included in this report. For instance, in tables N.1 and N.6 the current PPP conversion factor (rials per international dollar) is used. In table N.5 the 1987 PPP conversion factor and in table N.16 the rial-US dollar parity rate at constant prices of 1987 are used, while tables N.17,N.20, N.22 and N.23 use the current rial-US dollar parity rate. To prevent any ambiguity, the exchange rates used for rial-US dollar conversion for the different years are given in the table below.

All the above-mentioned figures are quoted from the World Bank's World Development Indicators 1998. It should be mentioned that from 1993 onward the figures relating to the current parity rate of the US dollar against the rial is taken at the official base rate, while for the years preceding 1993 an average rate used by the world bank has been applied.

7 All rates of value amounts are calculated on the basis of constant rial values. Calculations for ratios are based on current values in rials, except for table N.17, where ratios are based on dollar values.

8 The following abbreviations are used in the tables:
- (..) Data not available.
- (-) Not applicable or meaningless.
- (*) Preliminary data.

In connection with the human development indicators of provinces, note should be taken of the following:

1 The bulk of data presented, and indicators calculated accordingly, relate to the year 1996. The results of the Multiple Indicator Cluster Survey (MICS) of 1997 have been used only for some indicators related to health and medical services.

2 Data for selected occupations are based on the ISCO (1988) classification.

Rial–Dollar conversion factors–alternatives

	International Dollar		US Dollar	
year	Current	Constant 1987	Current	Constant 1987
1988	115.7	120.1	178.0	171.5
1989	138.7	150.3	226.0	205.9
1990	161.3	182.6	304.4	292.7
1991	191.9	225.9	408.6	297.6
1992	230.7	279.0	600.0	372.8
1993	303.6	376.1	1267.8	501.6
1994	409.6	519.3	1749.0	690.1
1995	562.6	728.5	1747.5	976.8
1996	745.0	983.6	1751.7	1307.4
1997	*880.0	*1136.7	1752.5	*1511.0

Source: World Development Indicators 1998, World Bank

3 Due to the unavailability of data on GDP per capita by provinces, use has been made of gross household expenditure per capita (taken from census on revenues and expenditures of urban and rural households), as an acceptable approximation, for the calculation of human development index.

4 Due to the lack of reliable estimates on the ratios of population without access to health services, this factor has not been taken into account in the calculation of the human poverty index.

5 In view of the above explanations, differences exist between the indexes given for the whole country in the provincial tables with their corresponding indicators at the national level, making them incomparable. In the present section, the figures given for the whole country in the provincial tables are comparable with their corresponding figures for the provinces.

Human Development Indicators

Table N.1: Human development index

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Life expectancy at birth (years)	61.6	62.9	64.2	64.7	65.2	65.8	66.3	67.0	69.2	69.5
Adult literacy rate (%)	57.1	59.7	62.4	65.2	66.6	68.1	69.7	71.3	72.9	74.5
Combined first- second and third level gross enrolment ratio (%)	65.6	67.0	76.9	74.9	76.7	77.7	77.9	76.0	75.9	75.0
Real GDP per capita (PPP$)	3715	3766	4170	4676	5086	5364	5374	5372	5257	5222*
Adjusted real GDP per capita (PPP$)	3715	3766	4170	4676	5086	5364	5374	5372	5257	5222
Life expectancy index	0.610	0.632	0.653	0.662	0.670	0.680	0.688	0.700	0.737	0.742
Education index	0.599	0.621	0.672	0.684	0.700	0.713	0.724	0.729	0.739	0.747
GDP index	0.716	0.721	0.808	0.863	0.932	0.886	0.871	0.849	0.810	0.785
Human devlopment index (HDI) value	0.642	0.658	0.711	0.736	0.767	0.760	0.761	0.759	0.762	0.758

Sources: 1, 2, 8, 9, 19, 20, 21, 23, 26, 27, 28, 29, 31, 36, 40, 41

Table N.2: Gender - related development index (GDI)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Life expectancy at birth, Female (years)	62.7	64.3	65.7	66.2	66.6	67.1	67.5	68.2	70.3	70.6
Life expectancy at birth, Male (years)	60.5	61.6	62.6	63.3	63.9	64.5	65.2	65.8	68.2	68.4
Adult Literacy rate, Female (%)	46.3	49.3	52.5	55.9	57.7	59.7	61.7	63.8	65.9	67.0
Adult Literacy rate, Male (%)	67.1	69.3	71.6	73.9	75.0	76.2	77.3	78.5	79.7	81.9
Combined first-second and third level gross enrolment ratio, Female (%)	59.8	61.3	76.7	73.4	74.6	75.5	74.6	73.7	73.7	73.3
Combined first-second and third level gross enrolment ratio, Male (%)	71.1	72.3	77.1	76.2	78.7	79.9	79.5	78.2	78.0	76.7
Share of earned income, Female (%)	7.6	7.7	7.8	8.0	8.2	8.6	8.8	9.1	9.4	9.7
Share of earned income, Male (%)	92.4	92.3	92.2	92.0	91.8	91.4	91.2	90.9	90.6	90.3
Gender-related development index (GDI) value	0.454	0.466	0.502	0.528	0.549	0.555	0.561	0.568	0.573	0.579

Sources: 1, 2, 8, 9, 19, 20, 21, 23, 26, 27, 28, 29, 31, 36, 40, 41

Table N.3: Gender empowerment measure (GEM)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Seats in parliament held by women (%)	2.0	2.0	2.0	2.0	3.3	3.3	3.3	3.3	5.2	5.2
Female administrators and managers (%)	2.9	2.6	2.4	2.1	..	..	..	..	..	..
Female professional and technical workers (%)	32.9	33.1	33.3	33.4	..	..	..	..	..	..
Women's share of earned income (%)	7.6	7.7	7.8	8.0	8.2	8.6	8.8	9.1	9.4	9.7
Gender empowerment measure (GEM) value	0.201	0.200	0.200	0.201	-	-	-	-	-	-

Sources: 6, 19, 20, 23, 24

Table N.4: Trends of human development index and GDP per capita

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Human development index	0.642	0.658	0.711	0.736	0.767	0.760	0.761	0.759	0.762	0.758
GDP per capita (1987 US$)	2505	2537	2297	3015	3147	3246	3189	3094	2996	3041*
Annual rate of change in GDP per capita (%)	-11.2	1.3	-9.5	31.3	4.4	3.1	-1.8	-3.0	-3.2	1.5
Average annual rate of change in GDP per capita (%)	→	→	→	3.45	←	←	←	←	←	←

Sources: 1, 19, 20, 21, 23, 40, 41

Table N.5: Human poverty profile and index

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Human poverty index (HPI-1) value (%)	31.0	29.0	27.0	24.9	23.9	22.8	21.6	20.5	19.2	18.1
People not expected to survive to age 40 (as % of total population)	17.1	15.6	14.0	13.4	12.7	12.1	11.4	10.7	8.2	7.9
Adult illiteracy rate (%)	42.9	40.3	37.6	34.8	33.4	31.9	30.3	28.7	27.1	25.5
Popluation without access to safe water (%)	14.3	12.4	10.4	8.5	7.4	7.3	6.7	6.4	6.0	5.5
Popluation without access to health services (%)	22.1	19.1	16.1	14.1	11.9	10.0	8.1	5.7	6.0	6.0
Popluation without access to sanitation (%)	72.0	72.0	67.5	63.0	58.5	54.9	49.5	45.0	40.5	35.7
Under-weight childeren under age five (%)	..	..	..	15.8	..	..	..	15.7	..	..
Children not reaching grade 5 (%)	17.9	19.1	13.7	12.4	11.4	10.7	8.3	14.0	12.2	11.8
Refugees by Country of asylum (thousands)	..	..	..	..	4150	2560	2373	2063	2030	2019
Real GDP per capita (PPP$), poorest 20%	810	802	881	937	1088	1201	1271	1197	1190	1246*
Real GDP per capita (PPP$), richest 20%	9043	9093	9894	11469	12198	12577	12707	12774	12561	12360*
Poplulation below income $1 a day at 1987 PPP$ (%)	1.5	2.1	3.5	3.8	3.3	3.3	2.7	3.0	3.4	3.3*
Poplulation below national income poverty line (%)	18.4	17.8	18.8	21.6	20.9	19.0	19.9	19.8	19.7	18.6

Sources: 1, 3, 4, 5, 6, 7, 17, 18, 19, 20, 21, 23, 26, 27, 28, 29, 31, 33, 34, 35, 41

Table N.6: Trends in human development

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Life expectancy at birth (years)	61.6	62.9	64.2	64.7	65.2	65.8	66.3	67.0	69.2	69.5
Infant mortality rate (per 1000 live births)	63.5	57.9	52.5	50.2	48.0	45.7	43.5	40.7	31.7	30.7
Population with access to safe water (%)	85.7	87.6	89.6	91.5	92.6	92.7	93.3	93.6	94.0	94.5
Underweight children under age five (%)	..	..	..	15.8	..	..	..	15.7	..	..
Adult literacy rate (%)	57.1	59.7	62.4	65.2	66.6	68.1	69.7	71.3	72.9	74.5
Gross enrolment ratio for all levels (% age 6-23)	65.6	67.0	76.9	74.9	76.7	77.7	77.9	76.0	75.9	75.0
Real GDP per capita (PPP$)	3715	3766	4170	4676	5086	5364	5374	5372	5257	5222

Sources: 1, 2, 3, 7, 8, 9, 19, 20, 21, 23, 31, 33, 34, 35, 40, 41

Table N.7: Women's access to education

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Female net enrolment, primary level ratio (%)	75.5	77.7	79.9	82.2	84.6	87.0	89.5	92.1	94.7	..
Female net enrolment, primary level index (1988=100)	100.0	102.9	105.8	108.9	112.1	115.2	118.5	122.0	125.4	-
Female net enrolment, secondary level ratio (%)	31.1	33.7	36.5	39.6	42.8	46.4	50.2	54.4	58.9	..
Female net enrolment, secondary level index (1988=100)	100.0	108.4	117.4	127.3	137.6	149.2	161.4	174.9	189.4	-
Female tertiary students (per 100000 women)	490	596	697	877	978	1131	1260	1343	1582	1686
Female tertiary students index (1988=100)	100.0	121.6	142.2	179.0	199.6	230.8	257.1	274.1	322.9	344.1
Female tertiary natural and applied science students (as % of female tertiary students)	52.2	..	53.1	58.3	58.7	56.7	55.5	53.1	50.5	49.3

Sources: 2, 3, 8, 9, 19, 20, 21, 23, 30, 31

Table N.8: Women's participation in economic and political life

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Female administrators and managers (%)	2.9	2.6	2.4	2.1	..	..	..	..	..	..
Female professional and technical workers (%)	32.9	33.1	33.3	33.4	..	..	..	..	..	..
Female sales and service workers (%)	3.5	3.5	3.5	3.5	..	..	..	..	..	..
Female clerical workers (%)	12.5	12.3	12.2	12.1	..	..	..	..	..	..
Women in government (Total, %)	29.7	29.7	29.7	30.7	30.7	29.8	29.8	29.2	29.2	29.1
Women in government (At ministerial level, %)	0	0	0	0	0	0	0	0	0	0
Women in government (At sub-ministerial level, %)	..	..	..	..	..	..	..	..	..	..
Female unpaid family workers (as % of total)	45.7	45.8	45.9	46.0	46.1	46.2	46.3	46.4	46.5	..
Female economic activity rate (as % of male rate)	11.6	11.8	12.1	12.4	12.8	13.1	13.4	13.9	14.2	14.3

Sources: 19, 20, 21, 23

Table N.9: Child survival and development

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Infant mortality rate (per 1000 live births)	63.5	57.9	52.5	50.2	48.0	45.7	43.5	40.7	31.7	30.7
Under-five mortality rate (per 1000 live births)	85.3	76.6	68.1	64.5	61.0	57.5	54.1	50.0	38.6	37.3
Pregnant women aged 15-49 with anaemia (%)	..	..	..	..	..	..	..	33.0	..	..
Births attended by trained health personnel (%)	..	70.0	..	..	..	..	..	..	..	86.1
Low birth-weight infants (%)	12.0	..	..	8.0	8.0	8.0	..	..	..	..
Maternal mortality rate (per 1000 live births)	90.0	91.0	..	54.0	..	52.0	52.0	40.0	36.4	37.4
Mothers exclusively breast feeding at three months (%)	..	..	..	9.3	9.3	..	..	39.5	..	43.7
Oral rehydration therapy use rate (%)	90.0	..	..	85.0	..	57.2	..	..	51.7	47.8
Under weight children under age five (%)	..	..	..	15.8	..	..	..	15.7	..	..

Sources: 7, 19, 20, 21, 23, 26, 27, 28, 33, 34, 35

Table N.10: Health profile

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
One-year-old fully immunized against tuberculosis (%)	88.0	85.0	95.0	91.0	100.0	100.0	100.0	99.0	96.0	98.3
One-year-old fully immunized against measles (%)	83.0	79.0	85.0	84.0	96.0	96.0	97.0	95.0	100.0	95.0
AIDS cases (per 100000 people)	0.006	0.01	0.02	0.05	0.03	0.04	0.05	0.04	0.12	0.30
Tuber- culosis cases (per 100000 people)	15.0	24.0	21.0	22.0	34.5	30.6	22.6	25.8	22.6	20.9
Malaria cases (per 100000 people)	102.5	109.7	145.9	176.2	134.7	104.7	87.3	112.2	92.9	64.0
Cigarette consumption per adult index (1988=100)	100.0	69.0	86.2	73.0	64.9	51.3	45.1	35.1	45.1	40.9
Doctors (per 100000 people)	49.9	52.8	56.8	60.5	66.1	73.9	82.7	92.4	100.9	107.9
Nurses (per 100000 people)	..	..	..	..	..	..	..	..	..	..
People with disability (as % of total population)	0.9	-	-	-	-	-	-	-	0.8	-
Public expenditure on health (as % of GNP)	2.3	2.1	1.5	1.5	1.7	2.1	2.0	1.7	2.1	2.0
Public expenditure on health (as % of GDP)	2.2	2.1	1.4	1.5	1.7	2.0	2.0	1.7	2.0	2.0

Sources: 1, 3, 7, 12, 16, 19, 20, 21, 23, 33, 34

Table N.11: Food security

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Daily per capita supply of calories (gr)	2612	3054	3094	3018	3367	3362	3165	3459	3505	3415
per capita supply of cereals (kg)	179.7	217.9	210.8	207.4	229.4	226.6	202.9	230.4	227.8	220.9
per capita supply of cereals (Change, %)	→	→	→	→	1.55	←	←	←	←	←
Daily per capita supply of fat (gr)	54.3	64.5	65.5	65.0	65.1	74.2	72.9	73.2	80.2	77.2
Daily per capita supply of fat (Change, %)	→	→	→	→	3.53	←	←	←	←	←
Daily per capita supply of protein (gr)	69.4	79.5	79.0	80.4	87.9	88.0	82.4	90.0	90.1	87.3
Daily per capita supply of protein (gr)	→	→	→	→	2.25	←	←	←	←	←
Food production per capita index (1988=100)	100.0	102.6	116.2	119.4	134.4	135.0	134.4	134.6	134.6	137
Food imports (as % of merchandise imports)	16.1	21.6	7.2	6.9	7.2	11.6	12.9	18.0	17.1	17.4
Food consumption (as % of total household consumption)	44.5	43.8	35.7	33.6	33.5	34.2	35.6	37.2	33.6	33.8

Sources: 13, 15, 17, 18

Table N.12: Education

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Gross enrolment ratio, Primary level, total (%)	122.5	122.1	145.6	133.8	132.8	131.3	126.6	122.2	119.1	119.2
Gross enrolment ratio, Primary level, Female as % of male	94.6	95.0	115.8	111.8	110.4	110.8	108.8	108.7	107.8	108.7
Gross enrolment ratio, Secondary level, total (%)	52.7	55.3	57.8	61.7	67.9	71.8	74.2	75.2	76.8	77.5
Gross enrolment ratio, Secondary level, Female as % of male	69.1	70.4	73.5	74.7	77.4	79.7	83.3	86.6	88.8	90.9
Tertiary natural and applied science (as % of total tertiary)	64.2	..	62.9	63.8	62.6	59.8	58.5	57.4	55.6	54.7
R & D scientists and technicians (per 1000 people)	..	..	..	..	..	..	..	..	0.7	..
Public expenditure on education (as % of GNP)	4.0	4.0	4.1	3.9	4.6	5.5	4.5	4.1	4.8	5.3
Public expenditure on education (as % of total government expenditure)	19.4	23.0	22.5	22.1	25.3	22.1	18.3	16.3	18.8	20.7
Public expenditure on primary and secondary education (as % of all levels)	78.8	78.3	75.9	73.9	74.3	76.9	74.5	74.9	74.8	72.1
Public expenditure on higher education (as % of all levels)	12.8	13.5	15.4	16.8	16.9	17.7	25.3	24.8	25.0	22.5

Sources: 1, 2, 3, 8, 9, 16, 19, 20, 21, 23, 25, 31, 36

Table N.13: Profile of people in work

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Labour force (as % of total population)	25.2	25.4	25.5	25.6	25.7	25.8	25.9	26.0	26.1	..
Women's share of adult (age 15 and above) labour force (%)	9.9	10.0	10.2	10.4	10.7	11.1	11.4	11.8	12.2	..
Percentage of adult labour force in agriculture	27.1	26.4	25.7	25.0	24.6	24.1	23.7	23.2	22.8	..
Percentage of adult labour force in industry	25.8	26.2	26.7	27.2	27.7	28.3	29.0	29.6	30.4	..
Percentage of adult labour force in services	47.1	47.4	47.6	47.8	47.7	47.6	47.3	47.2	46.8	..

Sources: 19, 20, 21, 23, 24

Table N.14: Access to information and communications

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Radios (per 1000 households)	670	705	703	725	742	781	789	747	730	720
Black and White televisions (per 1000 households)	539	574	591	608	617	614	608	536	536	506
Colour televisions (per 1000 households)	81	75	84	112	157	211	258	267	344	399
Printing and Writing paper consumed (metric ton per 1000 people)	3.7	4.8	6.0	7.9	5.8	4.7	6.1	9.5	8.8	7.7
Post offices (per 100000 people)	7.4	7.0	7.1	7.0	9.0	9.3	11.7	15.5	21.2	21.8
Main telephone lines (per 1000 people)	36.2	38.1	40.4	44.0	52.9	63.3	74.1	86.0	97.0	106.8
Public pay phones (per 1000 people)	0.25	0.24	0.26	0.29	0.33	0.46	0.71	0.92	1.00	1.22
International telephone calls (minutes per people)	..	2.1	2.8	2.6	4.9	5.3	5.2	5.6	5.4	5.2
Cellular mobile telephone subscribers (per 1000 people)	0	0	0	0	0	0	0.16	0.27	1.00	3.92

Sources: 3, 14, 15, 17, 18, 20, 21, 23

Table N.15: Profile of political life

1) Iran has a single house named Islamic Consultative Assembly.

2) Date of its last election is year 1996.

3) All of its members are elected.

4) Voter turnout at its last election is 71.1%.

5) 3 Parties were represented at its last election.

6) Islamic Consultative Assembly has 270 members, of them 14 are women.

7) Year 1963 is the first year in which Iranian women were allowed to be nominated and elected to National Parliament.

Source: 6

Table N.16: Military expenditure and resource use imbalances

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Total defense expenditure (1987 prices, US$ millions)	8668.8	5505.1	3898.2	4065.5	3685.6	4535.9	5920.7	5279.8	5284.2	*6212.8
Defense expenditure as % of GDP	6.7	4.1	3.1	2.4	2.1	2.4	3.2	2.9	2.9	3.3
Defense expenditure per capita (1987 prices, US$)	167.0	103.5	71.5	72.8	65.1	78.9	101.5	89.2	88.0	*101.7
Military expenditure (as % of combined education and health expenditure)	166.1	103.5	76.0	60.7	45.1	45.5	72.7	70.4	61.5	63.4

Sources: 1, 16

Table N.17: Financial inflows and outflows

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Total external debt (US$ billions)	5830	6520	9020	11300	16084	23516	22737	21928	16835	12117
Total external debt (as % of GNP)	4.7	5.3	7.5	9.1	14.5	32.7	31.7	21.6	12.6	7.6
Debt service ratio (debt service as % of exports of goods and serviecs)	5.7	3.4	3.3	4.2	5.2	9.4	21.8	29.8	14.6	..
Total net official development assistance (ODA) received (US$ millions)	81.5	96.0	105.0	194.0	106.6	141.0	130.7	192.0	171.0	..
Total net official development assistance (ODA) received (as % of GNP)	0.07	0.08	0.09	0.16	0.10	0.20	0.18	0.19	0.13	..
Total net official development assistance (ODA) received (per capita, US$)	1.6	1.8	1.9	3.5	1.9	2.5	2.2	3.2	2.8	..
Net foreign direct investment (as % of GNP)	0.049	-0.016	-0.301	0	0	0	0.003	0.017	0.008	..
Trade (as % of GNP)	19.1	24.3	34.9	41.0	44.7	59.6	48.6	33.3	30.8	23.5
Export-import ratio (exports as % of imports)	84.5	82.2	88.6	62.5	70.3	77.0	125.4	125.4	128.7	108.6
Terms of trade (1988=100)	100.0	99.2	114.0	126.4	121.6	115.7	91.4	84.8	91.9	85.5
Current account balance before official transfers (US$ million)	-1869	-2591	-2173	-11448	-8500	-5715	3758	3362	4769	1287

Sources: 1, 19, 41

Table N.18: Growing urbanization

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Urban population (as % of total)	55.4	55.9	56.5	57	57.9	58.7	59.6	60.4	61.3	..
Urban population annual growth rate (%)		3.5					2.9			
Population in cities more than 750000 (As % of total population)	20.7	20.6	20.5	21.9	21.9	23.2	23.2	24.4	24.4	..
Population in cities more than 750000 (As % of urban population)	37.4	36.9	36.3	38.4	37.8	39.5	38.9	40.4	39.9	..
Largest city	Tehran	Tehran	Tehran	Tehran	Tehran	Tehran	Tehran	Tehran	Tehran	..
Largest city population (thousands)	6212.2	6298.7	6386.5	6475.5	6531.2	6587.4	6644.1	6701.2	6758.8	..

Sources: 19, 20, 21, 23

Table N.19: Population trends

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Population (thousands)	51908	53186	54495	55837	56656	57486	58330	59186	60055	61092
Annual population growth rate (%)	→	2.46	←		→		1.47	←		
Crude birth rate (%)	38.0	35.5	33.1	30.6	28.6	26.6	24.5	22.5	20.5	19.5
Crude death rate (%)	10.0	9.1	8.7	8.3	7.9	7.6	7.2	6.9	6.7	6.5
Dependency ratio (%)	93.2	92.6	92.0	91.5	88.7	86.0	83.4	80.8	78.2	74.5
Total fertility rate	5.9	5.5	5.2	4.9	4.5	4.1	3.7	3.4	3.0	2.6
Contraceptive prevalence rate, any methods (%)	..	49.0	..	64.6	64.6	67.8	70.0	72.9	76.3	72.9

Sources: 7, 19, 20, 21, 23, 26, 27, 28

Table N.20: Energy use

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Total electricity consumption (million KW-hours)	39589	42557	47842	52731	56478	62325	66023	68252	74194	78249
Electricity consumption index (1988=100)	100	107.5	120.8	133.2	142.7	157.4	166.8	172.4	187.4	197.7
Electricity consumption per capita (KW-hours)	763	800	878	944	997	1084	1132	1153	1235	1281
Traditional fuel consumption (as % of total consumption)	1	0.9	0.8	0.7	0.7	0.6	0.6	0.5	0.4	0.5
Total commercial energy use (oil equivalent, 1000 ton metric)	45286	50380.6	54370.8	61094.9	66286	70372.8	76033.5	76268.2	82384.6	86968.4
Commercial energy use per capita (oil equivalent, kg)	864	938	988	1083	1158	1212	1291	1276	1358	1409
Commercial energy use (GDP output per kg, oil equivalent, 1987 US$)	2.9	2.7	2.3	2.8	2.7	2.7	2.5	2.4	2.2	2.2
Net commercial energy imports (as % of energy consumption)	-187.3	-197.0	-222.4	-207.8	-200.1	-196.5	-172.2	-175.8	-139.8	-133.2

Sources: 1, 19, 20, 21, 23, 37, 38, 39, 41

Table N.21: Profile of environmental degradation

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Land area (1000 ha)	163057	163057	163057	163057	163057	163057	163057	163057	163057	163057
Forest and wood-land (as % of land area)	-	-	-	-	7.6	-	-	7.6	-	-
Internal renewable water resources per capita (cubic metres per year)	2254	2200	2147	2095	2065	2035	2006	1977	1948	1915
Annual potential of fresh water withdrawals (as % of water resources)	46.6	47.6	48.6	49.7	50.8	51.8	53.0	53.6	54.3	55.0
Annual potential of fresh water withdrawals per capita (cubic metres)	1427	1423	1419	1415	1424	1434	1444	1441	1438	1431
Annual rate of deforestation (%)	..	..	..	..	..	..	..	..	..	..
Annual rate of re forestation (%)	0.16	0.20	0.43	0.73	0.68	0.62	0.38	0.28	0.32	0.48
CO2 emissions per capita (metric tons)	2.56	2.75	2.86	3.07	3.29	3.43	3.67	3.69	3.93	4.15

Sources: 11, 19

Table N.22: National income accounts

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
GDP (Current US$ billions)	125304	122952	120383	122632	110771	73838	73403	102361	134287	160189
Agriculure (as % of GDP)	23.9	24.7	23.5	23.1	23.9	20.8	21.1	22.2	20.3	19.8
Industry (as % of GDP)	21.9	23.5	28.6	28.3	29.2	36.2	37.5	35.8	36.2	34.0
Services (as % of GDP)	54.2	51.8	47.9	48.6	46.9	43.0	41.4	42.0	43.5	46.2
Private consumption (as % of GDP)	66.8	66.4	65.7	63.2	62.0	55.1	56.1	60.9	59.7	62.1
Government consumption (as % of GDP)	14.4	11.8	11.1	10.7	10.4	14.6	12.6	12.9	13.6	14.1
Gross domestic investment (as % of GDP)	19.9	24.7	27.0	30.7	31.3	29.0	24.2	19.6	20.9	21.4
Gross domestic savings (as % of GDP)	18.0	20.8	24.8	28.5	31.7	30.3	31.3	26.2	26.7	23.8
Tax revenue (as % of GDP)	4.4	4.3	4.6	5.5	5.7	4.4	4.3	4.1	5.4	6.2
Central government expenditure (as % of GDP)	20.7	17.2	18.2	18.0	18.1	24.2	23.9	25.1	25.4	25.4
Exports (as % of GDP)	6.8	10.0	14.7	14.8	14.8	24.2	24.9	20.5	18.5	13.0
Imports (as % of GDP)	7.9	12.9	18.5	19.4	18.5	22.9	17.8	13.9	12.7	10.6

Sources: 1, 19, 41

Table N.23: Trends in economic performance

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Total GNP (Current Prices, US$ billions)	124650	122015	119518	123764	110660	71878	71679	101325	133088	159184
GNP per capita (Current Prices, US$)	2401	2294	2193	2217	1953	1250	1229	1712	2216	2606
Average annual growth rate of GNP (%)	→	→	→	→	5.19	←	←	←	←	←
GNP per capita annual growth rate (%)	-11.0	1.2	9.6	9.9	3.4	1.5	-3	2.7	5.2	1.9
Average annual rate of inflation (%)	→	→	→	→	27.73	←	←	←	←	←
Annual rate of inflation (%)	22.5	20.6	18.0	22.7	25.4	38.7	36.1	33.7	23.2	15.6
Exports as % of GDP (% annual growth rate)	61.7	47.1	47.0	0.7	0	63.5	2.9	-17.7	-9.8	-29.7
Tax revenue as % of GDP (% annual growth rate)	-13.9	-3.2	8.4	19.1	2.9	-23.5	-1.4	-4.4	30.4	15.7
Overall budget surplus/deficit (as % of GDP)	-9.5	-4.1	-1.1	-2.2	-1.3	-0.6	0.3	0.3	1.0	-0.1

Sources: 1, 16, 19, 20, 21, 23, 41

Table N.24: Income distribution -related human development index (IHDI)

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Human development index	0.642	0.658	0.711	0.736	0.767	0.760	0.761	0.759	0.762	0.758
Real GDP per capita (poorest 20% as ratio of richest 20%)	0.089	0.088	0.089	0.082	0.089	0.095	0.100	0.094	0.095	0.101
IHDI values	0.057	0.058	0.063	0.060	0.068	0.073	0.076	0.071	0.072	0.076

Sources: Tables N-1, N-5

Table N.25: Selected socio - economic aggregates and ratios

	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Total GDP (1987 millions US$)	130053	134954	125195	168372	178279	186623	186034	183123	179924	185796
GDP per capita (1987 US$)	2505	2537	2297	3015	3147	3246	3189	3094	2996	3041
Total GDP (1987 millions PPP$)	185713	184878	200682	221812	238217	248896	247221	245539	239155	246960
GDP per capita (1987 PPP$)	3578	3476	3683	3972	4205	4330	4238	4149	3982	4042
Total GNP (1987 millions US$)	129374	133926	124295	169926	178101	181668	181664	181271	178318	184631*
GNP per capita (1987 US$)	2492	2518	2281	3043	3144	3160	3114	3063	2969	3022
Government budget expenditure (GBE) (as % of GNP)	20.8	17.3	18.4	17.8	18.1	24.9	24.5	25.4	25.6	25.6
Public expenditure on health and education (as % of GNP)	6.3	6.1	5.6	5.5	6.3	7.6	6.5	5.8	6.9	7.3
Public education expenditure (as % of GBE)	19.4	23.0	22.5	22.1	25.3	22.1	18.3	16.3	18.8	20.7
First and second level education expenditure										
(as % of public education expenditure)	78.8	78.3	75.9	73.9	74.3	76.9	74.5	74.9	74.8	72.1
Public health expenditure (as % of GBE)	10.8	12.1	7.9	8.6	9.2	8.3	8.3	6.7	8.0	8.0
Basic health expenditure (as % of Public health expenditure)	25.6	27.2	40.9	43.9	45.3	41.4	41.2	54.2	41.0	43.9
Public social affairs expenditure (as % of GBE)	44.9	51.5	49.6	54.6	61.8	48.7	42.3	40.6	45.6	48.0
Public health and education expenditure										
(as % of public social affairs expenditure)	67.2	68.1	61.3	56.3	55.8	62.6	63.0	56.8	58.8	59.7
GDP per capita; Poorest 20% (1987 PPP$)	780	740	778	796	900	969	1002	924	901	965
GDP per capita; Richest 20% (1987 PPP$)	8709	8394	8738	9744	10085	10153	10022	9866	9514	9569

Sources: 1, 16, 19, 20, 40, 41, 42, 43

Human Development Indicators by Province (1996)

Table P.1: Human development index (HDI), by Province

	Life expectancy at birth (years)	Adult literacy rate (%)	Combined first-second and third level gross enrolment ratio (%)	Real consumption expenditure per capita (1000 Rials)	Adjusted Real consumption expenditure per capita (1000 Rials)	Life expectancy index	Education index	Consumption expenditure index	Human devlopment index (HDI) value
Country (IRAN)	69.2	72.9	75.9	1899	1899	0.737	0.739	0.895	0.790
Ardebil	65.7	63.2	72.7	1652	1652	0.678	0.664	0.772	0.705
Booshehr	66.6	72.5	74.8	1493	1493	0.693	0.733	0.693	0.706
Chahar Mahal & Bakhtiary	65.9	67.2	75.6	1437	1437	0.682	0.700	0.665	0.682
East Azarbayjan	66.5	67.5	72.9	1652	1652	0.692	0.693	0.772	0.719
Fars	67.5	74.7	74.6	1925	1909	0.708	0.747	0.900	0.785
Gilan	70.3	72.6	77.5	1671	1671	0.755	0.742	0.781	0.759
Hamedan	65.5	68.1	73.2	1182	1182	0.675	0.698	0.538	0.637
Hormozgan	65.9	63.3	70.7	1585	1585	0.682	0.658	0.738	0.693
Ilam	64.0	67.0	83.2	1409	1409	0.650	0.724	0.651	0.675
Isfahan	70.3	79.5	77.8	1758	1758	0.755	0.789	0.824	0.789
Kerman	65.4	70.5	81.3	1714	1714	0.673	0.741	0.803	0.739
Kermanshah	65.0	68.1	73.8	1860	1860	0.667	0.700	0.875	0.747
Khoozestan	66.9	69.2	72.6	1781	1781	0.698	0.703	0.836	0.746
Khorasan	64.3	73.9	74.6	1502	1502	0.655	0.741	0.697	0.698
Kohkilooyeh & Boyer Ahmad	63.4	61.9	86.7	1160	1160	0.640	0.702	0.527	0.623
Kordestan	61.6	56.9	68.3	1389	1389	0.610	0.607	0.641	0.619
Lorestan	64.6	65.0	79.2	1476	1476	0.660	0.697	0.684	0.680
Markazi	66.7	71.7	77.2	1750	1750	0.695	0.735	0.820	0.750
Mazandaran	67.4	72.0	78.1	1557	1557	0.707	0.740	0.725	0.724
Qom	67.6	75.4	73.6	3057	1967	0.710	0.748	0.928	0.795
Semnan	68.2	79.5	79.3	1586	1586	0.720	0.794	0.739	0.751
Sistan & Baloochestan	61.1	48.1	61.3	1120	1120	0.602	0.525	0.507	0.545
Tehran	70.5	84.7	82.9	3057	1967	0.758	0.841	0.928	0.842
West Azarbayjan	64.7	61.1	64.8	1439	1439	0.662	0.623	0.666	0.650
Yazd	68.5	77.9	77.7	1771	1771	0.725	0.778	0.831	0.778
Zandjan	65.8	65.2	72.3	1291	1291	0.680	0.676	0.592	0.649

Sources: 2, 8, 9, 17, 18, 19, 21, 22, 29, 31, 36

Table P.2: Gender - related development index (GDI), by Province

	Life expectancy at birth (years)		Adult literacy rate (%)		Combined first-second and third level gross enrolment ratio (%)		Share of earned income		Gender-related development index (GDI) value
	Male	Female	Male	Female	Male	Female	Male	Female	
Country (IRAN)	68.2	70.3	79.7	65.9	78.0	73.7	90.6	9.4	0.585
Ardebil	64.8	66.7	74.3	52.0	75.7	69.7	92.0	8.0	0.510
Booshehr	65.4	67.8	79.8	65.1	76.5	73.0	94.5	5.5	0.510
Chahar Mahal & Bakhtiary	65.0	66.9	76.2	58.3	81.5	69.8	85.0	15.0	0.564
East Azarbayjan	65.3	67.7	76.6	58.3	75.7	70.0	90.2	9.8	0.542
Fars	66.1	68.9	80.7	68.6	77.4	71.8	90.1	9.9	0.584
Gilan	69.5	71.2	78.8	66.7	79.5	75.7	81.8	18.2	0.646
Hamedan	64.7	66.4	76.4	59.9	75.6	70.8	92.8	7.2	0.492
Hormozgan	64.9	66.9	71.2	55.0	73.3	67.9	94.3	5.7	0.486
Ilam	63.1	64.9	74.4	59.4	84.6	81.8	91.2	8.8	0.520
Isfahan	69.6	71.0	84.5	74.1	78.5	77.1	89.3	10.7	0.614
Kerman	64.4	66.5	75.1	65.8	80.0	82.6	89.8	10.2	0.562
Kermanshah	64.5	65.6	76.2	59.5	74.7	72.7	91.6	8.4	0.535
Khoozestan	65.9	67.9	77.8	60.3	76.2	68.9	94.3	5.7	0.515
Khorasan	63.5	65.1	79.5	68.4	76.4	72.7	88.2	11.8	0.552
Kohkilooyeh & Boyer Ahmad	63.0	63.7	74.2	55.9	94.8	79.3	92.0	8.0	0.491
Kordestan	60.5	62.7	70.2	43.2	76.6	59.9	92.5	7.5	0.448
Lorestan	63.8	65.3	73.0	57.0	80.2	78.2	93.0	7.0	0.499
Markazi	65.7	67.8	79.2	64.4	80.8	73.5	90.0	10.0	0.563
Mazandaran	66.1	68.8	78.9	65.4	81.0	75.3	89.0	11.0	0.566
Qom	66.5	68.9	82.2	68.3	74.7	72.6	93.2	6.8	0.555
Semnan	67.1	69.3	84.2	74.4	79.7	78.8	91.5	8.5	0.573
Sistan & Baloochestan	60.7	61.5	58.1	37.5	66.4	56.1	94.5	5.5	0.393
Tehran	69.7	71.4	88.7	80.4	82.0	83.7	92.2	7.8	0.610
West Azarbayjan	63.9	65.5	72.8	49.0	71.8	57.6	92.3	7.7	0.474
Yazd	67.6	69.5	83.2	72.3	80.0	75.2	84.5	15.5	0.642
Zandjan	64.7	67.0	74.6	55.9	77.4	67.2	92.9	7.1	0.490

Sources: 2, 8, 9, 17, 18, 19, 21, 22, 29, 31, 36

Table P.3: Gender empowerment measure (GEM), by Province

	Seats in parliament held by women (%)	Female administrators and managers (%)	Female professional and technical workers (%)	Women's share of earned income (%)	Gender empowerment measure (GEM) value
Country (IRAN)	5.2	12.8	32.9	9.4	0.300
Ardebil	0.0	11.7	24.8	8.0	0.205
Booshehr	0.0	13.4	29.2	5.5	0.223
Chahar Mahal & Bakhtiary	0.0	12.7	34.0	15.0	0.243
East Azarbayjan	0.0	11.9	31.3	9.8	0.229
Fars	0.0	10.6	34.0	9.9	0.232
Gilan	0.0	15.9	41.5	18.2	0.276
Hamedan	22.2	14.5	35.7	7.2	0.380
Hormozgan	0.0	12.1	31.9	5.7	0.220
Ilam	0.0	12.8	29.4	8.8	0.226
Isfahan	11.1	14.8	33.4	10.7	0.386
Kerman	0.0	16.6	41.9	10.2	0.271
Kermanshah	0.0	15.7	32.6	8.4	0.246
Khoozestan	0.0	12.5	30.5	5.7	0.225
Khorasan	8.0	12.6	34.5	11.8	0.338
Kohkilooyeh & Boyer Ahmad	0.0	8.9	19.3	8.0	0.164
Kordestan	0.0	12.8	30.2	7.5	0.225
Lorestan	0.0	9.2	31.7	7.0	0.207
Markazi	0.0	13.2	31.8	10.0	0.236
Mazandaran	0.0	15.3	31.5	11.0	0.245
Qom	0.0	13.5	26.0	6.8	0.229
Semnan	0.0	13.4	35.3	8.5	0.245
Sistan & Baloochestan	0.0	12.4	30.6	5.5	0.220
Tehran	17.5	11.9	33.8	7.8	0.441
West Azarbayjan	8.3	11.4	29.3	7.7	0.316
Yazd	0.0	14.4	30.4	15.5	0.244
Zandjan	0.0	16.5	34.7	7.1	0.251

Sources: 6, 19, 22

Table P.4: Human poverty profile and index, by Province

	Human poverty index (HPI-1) value (%)	People not expected to survive to age 40 (as % of total population)	Adult illiteracy rate (%)	Population without access to		Real consumption expenditure per capita (1000 Rials)		Population below income poverty line (%)	
				Safe water (%)	Sanitation (%)	Poorest 20%	Richest 20%	$1 a day (1987 PPP$)	National poverty line
Country (IRAN)	21.4	8.2	27.1	5.5	35.7	430	4537	3.4	19.7
Ardebil	29.8	12.1	36.8	10.1	50.3	378	3759	4.2	16.9
Booshehr	21.7	11.1	27.5	3.5	37.5	441	3189	3.6	17.6
Chahar Mahal & Bakhtiary	24.6	11.9	32.8	1.3	38.2	391	3355	3.5	15.7
East Azarbayjan	25.2	11.2	32.5	7.8	38.0	461	3680	1.4	17.2
Fars	20.8	10.1	25.3	6.4	36.2	546	4212	1.4	14.7
Gilan	20.9	7.1	27.4	14.2	22.7	428	4002	1.9	17.4
Hamedan	26.2	12.3	31.9	7.3	46.6	252	2879	9.0	18.8
Hormozgan	27.7	11.9	35.7	13.6	37.7	403	3505	2.5	14.6
Ilam	23.7	14.2	33.0	4.1	16.2	435	2868	1.8	19.1
Isfahan	15.4	7.2	20.5	2.2	22.8	385	4239	2.4	15.6
Kerman	22.9	12.5	29.5	10.0	30.8	384	4114	7.4	21.1
Kermanshah	24.8	12.9	31.9	5.1	39.6	618	3941	1.3	13.2
Khoozestan	23.5	10.8	30.8	9.0	31.4	658	3753	0.7	11.7
Khorasan	23.1	13.8	26.1	5.8	45.3	277	3721	6.3	19.6
Kohkilooyeh & Boyer Ahmad	33.2	15.0	38.1	11.9	62.1	222	2840	17.7	21.3
Kordestan	31.7	17.2	43.1	4.2	39.3	485	2827	2.7	10.9
Lorestan	27.6	13.5	35.0	4.8	47.3	495	3094	2.4	17.2
Markazi	21.1	11.0	28.3	1.4	31.0	427	3957	1.4	11.6
Mazandaran	22.1	10.2	28.0	7.0	35.4	371	3730	4.2	16.6
Qom	17.6	9.9	24.6	0.5	16.2	832	7011	2.6	20.8
Semnan	15.0	9.3	20.5	0.6	17.9	300	3398	3.8	20.8
Sistan & Baloochestan	39.5	17.8	51.9	9.4	58.9	263	2690	9.5	17.8
Tehran	11.3	6.9	15.3	0.2	14.7	832	7011	0.4	19.4
West Azarbayjan	30.4	12.4	38.9	8.5	48.6	393	3233	6.0	16.9
Yazd	16.1	8.9	22.1	0.9	18.8	316	4241	2.7	17.1
Zandjan	28.5	12.0	34.8	9.5	49.6	310	2900	10.0	20.8

Sources: 4, 5, 17, 18, 19, 22, 29, 31, 34, 40

Table P.5: Women's access to education, by Province

	Female net enrolment					
	Primary		Secondary		Female tertiary students	
	Ratio (%)	Index (Iran=100)	Ratio (%)	Index (Iran=100)	Per 100000 women	Index (Iran=100)
Country (IRAN)	94.7	100.0	58.9	100.0	1582	100.0
Ardebil	91.1	96.2	40.8	69.3	769	48.6
Booshehr	95.7	101.1	56.4	95.8	973	61.5
Chahar Mahal & Bakhtiary	96.2	101.6	56.3	95.6	1301	82.2
East Azarbayjan	93.0	98.2	50.4	85.6	1181	74.7
Fars	97.5	103.0	59.4	100.8	1277	80.7
Gilan	99.2	104.8	68.9	117.0	1309	82.7
Hamedan	95.7	101.1	77.6	131.7	1151	72.8
Hormozgan	91.7	96.8	44.4	75.4	715	45.2
Ilam	93.8	99.0	62.4	105.9	629	39.8
Isfahan	99.0	104.5	69.6	118.2	2199	139.0
Kerman	99.9	105.5	66.3	112.6	1843	116.5
Kermanshah	93.4	98.6	52.1	88.5	542	34.3
Khoozestan	87.8	92.7	50.7	86.1	1038	65.6
Khorasan	94.0	99.3	54.2	92.0	1201	75.9
Kohkilooyeh & Boyer Ahmad	92.0	97.1	47.9	81.3	862	54.5
Kordestan	84.0	88.7	35.9	61.0	545	34.5
Lorestan	96.0	101.4	55.5	94.2	1034	65.4
Markazi	98.7	104.2	55.9	94.9	1604	101.4
Mazandaran	97.3	102.7	67.0	113.8	1344	85.0
Qom	97.5	103.0	59.6	101.2	1104	69.8
Semnan	98.8	104.3	73.0	123.9	2988	188.9
Sistan & Bloochestan	65.5	69.2	25.0	42.4	909	57.5
Tehran	99.9	105.5	77.9	132.3	3016	190.6
West Azarbayjan	77.2	81.5	40.1	68.1	726	45.9
Yazd	97.0	102.4	71.2	120.9	2199	139.0
Zandjan	92.9	98.1	44.6	75.7	2005	126.7

Sources: 2, 3, 8, 9, 19, 22, 31

Table P.6: Women's participation in economic and political life, by Province

	Female administrators and managers (%)	Female professional and technical workers (%)	Female sales and services workers (%)	Female clerical workers (%)	Female unpaid family workers (as % of total)	Female economic activity rate (as % of male rate)
Country (IRAN)	12.8	32.9	5.2	16.9	46.5	14.2
Ardebil	11.7	24.8	5.0	6.0	31.6	11.6
Booshehr	13.4	29.2	5.5	12.0	19.3	7.9
Chahar Mahal						
& Bakhtiary	12.7	34.0	5.2	13.4	82.4	23.4
East Azarbayjan	11.9	31.3	4.3	11.9	47.6	14.7
Fars	10.6	34.0	5.3	17.1	26.9	15.1
Gilan	15.9	41.5	8.1	18.4	77.2	28.6
Hamedan	14.5	35.7	4.4	13.7	30.7	10.5
Hormozgan	12.1	31.9	2.5	17.0	23.3	8.8
Ilam	12.8	29.4	5.6	10.0	30.3	13.3
Isfahan	14.8	33.4	4.4	12.9	48.8	16.9
Kerman	16.6	41.9	9.4	21.2	44.6	15.8
Kermanshah	15.7	32.6	4.4	12.9	47.8	13.0
Khoozestan	12.5	30.5	5.3	12.1	20.5	8.5
Khorasan	12.6	34.5	6.6	12.0	56.2	17.5
Kohkilooyeh						
& Boyer Ahmad	8.9	19.3	6.9	10.7	19.9	11.6
Kordestan	12.8	30.2	4.2	13.5	34.0	11.2
Lorestan	9.2	31.7	6.3	11.8	10.5	10.2
Markazi	13.2	31.8	5.9	13.4	39.2	14.6
Mazandaran	15.3	31.5	7.8	13.6	50.5	16.1
Qom	13.5	26.0	3.4	9.6	23.6	10.4
Semnan	13.4	35.3	7.0	15.4	44.0	13.3
Sistan						
& Baloochestan	12.4	30.6	4.6	14.3	10.4	8.2
Tehran	11.9	33.8	4.1	23.2	13.4	12.1
West Azarbayjan	11.4	29.3	4.3	12.4	34.6	11.5
Yazd	14.4	30.4	6.0	13.1	84.8	26.0
Zandjan	16.5	34.7	5.3	13.4	24.6	10.1

Sources: 19, 22

Table P.7: Child survival and development, by Province

	Infant mortality rate (per 1000 live births)	Under- five mortality rate (per 1000 live births)	Births attended by trained health personnel (%)	Maternal mortality rate (per 1000 live births)	Mothers exclusively breast feeding at four months (as % of total)	Oral rehydration thrapy use rate (%)
Country (IRAN)	31.7	38.6	86.1	37.4	65.8	47.9
Ardebil	45.9	58.9	62.2	56.8	83.0	35.5
Booshehr	42.4	53.3	80.4	52.8	61.5	44.9
Chahar Mahal						
& Bakhtiary	45.0	57.5	82.4	65.2	71.6	53.8
East Azarbayjan	42.8	54.1	83.7	47.6	63.6	43.0
Fars	38.5	47.8	86.0	24.1	82.7	58.3
Gilan	27.7	33.3	96.4	46.9	53.0	45.7
Hamedan	46.6	60.1	88.8	20.1	53.1	43.7
Hormozgan	45.1	57.7	59.8	44.0	58.4	36.4
Ilam	53.0	70.1	73.1	56.5	63.0	54.2
Isfahan	28.1	33.8	99.1	13.8	66.7	51.2
Kerman	47.1	60.8	87.0	30.4	71.9	48.1
Kermanshah	48.6	63.2	86.5	38.3	65.9	41.1
Khoozestan	41.2	51.8	81.8	30.6	60.0	46.9
Khorasan	51.7	68.0	78.1	50.2	61.7	37.3
Kohkiloyeh						
& Boyer Ahmad	56.1	74.8	56.4	62.8	64.4	50.8
Kordestan	63.7	86.7	70.9	99.4	75.5	58.8
Lorestan	50.7	66.4	71.5	28.0	70.2	51.4
Markazi	41.8	52.6	90.5	20.3	80.5	66.2
mazandaran	38.9	48.4	94.1	27.5	73.0	42.0
Qom	37.9	47.0	97.5	6.8	56.1	41.2
Semnan	35.8	44.0	94.4	40.9	60.0	63.1
Sistan						
& Baloochestan	65.5	89.7	40.9	25.2	55.6	52.3
Tehran	26.9	32.3	98.9	23.2	61.4	56.2
West Azarbayjan	48.1	60.1	68.4	83.8	75.8	35.6
Yazd	37.2	44.9	99.3	8.2	63.4	53.7
Zandjan	45.6	58.4	77.9	74.9	76.8	39.9

Sources: 7, 19, 22, 29, 33, 34

Table P.8: Health profile, by Province

	One-year-old fully immunized against				
	Tuberculosis (%)	Measles (%)	Tuberculosis cases (per 100,000 people)	Malaria cases (per 100,000 people)	Households have members with disabilities (as % of total households)
Country (IRAN)	98.6	95.9	20.9	64.1	3.87
Ardebil	97.7	96.3	19.1	41.9	4.13
Booshehr	98.5	98.6	13.0	25.7	4.88
Chahar Mahal & Bakhtiary	99.0	98.5	9.2	15.0	4.71
East Azarbayjan	99.6	96.5	13.1	8.5	3.35
Fars	98.3	99.5	10.0	48.6	4.44
Gilan	100.0	96.1	17.9	2.1	3.20
Hamedan	98.7	94.9	12.2	0.8	4.27
Hormozgan	96.4	92.3	35.6	561.6	4.96
Ilam	98.6	93.7	28.2	0.6	4.74
Isfahan	98.6	98.2	11.4	32.0	3.87
Kerman	98.7	96.0	25.7	125.0	3.92
Kermanshah	98.6	96.4	24.5	1.1	4.28
Khoozestan	97.2	92.7	25.8	5.5	5.29
Khorasan	98.9	96.7	34.1	4.0	4.31
Kohkilooyeh & Boyer Ahmad	99.1	98.3	15.3	37.8	5.76
Kordestan	99.0	95.1	25.0	3.2	4.56
Lorestan	99.0	95.0	21.1	2.7	4.79
Markazi	98.8	98.3	13.5	5.5	3.94
Mazandaran	98.4	97.6	28.3	2.9	3.76
Qom	99.8	98.7	13.8	9.1	4.14
Semnan	100.0	100.0	26.4	27.1	3.71
Sistan & Baloochestan	94.4	84.4	73.5	1290.2	3.89
Tehran	99.2	96.0	13.8	19.7	2.78
West Azarbayjan	95.7	88.8	16.4	0.9	4.36
Yazd	100.0	97.8	30.1	37.4	3.62
Zandjan	98.6	98.1	7.2	0.7	3.64

Sources: 7, 22

Table P.9: Food security, by Province

	Daily per capita consumption of energy		Daily per capita consumption of protein		Daily per capita consumption of calcium		Daily per capita consumption of iron		Food consumption (as % of total household consumption)
	Total (calory)	Index (Iran=100)	Total (gr)	Index (Iran=100)	Total (gr)	Index (Iran=100)	Total (gr)	Index (Iran=100)	
Country (IRAN)	2888	100.0	79	100.0	561	100.0	37	100.0	44.5
Ardebil	3237	112.1	92	115.3	643	114.6	43	116.6	40.5
Booshehr	2346	81.2	69	86.7	430	76.6	33	90.5	41.6
Chahar Mahal & Bakhtiary	3401	117.8	91	115.1	718	128.0	44	118.2	45.7
East Azarbayjan	2878	99.7	86	107.9	586	104.5	39	105.7	35.3
Fars	2747	95.1	71	88.7	499	88.9	33	88.9	37.3
Gilan	2810	97.3	71	88.9	427	76.0	34	92.7	43.0
Hamedan	2585	89.5	69	86.8	450	80.2	30	82.3	38.8
Hormozgan	2614	90.5	71	88.7	388	69.2	31	85.3	43.8
Ilam	3413	118.2	93	117.4	528	94.2	46	124.2	45.7
Isfahan	2478	85.8	69	86.8	518	92.2	33	88.9	34.5
Kerman	2600	90.1	74	92.6	463	82.5	31	85.3	39.0
Kermanshah	3859	133.6	106	133.3	658	117.3	51	138.0	40.2
Khoozestan	3625	125.5	110	138.9	817	145.6	47	128.8	42.1
Khorasan	3017	104.5	79	99.0	591	105.4	39	105.4	39.7
Kohkiloyeh & Boyer Ahmad	2671	92.5	68	85.2	353	62.9	33	90.8	48.6
Kordestan	2755	95.1	70	88.2	556	99.2	32	87.0	42.5
Lorestan	3832	132.7	103	129.9	667	118.8	50	136.4	46.1
Markazi	3023	104.7	83	104.4	588	104.8	39	105.7	40.7
Mazandaran	2689	93.1	74	93.0	518	92.3	34	93.2	38.6
Qom	2684	92.9	75	93.8	559	99.7	34	91.0	70.9
Semnan	2822	97.7	75	94.8	548	97.7	36	96.5	36.5
Sistan & Bloochestan	3064	106.1	82	103.8	434	77.4	40	107.6	50.0
Tehran	2684	92.9	75	93.8	559	99.7	34	91.0	29.1
West Azarbayjan	2840	98.4	79	99.6	627	111.7	37	100.5	40.2
Yazd	2574	89.1	73	91.3	556	99.1	34	93.5	36.1
Zandjan	2512	87.0	71	89.2	457	81.5	34	92.4	34.1

Sources: 5, 17, 18

Table P.10: Education, by Province

	Gross enrolment ratio				
	Primary		Secondary		R & D Scientists and technicians (per 100000 people)
	Total (%)	Female (as % of male)	Total (%)	Female (as % of male)	
Country (IRAN)	119.1	107.8	76.8	88.8	66.9
Ardebil	128.9	115.5	65.8	74.8	15.0
Booshehr	116.5	111.1	77.5	86.7	32.8
Chahar Mahal & Bakhtiary	114.7	101.6	76.0	79.9	15.6
East Azarbayjan	126.3	108.2	70.8	88.3	23.3
Fars	115.6	105.4	76.2	87.9	27.9
Gilan	120.8	107.8	83.9	97.4	63.6
Hamedan	117.8	119.2	68.8	75.3	41.3
Hormozgan	120.2	103.1	63.3	82.0	36.3
Ilam	127.6	127.5	87.2	75.7	19.9
Isfahan	115.3	112.0	83.0	95.3	112.2
Kerman	127.9	109.5	81.6	97.8	43.6
Kermanshah	124.5	119.3	74.5	74.1	16.8
Khoozestan	117.4	100.3	70.5	82.4	26.5
Khorasan	122.7	108.8	69.9	90.8	24.1
Kohkilooyeh & Boyer Ahmad	131.4	115.5	85.0	68.3	13.2
Kordestan	119.5	97.9	61.3	57.6	16.0
Lorestan	125.0	114.8	83.4	85.6	19.0
Markazi	124.3	116.4	74.3	82.1	63.8
Mazandaran	116.6	109.3	84.2	90.3	35.1
Qom	116.5	107.8	76.2	92.4	131.3
Semnan	110.6	103.5	87.6	97.1	89.3
Sistan & Bloochestan	111.4	101.2	43.4	62.5	21.2
Tehran	115.6	108.8	91.5	103.4	192.8
West Azarbayjan	112.3	91.3	62.4	68.5	4.5
Yazd	110.1	104.2	81.8	94.1	70.1
Zandjan	119.4	102.1	64.8	82.6	23.2

Sources: 8, 19, 22, 25, 31

Table P.11: Profile of people in work, by Province

	Labour force (as % of total population)	Women's share of adult labour force (% of age 15 and above)	Percentage of adult labour force in		
			Agriculture	Industry	Services
Country (IRAN)	26.1	12.2	22.8	30.4	46.8
Ardebil	24.9	10.4	35.5	26.7	37.8
Booshehr	22.5	7.2	19.0	20.4	60.6
Chahar Mahal & Bakhtiary	25.6	19.0	22.0	44.1	33.9
East Azarbayjan	28.4	12.7	25.4	36.4	38.2
Fars	25.4	12.8	23.5	28.5	48.0
Gilan	32.1	22.9	39.4	20.5	40.1
Hamedan	26.0	9.4	31.8	29.8	38.4
Hormozgan	21.1	7.5	23.8	22.4	53.8
Ilam	22.5	11.4	29.1	20.0	50.9
Isfahan	28.2	13.8	14.5	41.6	43.9
Kerman	24.2	13.2	29.4	24.8	45.8
Kermanshah	26.2	10.9	26.0	22.4	51.6
Khoozestan	22.8	7.5	19.7	31.1	49.2
Khorasan	26.4	15.2	29.4	29.7	40.9
Kohkilooyeh & Boyer Ahmad	20.6	10.4	27.8	29.7	42.5
Kordestan	25.6	9.8	31.4	28.5	40.1
Lorestan	23.3	9.1	29.5	27.2	43.3
Markazi	27.0	12.9	26.3	37.3	36.4
Mazandaran	26.8	14.2	36.3	22.3	41.4
Qom	23.6	8.9	8.3	41.7	50.0
Semnan	27.1	11.0	21.0	26.9	52.1
Sistan & Baloochestan	19.4	7.2	32.6	22.6	44.8
Tehran	27.2	10.2	4.4	33.7	61.9
West Azarbayjan	26.9	10.0	33.5	24.5	42.0
Yazd	29.3	19.6	14.4	43.5	42.1
Zandjan	25.0	9.3	38.8	28.3	32.9

Sources: 19, 22

Table P.12: Population trends and growing urbanization, by Province

	Population (thousands)	Annual population growth rate (1367-76) (%)	Crude birth rate (%)	Crude death rate (%)	Dependency ratio (%)	Total fertility rate	Contraceptive prevalence rate, any methed (%)	Urban population (% of total)	Urban population annual growth rate (%)	Population in cities more than 750,000		Largest city	
										as % of total Population	as % of urban population	City	population (thousands)
Country (IRAN)	60055.5	1.47	20.5	6.7	78.2	3.0	77.7	61.3	2.95	24.4	39.9	Tehran	6758.8
Ardebil	1168.0	0.46	25.5	8.1	86.9	3.8	83.1	48.7	3.09	-	-	Ardebil	340.4
Booshehr	743.7	1.38	25.3	7.2	86.1	3.7	66.6	53.0	2.07	-	-	Booshehr	143.6
Chahar Mahal													
& Bakhtiary	761.2	0.36	26.4	7.8	92.9	4.0	72.8	45.1	4.36	-		-Shahr-e-kord	100.5
East Azarbayjan	3325.5	0.28	20.8	8.1	71.8	2.9	80.2	60.3	2.09	35.8	59.4	Tabriz	1191.0
Fars	3817.0	1.50	24.5	6.7	82.6	3.3	76.7	56.7	2.78	27.6	48.7	Shiraz	1053.0
Gilan	2241.9	0.34	19.2	6.5	67.3	2.6	73.2	46.8	3.52	-	-	Rasht	417.7
Hamedan	1677.9	0.32	24.1	8.4	84.1	3.6	79.5	48.3	3.07	-	-	Hamedan	401.3
Hormozgan	1062.2	2.82	29.9	7.7	96.0	4.7	60.3	41.8	3.06	-		-BandarAbbas	273.6
Ilam	487.9	2.06	26.8	8.3	94.3	4.1	76.6	53.2	4.23	-	-	Ilam	126.3
Isfahan	3923.2	1.27	19.3	6.2	70.9	2.7	85.0	74.3	3.54	32.3	43.4	Isfahan	1266.1
Kerman	2004.3	1.48	25.4	8.3	87.0	3.8	74.1	52.9	4.50	-	-	Kerman	385.0
Kermanshah	1778.6	1.86	24.6	8.5	81.3	3.6	78.2	61.8	2.66	-		-Kermanshah	693.0
Khoozestan	3746.8	3.36	28.4	6.9	90.6	4.3	68.8	62.5	3.95	21.5	34.4	Ahvaz	805.0
Khorasan	6047.7	0.11	25.5	9.3	85.9	3.8	71.2	56.6	2.21	31.2	55.2	Mashhad	1887.4
Kohkilooyeh													
& Boyer Ahmad	544.3	1.85	30.4	8.5	101.3	4.7	72.9	39.2	7.16	-		-Dogonbadan	70.4
Kordestan	1346.4	1.77	27.7	9.8	88.5	4.2	79.0	52.4	3.81	-	-	Sanandaj	277.8
Lorestan	1584.4	1.08	26.6	8.3	89.5	4.0	71.2	53.6	2.24	-		-Khoramabad	272.8
Markazi	1228.3	0.76	22.0	7.9	78.2	3.2	82.8	57.1	3.48	-	-	Arak	380.8
Mazandaran	4028.3	1.21	19.2	7.6	74.7	2.6	82.0	44.3	2.99	-	-	Sari	195.9
Qom	853.0	2.41	24.0	6.9	79.6	3.5	82.7	91.1	2.68	91.2	100.0	Qom	777.7
Semnan	501.4	1.82	19.8	7.9	70.2	2.9	79.1	68.3	3.94	-	-	Shahrood	104.8
Sistan													
& Baloochestan	1722.6	3.43	34.5	8.9	107.1	5.7	55.9	46.1	4.76	-	-	Zahedan	419.5
Tehran	11176.2	2.29	18.4	5.6	62.2	2.5	86.2	84.2	2.32	68.9	81.9	Tehran	6758.8
West Azarbayjan	2496.3	1.79	26.3	8.5	79.8	3.8	79.1	52.7	3.96	-	-	Oroomieh	435.2
Yazd	750.8	1.67	21.1	7.5	78.7	3.2	84.9	75.2	3.71	-	-	yazd	326.8
Zandjan	1036.9	0.31	25.7	8.2	85.1	3.8	77.0	47.2	2.83	-	-	Zandjan	286.3

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