



Ministry of Roads and  
Urban Development

# Third United Nations Conference on Housing and Sustainable Urban Development (Habitat III)

Islamic Republic of Iran National Report







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September 2016





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# Members of the Iran's National Committee for Habitat III

Association of Construction Companies of Iran

Department of Environment

Iran National Habitat Committee Secretariat

Iranian Society of Consultants Engineers

Ministry of Foreign Affairs

Ministry of Interior

Ministry of Jihad Agriculture

Ministry of Power

Ministry of Roads and Urban Development

Ministry of Sports and Youth

Municipalities Organization

Municipality of Tehran

National Disaster Research Institute

Office of Deputy Minister for Architecture and Urban Planning, MRUD

Office of Deputy Minister for Housing and Construction, MRUD

Office of the Deputy President on Women and Family Affairs

Roads, Housing and Urban Research Center

Tehran Disaster Mitigation and Management Organization

The Housing Foundation of the Islamic Republic

The Syndicate of Consulting Architects and Planners

Urban Development and Renovation Organisation







## List of Acronyms

• AQCC	Air Quality Control Company
• Bank-e Maskan	The Housing Bank
• BRT	Bus Rapid Transit
• CBI	Central Bank of Iran
• CHHTO	Cultural Heritage, Tourism, and Handicrafts Organisation
• CIC	City Islamic Councils
• CNG	Compressed Natural Gas
• CSPO	Civil Servants Pension Organization
• DOE	Department of Environment
• GDP	Gross Domestic Product
• HCCTC	High Council for Coordination of Traffic in Cities
• HCTC	High Council for Traffic Coordination
• HCUPA	High Council for Urban Planning and Architecture
• IHIO	Iran Health Insurance Organization
• IKRC	Imam Khomeini Relief Committee
• LEF	Law Enforcement Forces
• Maskan-e-Mehr	Mehr Housing Program
• MCC	Money and Credit Council
• MFVA	Martyr Foundation and Veterans Affairs
• MLSW	Ministry of Labor and Social Welfare
• MOL	Ministry of Interior
• MRUD	Ministry of Roads and Urban Development
• NCCO	National Climate Change Office
• NDMO	National Disaster Management Organization
• NGOs	Non-Governmental Organizations
• NHLO	National Land and Housing Organization
• NPP	National Physical Plan
• NTDC	New Towns Development Corporation
• PPC	Provincial Planning Councils



• PPDC	Provincial Planning and Development Councils
• PTC	Provincial Technical Bureaus
• RCS	Red Crescent Society
• RPP	Regional Physical Plan
• RUDO	Roads and Urban Development Organisation
• SHP	Social Housing Program
• SSO	Social Security Organization
• SWO	State Welfare Organization
• TMR Tehran	Metropolitan Region
• UDRO	Urban Development and Renovation Organisation
• UNFCCC	United Nations Framework Convention on Climate Change
• UNISDR	United Nations International Strategy for Disaster Reduction
• UPTO	Union of Public Transportation Organizations



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# Preface

*In the name of God*

Iran's national habitat III report has been prepared in response to the UN Habitat's request. In its preparation the guidelines proposed for the preparation of national reports has been followed. This national report presents the strategies, policies and actions taken in Iran, over the past 20 years since the Habitat II agenda was approved in Istanbul, Turkey.

This report replaces the I.R. of Iran draft national report submitted earlier. In this report the existing conditions for those areas that are covered in the report are highlighted and emerging issues and challenges have been raised.

Habitat III conference provides a global platform for the evaluation of our past endeavor and also for developing a new urban agenda. It would advance our efforts towards adoption and implementation of sustainable urbanization and development policies.

I hope the new urban agenda would cover the future challenges and put forward sustainable urban development, planning and management policies.

Tehran, September 2016

**Abbas Akhundi**

Minister of Roads and Urban Development

Islamic Republic of Iran







# I Urban Demographic Issues

## 1 Managing rapid urbanization

Accelerated urbanization and concentration of urban population in larger urban agglomerations is becoming a distinct feature of Iran's urbanization phenomenon. During the 15 years from the Habitat II (1996-2011), Iran's urban population increased by 45.7 percent: from 36.8 million in 1996 to 53.6 million people in 2011. During this period, the number of cities was increased by 86.1 percent: from 612 cities in 1996 to 1139 cities in 2011. The current urban population of the country is estimated to be 65.93 million people, a 12.28 million increase from the 2006 census population (Table 1).

Tehran Metropolitan Region (TMR) is the most populous area in the country. Its urban population growth rate has always outpaced the national urban population growth. During this period, its urban population grew from 10.3 million in 1996 to 14.59 million people in 2011. The number of cities in TMR were increased from 25 cities of various sizes in 1996 to 55 cities in

2011 (Fig.1). The rate of urbanization in TMR grew from 86.16 percent in 1996 to 92.79 percent in 2006, while at the national level, the rate of urbanization in 2011 was 71.39 percent. Other metropolitan regions, such as Mashad, Tabriz, Esfahan, and Shiraz also have had tremendous population growth in their regions.

Much of the population growth in TMR has occurred outside the Tehran city limits and in the cities, towns and some spontaneous settlements inside the TMR. This phenomenon requires appropriate planning and governance of these areas at the regional level.

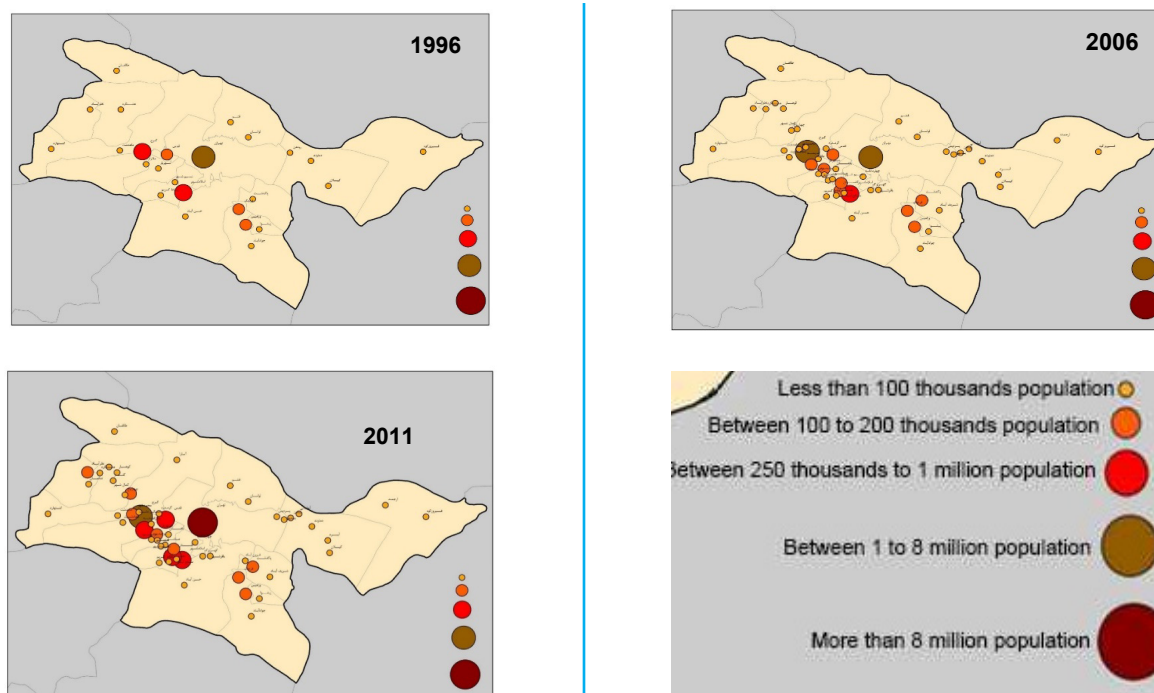


**Table 1** Population increase (in million) in different tiers of cities in Iran during the 1996-2011 period

Tiers of Cities	1996-2006		2006-2011	
	Population added	Annual growth rate(%)	Population added	Annual growth rate(%)
Cities of over 1 million population	3.51	2.57	3.75	4.38
Cities of 500 thousands to 1 million population	1.18	3.17	-0.61	-2.96
Cities of 200 to 500 thousands population	1.89	2.95	1.17	2.95
Cities of 100 to 200 thousands population	1.13	2.37	0.53	1.88
Cities of 50 to 100 thousands population	0.7	1.53	0.7	2.66
Cities of under 50 thousands population	2.29	2.78	0.6	1.23
<b>Total urban population</b>	<b>10.7</b>	<b>2.58</b>	<b>6.14</b>	<b>2.46</b>

Source: constructed based on Statistical Center of Iran's various census publications.

**Figure 1** Urban expansion and growth in Tehran Metropolitan Region (1996-2011)



To manage this rapid urbanization process, in addition to the existing urban development plans, several new plans were introduced and adopted at the national, regional, and metropolitan levels. The National Physical Plan (NPP) was prepared and approved by the High Council for Urban Planning and Architecture (HCUPA) in 1997. The objectives of this plan were to introduce an urban system wherein the hierarchy of urban services provision would be facilitated, the appropriate sites for future urban expansion and growth of cities would be identified, and finally a set of appropriate rules and regulations for land use for the entire Iranian territory would be devised and enforced. The NPP is

currently under revision.

In the NPP, the country was divided into 10 large planning regions and a Regional Physical Plan (RPP) was to be prepared for each region. To date, 6 RPPs have been prepared and approved for implementation and the RPPs for the remaining 4 regions are under preparation.

At the metropolitan level, in 2009 the HCUPA set forth criteria and indicators for identifying country's metropolitan regions and preparing appropriate metropolitan plans for the designated metropolitan areas of the country. To date, the Metropolitan plans for Tehran,



Tabriz, Mashad, Shiraz, Esfahan and Qazvin metropolitan regions have been prepared, approved and are under implementation.

A National Urbanization Policy is currently being pursued by the Ministry of Roads and Urban Development and would be added to the existing tools to manage the rapid urbanization process of the country.

## 2 Managing rural-urban linkages

As the country is getting more urbanized, the issue of reciprocal rural-urban linkages becomes much more important. Without taking note of the rural areas, the development of the cities will not be sustainable. Rural areas play an important role in supplying food to the urban population. This in turn creates jobs and income for rural residents preventing their migration to the cities.

Despite the efforts put forth to strengthen the rural system to maintain its population, in the period 1996-2011, the number of country's rural settlements have decreased from about 68 thousand to less than 62 thousands and the country's rural population has decreased from 23.2 million to about 21.5 million.

During the 1996-2011 period, several programs that encourage rural-urban linkages have been pursued by the government. In 1999, the Rural Islamic Council elections were held in the rural areas of the country and as a result rural Islamic Councils were established in each rural area of more than 20 households in population. In 2001 'dehyaries' (rural administrators) were established in villages of more than 20 households in population in order to provide the needed public services and infrastructure efficiently and effectively so that the desire of the rural households to stay in rural areas would be increased. As an executive agency, the 'dehyaries' have authority and responsibility similar to that of municipalities in cities. The rural Islamic councils have very specific supervisory roles over the 'dehyaries' and the facilitation of their activities at the rural level.

In 2013 there were 31,119 active 'dehyaries' in the country's villages which covers about 84.6% of the villages with a population of 20 households and more. The main duties of 'dehyaries' include the supply of public services, provision of public infrastructure, su-

pervision over construction, safeguarding the environment, and cooperation with government agencies in implementing their development plans. Their services do not replace any of the government's and are new ones being offered to the rural population. The head of the 'dehyaries' is selected by the Islamic council of the village.

Some of the efforts to improve the existing rural-urban linkages are as follows:

- Expanding the coverage of rural electrification, water piping, gas piping, communication facilities, environmental sanitation and waste management and sanitation,
- Encouraging industrial farming of livestock and poultry, honey-bee farming and fisheries in the villages or areas within their daily access
- Provision of agricultural land rehabilitation and farming services in rural areas
- Establishing industrial complexes in rural areas and encouraging rural handicrafts activities
- Expansion of the 'insured-purchasing system' for strategic agricultural commodities
- Marketing agriculture and animal husbandry products and a significant increase in investing in rural agriculture sector activities
- Expanding the use of modern methods of soil and water resources utilization

### ***Qualitative and quantitative expansion of education, health, culture, sports and other facilities and services in villages***

- Expansion of insurance services coverage, welfare, social security and rural support systems and activities
- Significant expansion of rural physical organization and development through the preparation and implementation of rural development plans
- Quantitative expansion and qualitative improvement of rural roads to facilitate communication between villages and between cities and villages and expanding access to neighboring towns and villages close to each other for functional integration
- The creation and utilization of network links and hierarchy of services between rural and urban areas to provide improved public services to rural villagers
- Taking into account the rural-urban linkages, especially in the preparation of metropolitan region plans, new towns plans, and county comprehensive plans preparations.

### 3 Addressing urban youth needs

The youth are a major, important and effective part of the country's urban population that provision of their needs and desires are the priorities of the government programs and executive bodies.

The relative share of youth population in the age structure of the country's urban population during the 1996-2016 period, is the highest as compared to the past trends. In terms of employment statistics, while the relative rate of participation in economic activities at the national level in 1996, 2006 and 2011 are respectively 33.9%, 38.8%, and 37.6%, their corresponding percentages for urban youth are respectively 33.4%, 37.8% and 35.9% which are not significantly different from those at the national level. The unemployment rate for the national urban areas in 1996, 2006 and 2011 are 8.9%, 11.8%, 15.7%, respectively, their corresponding figures for active urban youth are 14.9%, 22.4%, 28.3%. These figures show that the urban youth unemployment rates are almost twice higher than those of national urban areas. Some of the reasons for the higher unemployment rates among the youth could be summarized as follows:

- The higher rate of unemployment among the young women as compared to young men
- The incompatibility of the degree courses offered in the universities with those of the market needs
- The brain-drain phenomenon which results in the out-migration of the top university graduates

Strengthening the relationship between the university and industry, creating employment and educational career centers, providing the motivational and preferential facilities, and creating new technology towns and centers are some of the efforts that have been adopted during the past twenty years to improve the urban youth conditions.

In terms of university-industry relations, the number of university students has increased tremendously in the period 1996-2011. The number of university students was increased from 614 thousands in 1996, with an annual growth rate of 14.1 percent, to about 4.4 million in 2011. It is estimated that the current trend would continue.

### 4 Responding to the Needs of the Aging

The proportion of the aging population is on the rise in Iran, due to the improved public health, access to health services and a declining birth rate. Between 1996 and 2011, the number of people 65 years and older increased by 65.6 percent (1.7 million people). The proportion of the elderly population in the country in 2011 was 5.7 percent which has increased from 4.3 percent in 1996 (Table 2).

**Table 2 The aging population (in thousands) in urban and rural areas of Iran (1996-2011)**

The aging population		1996	2006	2011
Urban areas	Number	1470.7	2300.1	2897.4
	Proportion (%)	4.0	4.8	5.4
Rural areas	Number	1124.5	1356.5	1399.4
	Proportion (%)	4.8	6.1	6.5
Total	Number	2595.2	3656.6	4296.8
	Proportion (%)	4.3	5.2	5.7

Source: Statistical Centre of Iran, various census publications.

The services provided for the elderly population during the 1996-2011 period could be divided in to two categories: The insurance and the non-insurance support services. The insurance support services are provided by the Social Security Organization (SSO), The Civil Servants Pension Organization (CSPO), and Iran Health Insurance Organization. The State Welfare Organization (SWO), Imam Khomeini Relief Committee (IKRC), Red Crescent Society (RCS), and the Martyr

Foundation and Veterans Affairs (MFVA) are in charge of providing the non-insurance support services.

The SWO offers its services to the elderly within the following frameworks:

- **Medical and nursing care:** In order to reduce problems related to age prevention of old age diseases and treating the existing ailments

■ **Rehabilitation:** Including medical, social, professional and educational rehabilitation in order to increase the abilities of the aged in dealing with the consequences of age, better coping with their surroundings and maintain maximum independence.

The services offered for the aged population by the SWO are as follows:

- **Rehabilitation, care and nursing homes:** Offering services including care and rehabilitation including medical, physiotherapy, occupational therapy and speech therapy to the elderly.
- **Day rehabilitation and educational centers:** Offering educational and medical, social and professional reha-

bilitation services. There is at least one active center in each province.

■ **At home rehabilitation and care centers for the aged:** Offering care and rehabilitation services including medical, physiotherapy, occupational therapy, speech therapy, and psychological and social counseling services to the eligible elderly.

■ **Comprehensive rehabilitation centers for the elderly:** Offering rehabilitation services including medical, physiotherapy, occupational therapy, speech therapy and psychological and social counseling to the elderly (Table 3).

**Table 3 Rehabilitation services provided for the aged population, 1996-2014**

Rehabilitation services		1996	2001	2011	2014
<b>Care for the elderly</b>	Number of centers	–	90	317	345
	Number of recipients of services	–	–	17,425	18,055
<b>Speech Therapy</b>	Number of centers	57	97	113	94
	Number of recipients of services	7,402	11,638	27,423	98,694
<b>Physiotherapy</b>	Number of centers	155	182	187	181
	Number of recipients of services	83,586	81,887	61,977	450,672
<b>Occupational therapy</b>	Number of centers	55	82	97	105
	Number of recipients of services.	17,671	27,547	25,011	135,897
<b>Hearing tests</b>	Number of centers	62	83	88	91
	Number of recipients of services	76,769	83,056	75,169	131,228
<b>Optometry</b>	Number of centers	33	38	47	46
	Number of recipients of services	49,656	55,762	44,597	71,533
<b>Technical Orthopedics</b>	Number of recipients of services	14	17	20	18
	Number of centers	1,996	19,102	12,214	14,254
<b>Number of aged supported by the IKRC</b>		–	1,138,220	1,434,170	1,525,029

Source: Statistical Centre of Iran, various census publications.

There are currently two plans being implemented in the office of the aged of the SWO:

**The elderly rehabilitation plan in the urban-rural network:** This plan has been designed and carried out to teach the elderly methods for a healthy life in all dimensions and help them cope with old age, resulting to a healthy and successful life.

**Community-based rehabilitation plan:** Considering the fact that implementing rehabilitation programs with a participatory approach requires active participation of the aged and their families, the participation of those benefiting from the program, their families and local community is an important principle in rehabilitating the aged.

The SWO, along with other organizations and the private sector and NGOs mentioned above, generally presents their services to the elderly the poor. Only a very small part of these exclusive and divisive services for nursing homes is provided solely to this age group.

## 5 Integrating gender in urban development

In the Fifth Five-Year Development Plan (2011- 2015) the government was mandated to prepare a comprehensive development plan for active participation of women in society with the objective of strengthening their role, to prepare a bill to strengthen the institutions of family, and to take actions to prevent violence against women. The following laws, declarations and other related legal documents enacted during the 1996-2015 period show the importance of the gender issue and the position of women in the development processes of the country:

- The 2004 High Council for Cultural Revolution Declaration on 'the rights and commitments of women in the Islamic Republic of Iran'
- The 2008 amendment law on inheritance of women and increasing the minimum age of marriage for girls and women's custody of children.
- The 2010 law for educational justice and gender-balance for higher education
- The 2008 law for increasing the coverage of rehabilitation and support services for the disabled and women head of households
- The 2009 law for organizing and supporting home-based employment
- The 2015 law on maternity leave
- The 2013 government Executive Order on the 50% discount in to the insurance premium to the women who are the heads of their households and are employed by the private sector

The results of the measures taken in the field of gender justice (especially in urban areas) in this period can be listed as follows:

- Increase in women's employment rate from 9.1 in 1996 to 13.8 in 2012.
- Providing financial assistance self-employment of women in supportive organizations;
- Building special parks for women;
- Establishing sports centers in cultural houses for women
- Establishing neighborhood houses with diverse programs such as free training for women to introduce them to methods for improving their lives, first aid, raising children; and
- The establishment of women-only spaces in terminals and large parks in order to cater to the needs of women such as breastfeeding and attending to newborns and children.
- Establishment of special family courts and hiring women judges in order to better support the women's rights;
- Establishing a special department in the Judiciary to support women and children;
- To create a 24-hour free consulting phone line in the judiciary special agencies;
- The establishment of social centers for girls vulnerable to social malaise (health homes);
- The hiring of female police officers to attend to the affairs of women.
- Enhanced life expectancy among women from the 63 years to 74 years
- Reduction of maternal and pregnancy mortality rate from 91 out of 100 thousands births of live infants to 20;
- Promotion of pregnancy prevention schemes in order to enhance women's health (such as training courses to inform them about avoiding high-risk behaviors);
- Dissemination of medical and pregnancy health messages, launching the special 24-hour lines to respond to all the related questions and information in this area;
- Dealing with sexually transmitted infections and diseases.
- The establishment and running of birth centers and training of midwives in rural areas, the implementation of special plans for the health of women, the national plan of dispatching health convoys for women in the deprived parts of the country, holding specialized workshops for pregnancy health and family planning.
- An increase in the number of women parliamentarians in the Iranian Islamic Parliament and city Islamic councils;
- Active involvement of women in the environmental decision makings at all executive levels;
- Establishing the first women-only news agency.
- Relative increase of literacy rate among women compared to men
- Increase of the rate of women's higher education from 5.7% to 17.9%
- The increase of women's relative share of studying medical sciences to 53%, basic sciences to 69% and technical-engineering to 37%

- Enhancing women's accessibility to technical-vocational, science and technological, and related training courses

## 6 Challenges experienced and lessons learnt in these areas

- Unprecedented increase in the number of cities and the urban population
- Extensive and ongoing changes in the pattern of urban population
- Intense qualitative and quantitative expansion of the urban population needs
- Deepening the socio-economic gap between urban and rural areas
- Inconsistencies in linking rural and urban management in the supply of services
- The higher unemployment rate of the youth as compared to the average unemployment rate in the country
- High rate of unemployment for college graduates
- The unemployment rate for young women being higher than young men
- The unemployment rate for the rural youth being higher than those of urban areas
- Weaknesses in information dissemination in the job market
- Discrepancy between professional and vocational training and needs of the job market
- The youth having a small share of the employment opportunities created in recent years in comparison with their employment needs
- The dominance of the increasing costs of housing over the increase in the economic abilities of the youth
- The high demand for housing by the youth, affected by the increase of the relative rate of the youth population
- The increase in the migration of youth from villages to cities and from smaller to bigger cities

- Lower participation of women in economic activities;
- Lower share and position of women in policy and decision making in economic fields;

## 7 Future challenges and issues in these areas

- The need for fundamental change in the management of metropolitan areas
- The creation of a participatory management system within the framework of local governance;
- Creating the foundations for stakeholder's active participation;
- Capacity building in production and employment
- Capacity building in manufacturing and job creation
- Supplying housing for the youth with priority for the employed over the unemployed, married over single;
- Determining the place of youth housing and making it transparent in the economic and financial programs, the monetary and banking system, and the subsidies mechanism and also the urban development plans and programs, especially for specific youth groups, low income groups, young couples and...
- Pursuing support policies to increase the economic abilities, ease of access, increasing the mental and physical security in supplying proper housing for the youth;
- Gradual change in the housing model for the youth from ownership-oriented to rent-based;
- The need to establish more civil society institutions in order to support and empower women;
- The need to allocate more financial resources to the schemes of entrepreneurship for women;
- The need to elevate women's position in the economic decision making system;







## II Land and Urban Planning

### 8 Ensuring sustainable urban planning and design

The Ministry of Roads and Urban Development (MRUD) is the lead agency responsible for urban planning and development in Iran. MRUD wields authority over the development of city plans, their approval and adoption, while Ministry of Interior (MoI) supervises city administration and funds urban development plans implementation.

At the regional level, the provincial governors oversee the implementation of urban development plans. The Municipalities Organisation (MO) was established under the MoI to support and coordinate the development of urban infrastructure and delivery of urban services.

**The High Council for Architecture and Urban Planning (HCAUP)**, presided over by the Minister of Roads and Urban Development has the leading role in sustainable urban planning and design. The Deputy Minister for Urban Development and Architecture of the MRUD is the Secretary to the HCAUP. Other

members of HCAUP include the Ministers of Interior, Economy and Finance, Culture and Islamic Guidance, Education, Power, Agriculture, and Defence. In addition to these ministers, three Vice-Presidents are the voting members of the HCAUP: (i) Vice-President for Strategic Planning and Supervision; (ii) Head of the Cultural Heritage, Tourism, and Handicrafts Organisation (CHHTO); and (iii) Head of Environmental Protection Organisation. HCAUP has the following four main functions:

- Issuance of national urban development policies;
- Commenting on by-laws affecting zoning, land use, and main urban functions;
- Adoption of urban master plans; and
- Issuance of urban criteria, regulations, by-laws, etc.

City Master Plans and Detailed Plans are regularly prepared for Iranian cities and have a ten-year horizon. These plans after being approved are submitted to the municipalities for implementation.

Action Area Plans and Subject Plans are prepared for

certain areas of the city or to address certain issues in the city, respectively. Other types of plans are prepared for areas larger than that covered by the city master plans. These include metropolitan area plans, regional physical plans, national physical plan, and national and provincial territorial development plans. The national territorial development plan is somewhat similar to the national physical plan but is prepared by the Vice-Presidency for Strategic Planning and Supervision.

The approval of master plans by HCAUP has an established process: (i) a qualified consultant is commissioned by the provincial Roads and Urban Development Organisation (RUDO), which is the provincial office of the MRUD; (ii) after the plan is prepared, it must be approved by the Provincial Planning Council; (iii) it is then reviewed concurrently by the HCAUP's technical committee and the office of Physical Plans at MRUD, before submission to HCAUP for approval.

Another important institution in this area is the Islamic City Councils which are established both in the urban and rural areas. Their members are elected directly by the citizens every four years. Each city council elects its respective mayor.

In September 2002, at other consultative levels, namely county and provincial, councils were also formed. City and district councils send their representatives to county councils. County councils in turn elect a council for the province. Each representative of the provincial councils attends the Provincial Planning Council (PPC) with the right to a single vote. The Supreme Council of Provinces is formed with the attendance of representative councillors from provincial councils. The Supreme Council is responsible before the Parliament.

## 9 Improving urban land management, including addressing urban sprawl

### *Urban land management*

The responsibility of urban land management rests with key public agencies such as MRUD and its subsidiary agencies, city councils and municipalities. National Land and Housing Organization (NHLO) is a state-owned company under the MRUD. Its mandate includes implementation of Urban Land Law; planning

for the housing sector; investment in housing through public-private partnerships; and guiding construction materials production. As a result, the Government has undertaken significant land acquisitions through NHLO.

Currently five methods are used for pricing land allocated by the Government:

1. Market price for small plots arrived at through bidding based on current market value estimations;
2. Negotiated price for mass production of housing through agreement to allocate large parcels of serviced land to housing developers or negotiated share of the equity. This pricing might also include some discounts for developers of rental housing;
3. Allocation of land to individual applicants at 'finished cost' price. The latter is essentially the original method of pricing and is used in special cases supported by government policies;
4. Long term (99 years) lease of land for Mehr Housing Program; and
5. Special pricing for transfer of plot ownership to Mehr Housing owners.

### *Addressing urban sprawl*

To address the urban sprawl, two MRUD subsidiary agencies have been established to (i) undertake up-grading, renovation and regeneration of urban informal settlements; and (ii) develop new towns to provide adequate and decent housing for excessive urban population.

The New Towns Development Corporation (NTDC) is responsible for developing new towns in the country. The body responsible for 'irregular zones'<sup>1</sup> upgrading is the Urban Development and Renovation Organisation (UDRO), which is now reorganised as a holding company and is more appropriately called Urban Development and Renovation Corporation. UDRO's mission includes the following:

- Foreseeing and preventing the proliferation of urban 'irregular zones';
- Institution-building, cultural advocacy, creating the tools, capacity-building, and coordination to realise community-based participatory renovation;
- Leadership, supervision and controlling over such measures as people-based innovative in urban development;

Based on its years of experience, UDRO's approach includes five key stages as follows:

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1. See section 35 for a more detailed definition of 'irregular zones' in Iran.



1. Carrying out catalytic projects in development and regeneration;
2. Addressing problematic urban fabrics;
3. Participatory urban renewal;
4. Supportive urban renovation;
5. Regeneration of old zones

'Irregular Zone' in Iran are based on location, with reference to official city boundaries, and include informal settlements and deteriorated fabrics. These two types can be further divided on the basis of their origins into:

- i) declining areas within the city;
- ii) informal or spontaneous settlements outside official city boundaries;
- iii) informal or spontaneous settlements formed in suburban villages;
- iv) informal or spontaneous settlements recently incorporated into cities;
- v) squatter settlements; and
- vi) informal or spontaneous settlements formed in and around brown fields.

The current focus is on reshaping existing structures, avoiding direct intervention, delegating significant authority to local agents, reorganising spaces and functions, and planning for the optimal utilisation of existing capacities. A wider range of issues are now taken into account and local capacities and enabling approaches have become important areas of focus.

It is based on the following principles:

- Reducing and preventing urban poverty;
- Increasing urban resilience through upgrading and retrofitting;
- Enhancing identity and protecting cultural values; and
- Employing good urban governance in regeneration to promote social cohesion.

## 10 Enhancing urban and peri-urban food production

The accelerated urban sprawl and expansion of physical boundaries of cities during the recent 20 years (1996-2016) have given rise to the integration of outskirts and urban peripheries into the urban areas, leading to their conversion from the rural to urban land and thus being used as urban land for housing construction. Although, only agricultural activity is allowed in urban peripheral areas, the agricultural land use of such areas is converted once the city boundaries are expanded. Thus, land allocated in this way for agriculture is essentially land reserved for future development. On the other hand, some primary initiatives have addressed urban food production at pilot level.

So, the conversion of many rural areas of the country into cities, has caused the expansion of construction boundaries and the agricultural land use of their peripheral lands are converted to non-agricultural urban land uses.

Moreover, the serious shortage of water resources in the remaining lands and villages of urban peripheries on the one hand and the land use conversion of farming villages with good weather to urban residents summer resorts and peri-urban settlements on the other, have caused that agricultural land of urban peripheries and village-towns to be prevented from their agricultural activities.

These changes as a whole at the said period has seriously decreased the agricultural land of the above areas and as this land is usually fertilized and amongst the best agricultural types of land, its shortage consequently has notably decreased the production of foodstuffs in these areas.

The endogenous continuation of this process made the conversion of the land use of the agricultural land that is located at the immediate zones of the city boundaries. Thus, agricultural activities such as farming, horticulture, and livestock are gradually becoming stagnant or being set aside on this type of land, leading to the acceleration of the vicious cycle of land use conversion.

Due to the higher profit gained through activities (rather than agriculture) on the lands of the urban and rural peripheries, this process has been intensified and weakened the important source of foodstuffs production.

The following have been effective in the improvement of food stuff production, both in urban and peri-urban areas as follows:

- development of the guaranteed purchase of strategic

agricultural products;

- a substantial increase in selling prices of agricultural products;
- improving market and better access of agricultural producers to the markets;
- establishment of production cooperatives and companies in the agricultural sector;
- higher demand to agricultural products compared to their production and its positive effect on increasing of their price and motivation to more production.

Moreover, some initiatives in the framework of pilot projects are being done in the urban and peri-urban areas. For example, NTDC seeks to promote hydroponic agriculture in the periphery of new towns. To this end, in each new town, a task force is formed with the participation of the Bank for Agriculture and Ministry of Agriculture to promote and support hydroponic food production in green-houses. Graduates of agriculture as well as other interested parties can participate in this scheme.

Domestic urban food production—such as production of vegetables, mushrooms or vermicomposts—has also been pursued by some NGOs as an income-generation activity for poor households.

Some experimental pilot projects for food production on green roofs (roof gardens) have also been undertaken.

## 11 Addressing urban mobility challenges

Public transportation plays a limited role in urban mobility in Iranian cities—only about 41% in 2005, about 1% of which is the share of urban rail transport (subway). The Law for ‘Public Transportation and Management of Fuel Consumption’ (2007) required that the share of public transportation in urban mobility should rapidly increase to 75%. It also requires that the government promotes, inter alia:

- Development and expansion of urban railroad networks;
- Improvement of vehicular traffic;
- Substitution of petrol and gasoline with Compressed

Natural Gas (CNG);

- Production of energy-efficient hybrid cars;
- Obligatory technical inspection of light and heavy vehicles;
- Development and expansion of parking space and passenger terminals.

Decisions affecting urban mobility at national level are made by the High Council for Traffic Coordination (HCTC) which was established in 1995 as a multi-sectoral task force. The secretariat of HCTC is established under the MoI. Similar task forces are also formed under the Provincial Government.

The Union of Public Transportation Organizations (UPTO) was established in 2005 to oversee urban mobility within cities with a population between 30 to 100 thousands. Currently some 1,091 cities are targeted by UTPO which make up about 92% of all Iranian cities. In these cities, UTPO provides the following services:

- Renovation, mobilization and development of the public urban fleet (taxi, bus, van, etc.)
- Insurance coverage of urban public drivers;
- Managing fuel allocation to private cars;
- Managing automobile technical inspection centres; and
- Managing passenger terminals.

In metropolitan areas, other means of public transportation such as Bus Rapid Transport (BRT) has been introduced. The municipalities have also promoted environment-friendly transportation means, such as cycling.

## 12 Improving technical capacity to plan and manage cities

### *Academic education*

At present, urban planning is taught at B.A. and Master's Level in Iranian Universities. Currently, there are several schools of urban planning that offer urban planning degree courses, both at bachelors and masters level and eight universities also offer PhD-level

education in the field of urban planning. The curricula of these degree courses focus on urban planning history, theories and methods and priority is given to physical planning and urban design. However, limited attention is paid to practical topics such as urban economy, financing urban projects and urban management. Covering these practical issues is still a key challenge in academic education and research in Iran.

### ***Training Municipal Councils***

City councils provide community representation at the local level. Citizens directly elect the councillors who then nominate the mayor. Yet, line agencies in charge of urban service provision in the cities (e.g., water and sewerage, electricity, gas, and communication) are local subsidiary of their respective national ministries. Thus, the scope of activities performed by municipal authorities—i.e. councils and mayors—is rather limited. The Municipalities Law, dating back to the earlier part of the twentieth century, originally authorised 53 sets of duties for municipality administrations. However, in subsequent periods, many of these duties were taken over by the central or provincial organisations, so that in recent years municipality administrations have only performed 21 sets of duties with another 7 duties managed jointly by them and governmental organisations.

Since the Third Five Year Development Plan (2000-2004), a number of municipal responsibilities were given to municipality administrations. In practice the scope of this re-delegation initiative has been limited. Yet, the institutionalisation of directly-elected municipal councils in the last decade has resulted in some degree of devolution in light of their authority and responsibility vis-à-vis municipality administrations and mayors. Whereas prior to the late 1990s, municipality administrations were integrated in the structure of Mol and the Government, they are now seen as ‘public’ institutions that are monitored by municipal councils as representatives of urban residents. The authority of municipal councils has nonetheless been limited due to the legal ambiguities surrounding their position and activities.

The Municipalities Organization (MO) was established in 1997 to undertake, inter alia:

- Training and capacity-building of municipal staff and councils;
- Applied research in urban and rural management;
- Promoting use of advanced technologies in urban management;
- Review of existing laws and regulations and elaborating guidelines and rules of procedure for municipal activities; and
- Establishing specialized municipal databanks.

Capacity-building has been a challenge for MO because of its own limited capacity and experience in using effective training methods and on-job training. Furthermore, in small cities, there is a marked deficiency in specialists with adequate skills needed by the city. Another factor contributing to inefficiency of MO training is constant change in scope and mandate of municipalities as well as municipality personnel and councillors.

## **13 Challenges experienced and lessons learnt in these areas**

### ***Ensuring sustainable urban planning and design***

Although development plans are prepared to manage the needs of the growing urban population, urban planning processes are still inadequate vis-à-vis the pressing development needs and the urban sprawl. Despite establishment of several elected councils at city and national level, a major factor causing the inadequacy of the urban planning process is still the lack of adequate stakeholder consultation.

In this situation, the poor are usually excluded. The exclusion of the needs of the poor increases deterioration process in the historic fabric. As the provisions of the plan favour new construction, the investment is decreased in the historic fabric. This starts a dilapidation process: increase of population density; sub-standard housing and the underserved area; little or no maintenance process of the buildings or the urban infrastructure. In such a situation a form of low-cost housing develops which attracts new settlers such as legal or illegal migrants, lower income groups, and informal workers, making the area susceptible to all types of crime.

### ***Improving urban land management, including addressing urban sprawl***

Not corresponding to demand, the limited supply of urban land has led to the following problems:

- Increase in constructions and as a result building more than the built-up ratio and population density that was set in the urban master plans;
- Conversion of agricultural to residential and commercial land uses;

- Sprawl of informal settlements in the urban peripheries;

- Multiple cases of illegal land subdivision,

Despite continuous effort for the upgrading and re-generation of informal settlements, both in scope and volume of activity, they keep forming in the urban peripheries. Addressing the above issues requires facing the following challenges:

- Elaboration and adoption of comprehensive land law through a close cooperation among all stakeholders in particular, MRUD, NHLO, UDRO, the Judiciary Force, Land Registration Department, Municipalities and Department for Forests, Pastures and Natural Resources.
- Adoption of a market-responsive policy for land allocation and pricing through a close cooperation among related agencies and local authorities.

#### ***Enhancing food production in urban and peri-urban areas***

Lack of awareness is a key challenge in promotion of urban food production, which has left many of its opportunities unexplored. Lack of adequate agricultural land is also another problem. In many cities, the existing gardens and agricultural land also require urgent conservation. Provision of water is another major impediment, since most cities only have a potable water network, while digging wells is prohibited to preserve the subterranean water table.

#### ***Addressing urban mobility challenges***

Key challenges in urban mobility arise from the fact that public transportation still plays a secondary role in urban mobility and personal car ownership is still implicitly favoured. Despite efforts in metropolitan areas, use of environment-friendly modes of transportation such as pedestrian access and cycling is still limited.

#### ***Improving technical capacity to plan and manage cities***

Limited attention is paid to practical topics such as urban economy, financing urban projects and urban management in the academies and research and training institutes. Covering these practical issues is still a key challenge in academic education and research in Iran.

Capacity-building has been a challenge for MO because of its own limited capacity and experience in using effective training methods and on-the-job training.

## **14 Future challenges and issues in these areas**

### ***Ensuring sustainable urban planning and design***

At present, the majority of planning structure is centralized and top-down. The plans are adopted and implemented through the hierarchical process per their scope, size and period. The following should be considered:

- Continue the planning innovative programs in the field of decentralization and devolve authority to local levels;
- Include the problems of the vulnerable, women, youth and the poor in the all-inclusive and comprehensive planning processes;
- pay sufficient attention to the dynamic nature of urban development, the influence of the market and the challenges resulting from inequality

### ***Improving urban land management, including addressing urban sprawl***

Rapid urbanisation and inefficient functioning of land and housing markets have intensified speculative activities and rising real estate prices. In the absence of adequate and decent formal housing, the urban poor seek affordable informal shelter—whether outside formal city boundaries or within the city in deteriorated fabrics—where sub-standard and unconventional land divisions and lack of basic services are its outstanding characteristics.

Solutions thought for informal shelter has led to the formation of ‘irregular zones’, where residents have lower qualities of life and fewer opportunities. Despite extensive ‘irregular zones’ upgrading and regeneration measures taken by the Government, ‘irregular zones’ continue to form around the cities, making the situation within the cities more deteriorated. The following should be considered:

- effective use of available state-owned land;
- ensure the provision of sufficient land supply for urban housing and infrastructure;
- formulate suitable standards for the land development;
- consider the situation of the land plots that are not registered, lack title and/ or have been informally transacted;
- motivate the targeted groups and populations in their collaborative effort to do micro-investments for improving urban regeneration.

### ***Enhancing urban and peri-urban food production***

- Lack of awareness of the private sector and people on techniques, methods, legal implications and public support regarding the production increase of food stuff both in cities and city-villages;
- Lack of adequate agricultural land in urban and peri-urban areas
- Lack of rules and regulations promoting use of public green spaces for agricultural purposes; and
- Lack of adequate water for agricultural use.

There is a need for including the following in the new urban agenda:

- Developing rules and regulations to promote urban and peri-urban agriculture;
- Use of recycled drainage and waste water for urban and peri-urban agriculture; and
- Raising awareness of the society to enhance food stuff production in urban and peri-urban areas for the future.

### ***Addressing urban mobility challenges***

- Public transportation still plays a secondary role in urban mobility;
- The use of personal vehicle is still implicitly favoured in urban design;
- The accessibility, effectiveness and efficiency of public transportation is low;
- Use of environment-friendly modes of transportation is still limited in metropolitan areas;
- Private sector investment in public transportation is still limited;
- Access to environmentally-sound transportation technologies is limited.

### ***Improving technical capacity for urban planning and management***

- Including urban planning and management in the related academic curricula;
- Regular on-the-job training courses for municipal managers and staff;
- Recruit the required specialized staff for small cities;







# III Environment and Urbanization

## 15 Addressing climate change

Iran is a country that due to its special geographical and environmental characteristics enjoys a high climatic variety and thus is the habitat to countless marine and terrestrial species. However, over the past few decades, shortages of precipitations, continued drought, severe fluctuations in the available limited water resources and their contamination, air pollution in cities and industrial areas, increased soil erosion and loss of vegetation, and loss of biodiversity have imposed a huge burden on the country's natural resources. In fact, with having a vast area of arid and semi-arid lands and fragile mountainous eco-systems as well as having the economy that is heavily dependent on the production, processing and sale of fossil fuels, the country is severely vulnerable to climate change. The Islamic Republic of Iran joined the United Nations Framework Convention on Climate Change (UNFCCC) on July 18, 1996 and the National Climate Change Office (NCCO) was established in the Depart-

ment of Environment (DoE) in 1998. Iran also joined the Kyoto Protocol on August 22, 2005. Moreover, the Iranian Cabinet issued an Executive Order in 2009 on the implementation mechanisms to implement the UNFCCC and Kyoto Protocol, and amended it in 2012.

### *Monitoring the Climate Change in Iran*

Based on the estimates reported in Iran' Second Communication to the UNFCCC which had used the data of 1965-2005, the minimum and maximum temperatures, precipitation, wind speed, dew point temperature (as an indicator of humidity), cloudiness and daylight hours that have been studied indicate that:

**Temperature:** Temperature has been risen between 2.5 and 5 degrees Celsius on average, the increase in minimum temperatures is more widespread than the maximum temperature, the discrepancies are remarkably higher in large, heavily polluted and industrial cities and due to the pattern of higher minimum temperatures, the daily temperature variability has reduced almost everywhere.

**Precipitation:** Southwestern parts of the Caspian Sea, northwest and west of the country have experienced

the highest rate of reduction in the amount of their annual precipitation, whereas precipitation has increased in other regions except in the southeast of the Caspian Sea.

**Wind:** The highest rates of decrease of wind speed are seen in central part of the country as well as in the northeast.

**Humidity:** The dew point temperature which is an indicator of humidity has considerably decreased in most parts of the country except in the north and northeast parts.

**Daylight Hours:** A rising rate pattern is visible everywhere through the country. The highest rate of increase is seen in the northwest of the country.

**Cloudiness:** The number of the days with clear skies changes between -12 to 12 per decade with the highest rise and fall in the number of the days with clear skies observed in relatively small area of the country in the cities of Shahroud and Gorgan that could be due to the effect of Alborz mountains range on the climatic condition at different places.

The climate of the country has also been forecasted during the 2010-2039 and the results have been compared with observations during 1976-2005 period. The results indicate that the amount of precipitation will, on average, decrease throughout the country by 9 percent during 2010-2039 as compared with the 1976-2005 period. However, the number of heavy and torrential rains will increase by 13 percent and 39 percent over the same period, respectively. Temperature projections show an average increase in the amount of 0.9 degrees Celsius and minimum and maximum temperatures will on average rise by 0.5 degrees Celsius. The

rise is more pronounced during the cold season. The number of hot days will increase in most parts of Iran. The highest increase will occur in the southeast of the country by 44.2 days. The number of freezing days will decrease in most parts of the country with the largest decline being predicted in the Northwest of the country by the 23 days per annum. The number of wet days will increase in some areas in northwest, center, south, east, and southwest of the country. In other parts of the country the number of wet days will decrease. The number of dry days will increase in many parts of the country. The highest rise at 36 days is expected to occur in the west and southeast of the country.

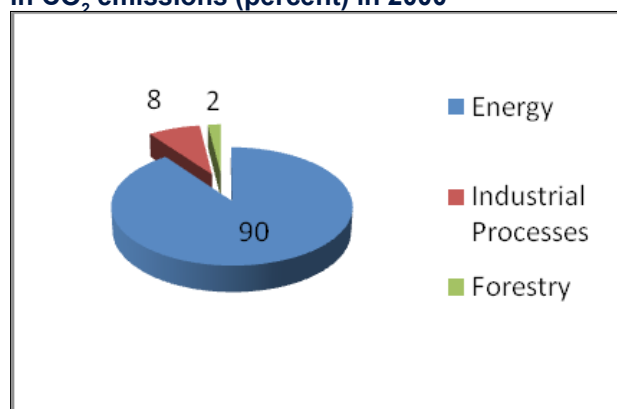
In recent decades, climate change has affected water resources with frequent incidence of droughts and floods which have caused severe damages to water resources and have created significant number of problems in water resources management in the country. In fact, due to a serious decline in water resources, one of the biggest environmental challenges in the coming decades will be the water crisis.

### Mitigation of the effects of climate change

The summary of the direct and indirect GHGs inventory in Iran is shown in Figures 2 and 3. The total CO<sub>2</sub> emissions from different sectors in 2000 is about 375,187 Gg<sup>1</sup>, with the energy sector contributing about 90 percent (Fig.2) of the total emissions and industrial processes and forestry contributing about 8% and 2%, respectively. The total CO<sub>2</sub> equivalent emission is estimated to be 491,052 Gg in 2000. The energy sector has the largest share of 77% and the forestry sector has 2% in overall GHGs emission (Fig. 3).

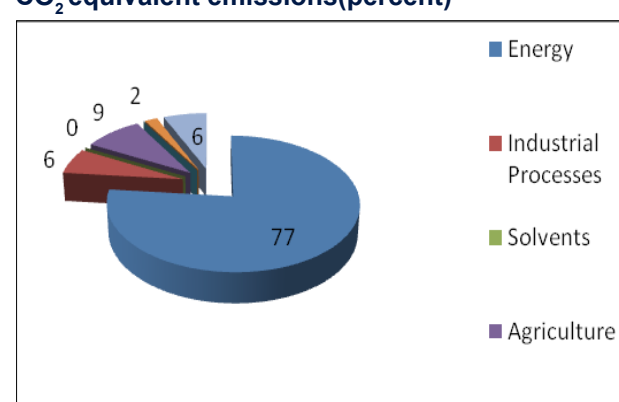
1. Gigagram

**Figure 2 Share of different sectors in CO<sub>2</sub> emissions (percent) in 2000**



Source: Iran Second Communication to the UNFCCC, 2010.

**Figure 3 Contribution of different sectors to total CO<sub>2</sub> equivalent emissions(percent)**



Source: Iran Second Communication to the UNFCCC, 2010.



Policies to reduce measures of greenhouse gas emissions in the country are divided into two groups:

(a) The national reduction program including reduction footsteps that is secured with the state budget and will be responsible for 30% reduction in emissions by 2025;

(b) Reduction activities through international financial assistance including reduction footsteps that could be implemented only if the financial, technological and international cooperation is done under the UNFCCC. These programs will be responsible for 34% reduction in greenhouse gas emissions by 2025. Although these policies are objectives of the government on the development prospects of the country in 2025, but achieving these goals will require financial, technological and international cooperation under the UNFCCC. It is obvious that Iran enjoys a significant GHGs mitigation potential. The energy sector with a mitigation potential of more than 1,270 million tons of CO<sub>2</sub> equivalent by 2025 has the largest potential followed by waste, agriculture, industrial processes and forestry sectors. GHGs emissions under the Official Development Plan (ODP) scenario would increase from 490 million tons in 2000 to 2.2 billion tons, representing an annual growth rate of 6.2%, while under the mitigation scenario it peaks at 890 million tons of CO<sub>2</sub> equivalent, representing an annual average growth rate of 2.4%. This point to an enormous potential for GHGs mitigation in the country.

#### **Degree of adaptation to climate change phenomenon**

The Islamic Republic of Iran has adopted a vision of interrelationship between climate change and sustainable development as:

“Prevention and control of negative socio, economic and environmental impacts of climate change through integrated management and international and regional cooperation so that incorporation of necessary measure at national and provincial development policy levels and other related measures, ensure sustainable development of the I.R. of Iran” (Iran Second Communication to the UNFCCC, 2010).

To realize the above vision the following strategies have been considered:

- *Mitigation of GHGs*: Reduction of GHGs has twofold benefits for the country. It meets optimization of the fuel consumption and also improves the international environmental status of the country. In conjunction with technological improvements, utilization of solar, wind and nuclear energies can reduce the share of fossil fuels.

- *Adaptation to New Climatic Condition*: This strategy embraces all policies and plans which deal with devel-

opment of resource-based sectors. The broad outlines of this strategy can be observed in most of the national and provincial as well as sectoral plans.

- *Promotion of Climate Compatible Management*: Due to the weaknesses of the institutional arrangements both in the short and long terms, collaborative management is of great importance to implement the climate change action plan.

Several actions plans have been identified to implement the above strategies.

## **16 Disaster risk reduction**

According to global estimates, Iran is placed in the list of the top ten countries facing disasters. Occurrence of devastating earthquakes, floods, long term droughts and other types of disasters have resulted in heavy casualties and financial losses over the past two decades in the country. Iran is one of the most seismically active areas in the world and has experienced many destructive earthquakes in the past and continues to be one the most vulnerable countries to major earthquake disasters. “Based on the database of the earthquakes with more than 1,000 fatalities over the past 105 years (since 1900), the worst case for country vulnerability index is Iran”. These earthquakes have resulted in the death of thousands of people and destruction of many villages and cities in the country. The Bam earthquake of 26 December 2003 destroyed the entire ancient city of Bam, with a population of around 150,000. Total number of fatalities of this earthquake is reported to be more than 30,000 people. In the long and terrible earthquake history of Iran events of this nature are not rare. The Rudbar-Manjil earthquake of 1990 had resulted in the death of about 40,000 people.

One of the phenomena occurring in the country is the emerging risk of dust storms. Persistence of this phenomenon has inflicted irreparable losses in economic activities particularly in agriculture and health sector. Hence, reducing the risk of disasters has come under the spotlight and focus of the national general policies and development plans. Most of these actions are in line with the Hyogo Framework for Action. Some of the most notable achievements are as follows:

- Establishment of the National Disaster Management Organization (NDMO) in 2007 under the Presidential Administration. According to Act

on the formation of the National Disaster Management Organization, in order to coordinate the activities of the organizations and institutions the High Council of the National Disaster Management Organization (the High Council) is also formed. The High Council is responsible for (a) developing policies and national plans related to National Comprehensive Disaster Management Plan and to take legal actions for their enactment; (b) formulating the detailed budget of the comprehensive disaster management system to be proposed for inclusion in the State annual budget bill for its enactment; (c) Adoption of strategic policies, directing and motivating research and executive activities aimed at reduction of risks resulting from earthquake, climatic hazards and hazardous chemical materials.

- Implementing retrofitting and renovation plans for buildings and urban fabrics. In line with the safety of schools, the Islamic Republic of Iran has allocated 4.5 billion US\$ in the United Nations International Strategy for Disaster Reduction (UNISDR) biennial campaign of 2006-2007 for school safety. The major achievements of this measure are reconstruction of more than 56,500 classrooms and retrofitting of more than 28,000 classrooms. This program will be continued until all schools and training centers will be reconstructed or retrofitted.

- Reconstructing and retrofitting of 200,000 residential units annually in rural areas by using Government funds and comprehensive participation of people, out of which 1.7 million houses have been reconstructed and renovated. Additionally, renovating of the old fabrics of the cities is also continuously progressed. This process continues to achieve the ultimate goal.

The Islamic Republic of Iran, in line with the implementation of the Hyogo framework for action, has undertaken a wide range of activities in order to reduce the effects of disasters and has implemented disaster risk reduction programs and projects at national, provincial and local levels. The main topics of these activities include legislation introduced and enacted in relation with disaster risk reduction, such as: The overall policies of the system on "Prevention and Reduction of the Impact of Natural Disasters" endorsed by the supreme leader and the Act on the formation of disaster management organization of Iran and development of 50 related executive bylaws for this Act which was approved by the cabinet. The national structure of the above mentioned law is mirrored at provincial and local levels. The aim of these organization is to pave the way for implementation of disaster risk reduction activities in a more coordinated and comprehensive manner and involves most of the key players of disaster risk

reduction in the country. It has a high level council chaired by the president of the Islamic republic of Iran. The organization is headed by deputy interior minister for this purpose. The organization has its own annual budget line. A large number of guidelines, bylaws, standards, instructions, criteria, regulations, have been developed covering disaster risk reduction initiatives.

Other actions taken in the field of disaster risk reduction are as follows:

- The development of warning systems for flooding in the country
- Developing drought forecasting and warning systems in the country
- Seismic network development in the country
- Strengthening and developing the gas network automatic cut off system in the event of disasters
- Compilation of a comprehensive system of education and research in crisis management
- Preparation of a national earthquake, flooding, and drought risk reduction master plan

## 17 Reducing traffic congestion

In order to exert comprehensive and coordinated traffic policies and provide the necessary policy and improve the administration of traffic related matters, the 'High Council for Coordination of Traffic in Cities' (HCCTC) was established in 1973 and the law creating it was amended in 2009. The HCCTC is responsible for coordinating the inter and intra-urban transportation and traffic affairs, data collection and preparation for national transportation needs, supervision over the studies and preparation of transportation and traffic plans for the cities of the country. During the 20-year period of 1995 to 2015, the HCCTC has issued more than 120 Resolution related to transportation and traffic related matters for the cities of the country.

Traffic congestion is one of the severe and persistent problems that the large cities and metropolises in the country are faced with. In these cities the pace of developing the needed transportation infrastructure has always been lower than that of demand for trips. Although in large metropolises of the country, like

Tehran, Mashad, Esfahan, Tabriz and Ahvaz, both subway systems and Bus Rapid Transit (BRT) have been added to the existing system of public transport, the trip growth rate in these cities has always been much higher, resulting in traffic congestion as well as air pollution.

Tehran metropolis is the largest and the most densely populated city in Iran and its transport challenges differ considerably from those faced by other Iranian cities. Other major cities in Iran also face traffic congestion, but the difference between them and Tehran today is quite dramatic. Over the past 20 years, the worsening traffic congestion has become more than a nuisance and has turned into a major challenge for the Tehran city authorities. The growth of Tehran Metropolitan Region is such that any new transportation system for Tehran city has to cater not only for Tehran, but also to the needs of the population residing in cities and towns on its fringe.

Tehran's Metro (underground train) has enjoyed some considerable success and has been in operation for the past 15 years. It now carries more than 2 million passengers/trips a day, representing about 12 per cent of the total number of trips made in Tehran. The development of the Metro network has accelerated recently.



Today there are about 150 kilometres of metro lines serving about 80 stations.

Although there is a renewed interest in the introduction of the metro, but because of its capital needs and time for construction, other options of public transportation are explored. BRT was seen to be a way of providing high capacity, mass transit at affordable price. Although it required some new infrastructure, it had the added advantage of maximizing existing infrastructure. The first BRT line was introduced into Tehran in 2007. In 2010, the BRT in Tehran carried 1.8 million passengers daily.

The BRT system was introduced to other major cities of the country. The BRT is currently operational in the cities of Mashad, Esfahan, Tabriz, Shiraz, Qom, Ahvaz, and Rasht.

## 18 Air pollution

Air pollution poses a dire risk to Iranians today. The consequences can be measured in the numbers of pollution-related deaths, the number of school and work days lost, and additional health challenges experienced by children, the elderly, and people with heart or lung diseases. The overwhelming number of vehicles has largely contributed to the air pollution problem in many of the major cities of Iran. Automobiles produce about 48% of Tehran's air pollution and motorcycles 22%. Though the government has started prohibiting the import of non-standardized gasoline, there is still a long road ahead in overcoming air pollution problem in major Iranian cities such as Tehran, Esfahan, Ahvaz, Arak and Tabriz.

The air pollution in Tehran metropolis is mainly caused by transportation vehicles, and is especially long-lasting due to the surrounding mountains that block any wind that might disperse the smog. Cancer-causing agents such as lead, sulfur dioxide, and benzene are found at two or three times the safe levels in Tehran's air.

The Department of Environment (DoE) is responsible for controlling the air pollution in Iran and has been monitoring air quality in Tehran since 1970s. In 1993, the Air Quality Control Company (AQCC) was established by Tehran Municipality. Since then, DoE and AQCC have monitored the concentration of different pollutants in Tehran continuously.



In 1995, the Clean Air Act was passed by Iran's parliament to address the problem of air pollution in Tehran and other large cities in the country. A 10-year air pollution mitigation master plan was developed and put into practice in 2000. In the past 15 years, the Government of Iran and Tehran Municipality have actively participated in an effort for the reduction of local and global air pollution.

In January 2000, the Iranian Cabinet approved an integrated master plan to control air pollution in Tehran. The plan set a 10 year timetable for its implementation. It put forward seven major urban transport related strategies for implementation:

- Improving new vehicle technology
- Discarding old vehicles
- Improving the quality of fuels and adoption of alternatives
- Regular inspection and maintenance of vehicles
- Expanding and improving public transportation
- Establishing traffic management system
- Introducing alternative training programs for different groups and promotion of public awareness

Comprehensive Air Pollution Control Plan for in eight Iranian megacities has been prepared and is under implementation. In 2007, the parliament approved the 'Public Transportation and Management of Fuel Consumption' Act, requiring the government to plan for transforming fossil-fuelled cars into CNG-fuelled ones, to promote and facilitate the production of Hybrid electric vehicles, and to undertake mandatory inspection of auto emissions. One of the aims of this law was to reduce vehicular air pollution.

## 19 The challenges experienced and lessons learned in the discussion above

The challenges of climate change and the related vulnerabilities could be categorized in the three following areas:

(a) Direct damage as a result of the climate change: This type of damage is affected by factors such as increase in global temperature and sea levels, drought and its impacts on the out-migration of the population of vulnerable areas and their income resources, environmental health and drinking water accessibility, and finally climate change economic impacts.

(b) Direct damage as a result of the commitments to reduce the emissions: the economic loss caused by the emissions reduction policies according to the Kyoto

protocol will lead to the decrease of economic growth or increase of investment in the technologies.

(c) Damage as a result of measures to tackle a problem: This sort of damage is the impact of policies to optimize energy consumption through the development of low-carbon and carbon free (renewable) energy resources in the countries of Annex 1 of the Kyoto Protocol on the oil market and consequently on the economy of the oil exporting countries.

The most important challenges concerning the air pollution and climate change are as follows:

- Inefficiency of quality control standards related to the air pollution reduction,
- Using substandard vehicles that are older than the approved lifespan,
- Lack of coordination among implementing agencies that are involved in the reduction of air pollution and climate change,
- Lack of an appropriate organizational structure to address climate change issues,
- Inefficiency of the process of tackling the dust pollution challenge both at national and regional levels,
- Lack of enough allocation of national financial resources to address the climatic change related issues, as well as insufficient international allocations to this end,
- Underdeveloped public transportation systems,
- Weak functionality of pollution controlling systems in air polluting industrial units and workshops,

Lack of adequate funding is holding back the implementation of some of the strategies, namely the plan to buy and scrap old vehicles, application of new technology for the production of new vehicles, and the expansion of public transportation.





# IV Urban Governance and Legislation: Issues and Challenges for a New Urban Agenda

## 21 Improving urban legislation

Administering the public affairs of the cities and controlling the exploitation of municipal resources by the private and public sectors require adequate and appropriate legislations to determine the rights of all urban stakeholders and beneficiaries in an equitable way and ensure their realization.

One of the most important approaches adopted by the government in field of urban management during the past two decades is the integration of decision-making processes. The approach has been pursued since the Third to the Fifth 5-Year Development Plans, aiming to reduce the government agencies' role in the cities management and their devolution to the municipalities. In 2014, the Comprehensive Urban Management Bill was prepared and submitted to the government. Once approved, the municipalities will be assigned more responsibilities in the cities management and the role of the government agencies will be diminished significantly.

Another important occasion during the recent two decades in the area of urban management that allowed a new organized capacity of communities and grassroots in the administration of the cities was the establishment of Islamic Councils both in the urban and rural areas. These councils that are directly elected by the people have assumed a part of the previous municipal functions. The council's functions under the Islamic Councils Act and its related by-laws that were recently amended in 2006 have been identified.

An important measure in the area of urban planning was the adoption of new legislations or amendment of the related by-laws, some of the most important of which are as follows:

- 1- The Enactment of New Towns Act;
- 2- The law on upgrading, revitalization and renovation of dilapidated and inefficient urban fabrics;
- 3- The Act on the Recovery and Support of Housing Supply and Demand;
- 4- The law on Public Transportation and Management of Fuel Consumption.

## 22 Decentralization and strengthening of local authorities

Decentralization and strengthening of local authorities is one of the ways to improve government efficiency and taking advantage of the capacity of local organizations to conduct public affairs. Although from the beginning of the nineteenth century centralization has been an important feature of the government structure and Tehran, as the capital city of Iran, has been host to almost all elements and bodies of country's administrative system. However, since 1937 when the first state divisions were created in the administrative system, the decentralization trends and devolution of a part of government's responsibilities to the regional, provincial, city and district divisions has taken place considerably. Despite a long history of decentralization of government in Iran, centralization is still a notable feature of the Iranian government structure.

The most important activities towards decentralization during the recent two decades could be summarized as follows:

1. Creation of the 'Provincial Planning Councils (PPC)' during the Third Five-Year Development Plan (2001-2005). These Councils have taken over some of the responsibilities of the central government such as planning and budgeting at provincial level.
2. Operationalization of the Article 44 of the Constitution related to the devolution of the management responsibilities to local authorities and privatization of the government-owned companies.
3. Creation of Islamic Councils at rural, city, county, and provincial levels in order to monitor the activities of the municipal and rural managers, and also other relevant governmental organizations active at local levels.
4. Delegation of powers to PPCs for the approval of the urban development plans for cities of 200 thousands population and less.
5. Delegation of responsibilities for the Provincial Technical Bureaus (PTB) for preparation, examination, and approval of town's 'Guide Plans' for towns of 50 thousands population and less.
6. Delegation of taxing powers to provincial governing bodies to examine and approve items subject to local municipality taxes
7. Delegating local policy making responsibilities and also supervision and monitoring municipality activities to City Islamic Councils (CIC)
8. Requiring the government to improve the manage-

ment capabilities of the provincial managers and to delegate executive mandates and responsibilities to provinces. This is one the government requirements that has been stipulated in the Third Five-Year Development Plan.

## 23 Improving participation and human rights in urban development

One of the increasing demands of the society is participation in the public affairs both at local (urban and rural) and national levels. In order to meet the demand, governments have recognized the right of public participation at different levels and have provided the people with the appropriate mechanisms to get effectively involved in a variety of urban management processes. One of the mechanisms is elections that are put in practice both at local and national levels. The presidential, parliamentary, the Assembly of Experts for Leadership elections at national level and the City and Village Islamic Councils elections at local level are amongst the recognition of the peoples' right of participation in the public affairs administration and self-determination.

At the urban level, direct participation of citizens in the city affairs within the framework of elected councils has been a successful experience. One of the responsibilities of the city councils is electing the mayor as the highest authority in the municipal system. In the last city councils elections in 2013, 7,320 candidates were elected, constituting 1,213 city councils' members. In some metropolises, in addition to the city Islamic councils, assistant councilors are also elected by citizens at community level. These assistant councilors provide the link between the city councilors and the people at the neighborhood. Of course this doesn't mean that the residents are not allowed to have direct contact with the city council members.

In addition to the city councilors, stakeholder participation in the municipality's activities has become noticeable in recent years. During the last decade, preparation of city strategic plans by municipalities has been accompanied by active stakeholder participation. Setting visions for future city development through stakeholder participation and consultation are part of the process of producing and executing the 5-year activity plans by the municipalities.



## 24 Enhancing urban safety and security

Safety and security is of great importance in order to enhance habitability of the cities. The responsibility of security provision in the society and public and private spaces in Iran has been assigned to the Law Enforcement Forces (LEF) that provide the citizens with a secure and safe social environment by both subtle and tangible control. Negligible terroristic threats, lack of fatal terroristic attacks in public spaces, feeling of safety and security by the citizens in dense public and social spaces are brought about by active involvement of the LEFs. Special LEFs called 'Police 110' has been created which immediately attends to the calls made by the citizens. Creation of 'Hamyaran-e-Police' which involves the assistance of youth and adults for security provision at the neighborhood level is another program that the LEFs have utilized very effectively. In vision 1404 of the Islamic Republic of Iran, the government envisions creating a society that is very safe and secure.

From safety point of view, firefighting and safety services are among public services that are rendered by the subsidiary firefighting units and organizations free of charge. At present appropriate firefighting equipment and safety services are available in most Iranian cities as a result of the growing trends to equip the cities with such services. Currently, there are 1,200 active firefighting units on call in different cities of the country with some 4,500 vehicles at a variety of levels of service. The basic services rendered by these units are the rescue operations and their equipments are proportional to the city population and the rank of the firefighting unit. Metropolises and large cities have access to most qualified personnel and best equipments to render firefighting and safety services. With the increase in the number of cities and the related firefighting and safety services, living in urban areas has been accompanied by more confident. The urban population of the country covered by this service has been about 87.5% in 2013.

## 25 Improving social inclusion and equity

Social inclusiveness is an indicator to measure adequacy of public participation in management (planning and decision making areas), public empowerment, justice in the distribution of opportunities, and development outputs. To achieve high levels of social inclusiveness, a set of measures, programs and rules are required that specify the framework of government commitments and responsibilities in relation to citizens' rights and the distinctive rights of citizens in association with government functions and services.

There's not any discriminative legislation based on ethnicity, religion, gender, physical ability, economic assets and ideology in Iran to enjoy citizenship rights and all the people have equal rights before law, government and non-governmental public organizations.

In the Fifth Five-Year Development Plan the government has been required to act on the following areas:

- Poverty eradication and social justice
- Just distribution of income in the country and diminishing the gap between different income deciles
- Deprivation reduction and empowerment of the poor through efficient allocation of social security and subsidies resources
- Implementing the program for upgrading the human development index
- Reducing the county development disparities by 10 percent per annum

Moreover, for those who are economically weak and unable to participate like ordinary people, some facilities have been anticipated as follows:

- Providing monthly allowance to the mentally handicapped and people with physical disabilities;
- Employment prioritization for the mentally handicapped and people with physical disabilities in jobs that are commensurate with their capabilities;
- Making pedestrians and sidewalks suitable for the movement of the handicapped groups;
- Providing financial support for the mentally handicapped and people with physical disabilities for housing construction;
- Holding general elections without discrimination of the person or group that has the general conditions to vote or become a candidate;
- Providing educational services to all Iranian citizens

and temporary immigrants from neighboring countries such as Afghanistan;

- Implementing spatial regularization projects and enabling residents of informal settlements on the urban fringe;
- Providing freedom for religious minorities to practice their religious ceremonies;
- Participation of the representatives of religious sects and ethnic minorities, in the Iranian Islamic Parliament, the Assembly of Experts and city and village Islamic councils;
- Establishing women's enabling units in public organizations to facilitate the participation of women in public spaces and outdoor social activities.

## 26 Challenges experienced and lessons learnt

- Majority of urban planning and management laws, rules and regulations are outdated and are not responsive to the current needs of the society. Although there is an attempt to update these laws, rules and regulations, but the process of revision is very lengthy.
- There's still serious challenges in the decentralization process and strengthening of local agencies;
- Spatial planning has not been carried out in an integrated manner in all provinces and some metropolitan areas of the country do not have such a planning for their territories;
- There exists an inconsistency between the numerous government agencies, municipalities, city Islamic councils and concerned non-governmental public agencies involved in urban planning and management.
- Despite the establishment of Islamic city councils, citizens' participation in urban management processes is still limited;
- The city councilors are not bound to consult the citizens in the process of decision and policy making that take place in city councils;

## 27 Future challenges and issues

- Outdated urban management and planning laws would continue to lower the urban management efficiency in cities.
- The continued concentration of capital and activities in Tehran and other large Metropolises would continue to be a serious challenge for the national development.
- Different views towards decentralization and devolution of affairs to the local government and its consequences;
- Reluctance of citizens to participate in the city council activities
- The challenge in creating a participatory culture at urban level (education and cultural promotion);
- The continued lack of appropriate firefighting equipment to provide services for skyscrapers in large cities
- Limited financial resources of municipalities to acquire standard firefighting equipments
- Dilapidated urban fabrics in cities make it difficult to provide firefighting and rescue services in some urban fabrics;
- Continued inappropriateness of public urban spaces for people with special needs



# V Urban Economy: Issues and Challenges for a New Urban Agenda

## 28 Improving municipal/local finance

Accelerated urbanization and the continued growth of urban population in Iran wherein more than 71.5 percent of the national population live in urban areas, has significantly increased the demand for goods and services in cities. Provision of urban infrastructure and services require sustainable financial resources. Municipalities for the operationalization of the municipal activities and participation in urban development activities are in need of adequate and sustainable financial resources. Lack of sustainable financial resources causes shocks in the activities of the municipalities and also hinders long-term planning for the city. Local taxes and incomes and government financial assistance are the main sources of finance for the municipalities in Iran. Despite the fact that in the last two decades these financial resources have increased considerably, but they have not been enough to meet financial burdens of the municipalities. Reductions in government financial assistance and the national

government's tendency towards financial self-sufficiency of the municipalities have forced the municipalities to move towards obtaining alternative and sustainable financial resources. The municipalities have sought and applied different alternative financial resources. Taxing construction activities, obtaining development rights surcharges, allowing construction much more than what has been stipulated in the city detailed plans against obtaining extra-charges, and fining unauthorized construction activities are some of the financial resources that the municipalities have adapted. In the last two decades, the government and the municipalities have adapted different measures for improving the financial conditions of the municipalities which has led to some sustainable sources of income for the municipalities. The government by streamlining the governing rules and regulations and the municipalities by finding new sources of sustainable income have contributed towards sustainability of the local municipal financial resources (Table 4).



**Table 4 Total national municipal revenues in Iran, (Billion Rials)**

Year	2002	2006	2013
<b>Total national municipal revenues</b>	17,956	54,000	446,000

Private sector participation in providing the needed investment for the municipal activities has become an important source of finance for the municipalities in Iran. The private sector's investment is used in different ways in the municipalities, one of the most important of which is issuing partnership bonds by municipalities. Their repayment is guaranteed by the government.

The Government's contributions as one of the main financial resources of the municipalities were reduced over the past two decades as a result of the implementation of financial self-sufficiency of the municipalities. The financial contribution of the government is concentrated for small cities (based on population) that shows the tendency of the government to support small cities.

Another form of financing for the municipalities by the private sector is direct investment in their projects. The investment is done based on special regulations and

has had an important role in increasing the financial power of municipalities' projects. This participation is increasing through the establishment of investment organizations in some municipalities.

In order to attract private investors, the municipalities have identified areas of investment and have introduced the projects that require investment. So far, two books about investment opportunities in municipalities' projects have been published by the Municipalities Organization.

Amongst other financial resources for the municipalities are loans that are paid by the municipalities through the municipalities 'Joint Municipal Fund' in Mol to support the implementation of revenue generation projects. During 2011 to 2014, an amount of 725.8 Billion Rials (about \$25 million) has been paid by this fund to the municipalities (Table 5).

**Table 5 Loans paid to municipalities from the 'Joint Municipal Fund' (Billion Rials)**

Year	2011	2012	2013	2014
<b>Loan</b>	153.3	206	267.6	989.5

Low-interest rate loans are among other financial resources for municipalities that are paid by the government through the Loan Financing Fund. It is used to implement capital projects or the renovation of municipalities' equipment. In addition to this fund, other Iranian banks make investments in the participatory projects and initiatives of municipalities. A private bank (City Bank or Bank-e Shahr) works with the municipalities and grants loans to them. Its shares belong to some of the country's municipalities.

## 29 Strengthening and improving access to housing finance

Housing provision and finance, due to population and housing characteristics in Iran continues to be one of the serious challenges in the country (Table 6).

**Table 6 Population and housing characteristics in Iran (1996-2011)**

Year	Population (million)	Housing units (million)	Households (million)	Households per Housing units	Housing backlog (million)
<b>1996</b>	60.05	12.28	17.70	1.14	1.51
<b>2006</b>	70.49	17.35	15.85	1.09	1.49
<b>2011</b>	75.14	21.04	19.95	1.05	1.09

Although the housing backlog has decreased from 1996 to 2011, but figures show that the housing market still had more than one million housing units backlog in the last decade. The number of vacant housing units in 2006 and 2011 in the urban areas of the country was about 633 thousands units and 1.66 million units, respectively. This indicates that the investment in the housing market has not had the expected profit for the

investors and also, the fact that the purchasing power of those who are in need of housing is much lower than the housing unit prices.

The size of the Iran housing finance system compared to the size of the overall economy is at the low end of the spectrum of international experience. Housing prices are always a multiple of the annual income

of families that want to buy them. Therefore access to long-term finance is required for most families to purchase housing. Access to home ownership has two major and very distinct dimensions: (a) the price of the unit compared to purchasing power, and (b) the cost of finance. During the last two decades, Iran has faced serious problems on both fronts. The housing price-to-income ratio faced by most income groups has reached values as high as 10 in the mid-1990s in Tehran and has been about 12 in urban areas in 2011. For the lowest four income deciles this figure is above 17, indicating a severe housing provision problem for these low income groups in country.

The small size of the housing finance system plays an important role in unbalancing housing output in Iran, but it is not the only cause. Several structural factors are combining their effects to make the output of housing very cyclical and the composition of new output skewed toward large units out of reach of the purchasing power of a significant percentage of the population. Macroeconomic volatility and relatively high inflation in last two decades have interacted with the system of directed credit to generate an important degree of financial repression that makes it very difficult for the housing finance system to mobilize long-term funds anywhere near an adequate scale. To ration scarce funds and to maximize the number of clients reached, the housing finance system offers only very low financing-to-value ratios to home purchasers. The impact of these important distortions is that housing investment especially in major markets such as Tehran is cash and wealth driven.

The Central Bank of Iran (CBI) approved establishment of private banks in 2001 and issued the first operating license to a privately owned bank in that year. It was expected that the banking reforms will lead to the restructuring of the 10 state-owned banks (6 commercial banks and 4 specialized banks). Today there are 20 private banks operating in the country.

Other actions taken by the CBI and the Money and Credit Council (MCC) to prepare the liberalization of the financial system include:

- In 1999, Article 3 of the charter of Bank Maskan was modified to permit the same activities as those of commercial banks.
- Since 2000 banks are allowed to allocate up to 20% of their new lending freely outside sector credit guidelines. The balance 80% remains subject to sector allocation rules.
- Specialized housing finance companies or banks were permitted to raise long-term resources through inter-bank credit.

## 30 Supporting local economic development

The current system of preparing master plans for cities does not include consideration of local economic development strategies for cities. They are mostly concerned with the physical development processes in the city rather than guiding or earmarking economic development strategies for the cities that they are being prepared. In an implicit attempt towards local economic development, during 1994 to 2014, the government has provided financial support for infrastructure and environmental needs of the cities within the framework of protecting the local economic development and has made allocations in the areas (Table 7) available for the cities.

**Table 7 Government financial support according to the plan (Billion Rials)**

Areas of financial support	1994	2004	2014
Urban public transportation	15	12,294.3	18,034
Urban services	257.4	3,883.6	2,100
Urban facilities and amenities	62.2	32.06	533
<b>Total</b>	<b>334.6</b>	<b>16,210.06</b>	<b>20,667.06</b>

In 2005 the law on supporting small-scale industries was approved. The main aim of this law was to provide financial facilities for small-scale employment generating investments that could be made in cities in order to strengthen the local economic development of these cities.

There is a proposal by the MRUD to include local economic development as one of the major parts of the

urban development strategies that would be pursued in the revised urban development plans.

## 31 Creating decent jobs and livelihoods

There has been a considerable amount activity in Iran in area of decent job creation and livelihood provision. In the Fifth Five-Year Development Plan the government was permitted to undertake the following identified actions in line with sustainable employment generation strategies, reduction of regional disparities, entrepreneurial development and creation of new employment opportunities:

- Providing facilities and necessary assistance to strengthen the technical-engineering-expertise capabilities
- Research and development and marketing for small-scale and intermediate industries
- Development of information centers and business through electronic-based markets
- Providing financial support for the non-governmental sector in order to develop and expand business, entre-

preneurial, technical and professional and applied-scientific education.

High unemployment rate in Iran has compelled the government to look for different alternatives in the area of entrepreneurial activities and employment development. One of such measures has been the provision of support and financial assistance for the creation of small-scale industries, especially in small cities and towns, in order to generate employment opportunities and increase the income and welfare of the low-income groups. This program started in 2006 and in the following two years was very successful. But the economic difficulties of the 2010 and 2011, the program did not get enough support and was left out.

The unsuccessful experience of the creation of the small-scale industries program led to the introduction of a new program called the 'employment development and investment document' in 2011. The Ministry of Labor and Social Welfare (MLSW) is in charge of implementing this plan. Although it is too early to get a feedback from the outcome of this program, any signs of improvement in employment related indicators, both at the national and local levels are not visible (Table 8).

**Table 8 Labor market indicators in urban areas of the Iran (percent)**

Year	Unemployment rate	Youth unemployment rate	Participation rate
2005	13.8	29.4	39.4
2006	13.4	29.2	38.8
2007	12.5	27.6	38.2
2008	12	27.4	36.5
2009	13.5	29.4	37.7
2010	15.3	34	37.3
2011	13.7	30	35.8
2012	13.8	31.4	36.5
2013	11.8	28.2	36.9
2014	11.6	28.5	36.5

Source: Statistical Center of Iran, Labor market surveys, various years.

## 32 Integration of the urban economy into national development policy

Because of the importance of the urban and regional economic development, it has been incorporated into the national five-year development plans from the beginning:

- In the Second Five-Year Development Plan (1995-1999) the policy of decentralization, devolution and strengthening the role of provinces by giving the plan-

ning authority to provincial executive agencies, in line with deprivation alleviation and reduction of regional disparities, was followed.

- In the Third Five-Year Development Plan (2000-2004) the policy of administrative and political decentralization through creation of 'Provincial Planning and Development Councils' (PPDC), 'County Planning Committees' and emphasis on decentralized planning and budgeting in provinces was pursued.
- In the Fourth Five-Year Development Plan (2005-2009) the issue of regional balance and territorial planning was invigorated.
- In the Fifth Five-Year Development Plan (2010-2014)



regional development planning with an emphasis on environmental considerations and deprivation alleviation was pursued.

Additionally, the importance of country's metropolises and large cities as engines of development has been incorporated into national development planning efforts. It should be mentioned that country's metropolises alone produce about 70 percent of the national GDP.

## 33 Challenges experienced and lessons learnt in these areas

### a) Housing finance

The housing finance in Iran follows a banking-based system and has several limitations, including maximum banking facilities granted, fixed mortgage rate, limited duration of repayment and inconsistency between banking facilities and collateral value. In the housing finance sector, facilities are granted by the state commercial banks for construction in general and participatory construction in particular. In the housing transaction sector, Bank-e Maskan (the Housing Bank) is the only specialized bank in this sector that grants banking facilities in the framework of installment purchase contracts.

Housing sector's indicators show that the housing finance system in Iran suffers from considerable problems and inefficiencies that are detailed as follows:

#### - Lack of competition in the housing finance sector

The Study of housing finance system confirms that the necessary resources for the current activities in the housing sector, is exclusively provided through households' savings, general state budget, public companies and banking system resources.

However, aside from the lack of diversity in the methods of housing finance, there is not any competition among the financial institutions in granting housing facilities in the country. Despite the short and limited presence of nongovernmental banks and credit institutions in this field, Bank-e Maskan is exclusively authorized to provide housing facilities in the housing sector. Under these circumstances, there is no possibility of competition. Bank-e Maskan is faced with problems

such as insufficient capital which disrupts the payment of facilities to the housing sector.

#### - Lack of diversity in housing facilities

In the current situation, granting of housing facilities to each section, including interest rate and the way the installments should be repaid are equal and predetermined and determined by the CBI, whereas it's an inevitable necessity to diversify the types of loans and loan granting conditions based on the requirements of different regions and income groups that use it.

#### - Inflexibility of banking facilities rate of interest

One of the limitations of the housing finance system is the lack of flexibility in facilities rates. Facilities rates for economic sectors is determined by the MCC and banks are required to grant facilities within the approved rates, without taking into account the credit risk and duration of facilities. This limitation when there's inflation in the country, especially for long-term facilities would be to the detriment of banks and is the main reason of the unwillingness of banks to pay long-term facilities (that is suitable for the sector).

#### - The low ratio of the amount of facilities to the value of residential units (LTV)

The low ratio of the amount of facilities to the value of residential units is one of the challenges facing the housing finance system.

#### - A high debt-to-income ratio

The high price of housing transactions, along with limited growth in per capita income and the short period of time to repay facilities have led to a high debt-to-income ratio.

The best tool for modifying this indicator is increasing the repayment period of housing loans, particularly for the target groups under the housing support programs.

#### - Inefficiency of the taxation and subsidization systems in the housing sector

Financial policies, including taxes and subsidies lack enough efficiency to enable government to achieve its policy objectives in the housing sector. In the housing sector, taxes account for a small share of government tax revenues and cash transactions in the sector and are completely ineffective in the regulation of the housing market. In 2011 the proportion of property tax to total tax revenues and the proportion of property tax to total government revenues were 2.6 and 0.9 per cent respectively.

### b) Supporting the local economy

Insufficient resources, increased demand, the diversity of projects, increased prices and lack of adequate supervision on projects, are the most important challeng-

es facing the local economy.

Lessons learned from dealing with these challenges include formulation of necessary rules and regulations, institution building and monitoring and control over projects.

## 34 Future challenges and issues in these areas

### *a) Access to financial resources for housing finance*

- increasing the contribution of housing investment market in the housing finance resources

Considering the limited resources of the banking facilities, including those for purchasing and construction, it's essential to change the approach in the housing sector finance through capital market capacities.

- Requirements for development in housing finance system

Despite the housing finance need to the investment markets, there are many obstacles facing the development of mortgage securitization. Factors such as the liberalization of the financial sector as well as legal, institutional, monitoring requirements are highly effective in development of advanced primary and secondary mortgage markets. The most important requirements for the development of the system include:

(A) Remove the macroeconomic instability

Macroeconomic instability, high and fluctuating domestic interest rates has negatively affected the long-term financing.

(B) Remove legal obstacles

Financial repression is one the main reasons for the lack of development in the housing finance market in housing sector, because the limited access of banks to financial resources is one of the major factors restricting them to function in housing finance market.

(C) The appropriate and effective development of secondary market

Stable macroeconomic environment, development of legal environment, competitive market structure, standardization of mortgage instruments, methods

to conclude the right mortgage contracts, secondary marketing skills, desirable methods of service, better implementation of risk management, the development of institutional investors, are considered as the requirements of the secondary market.

- Removing the obstacles on the way of increasing the ratio of loans to housing value (LTV)

One of the strategies to improve the LTV ratio and increase the affordability of applicants in home purchases is creating housing facilities to finance at least 50% of a residential unit priced by people. Therefore, the provision of these resources in a way that is not inflationary is a concern for policy makers.

- Inefficiency of the increased level of facilities

In order to avoid the impacts of the increased level of facilities in home prices, it's essential to pay attention to an increased supply and housing market control policies through taxation instruments at the same time.

- Establish Housing Loan Savings Fund

One of the potential plans of MRUD is to make a housing savings fund for housing purchase in general and/or specific housing development projects in particular, in all Iranian banks. This initiative would be in line with developing the mortgage market.

- Establishment and launch of Land and Building Funds

The establishment of Land and Building Funds could be the beginning of a structural transformation in country's building production system.

- Financing through mechanism of escrow accounts (Escrow Accounting)

Considering the problems and challenges in the field of pre-purchasing of real estates in the country, and lack of allocation of funds paid by the pre-purchaser in the construction of the projects that leads to the prolongation of construction, the loss of trust between the customer and the builders, lack of willingness for micro-investments in the housing sector, reduced chance of housing purchase by the moderate-income households in the country, it's necessary to design and develop escrow accounts to finance projects that will be built and completed through pre-sale.

B - Supporting the local economy

Challenges for supporting local economy include shortage of resources, increasing demand, diversity of projects, increased prices and lack of adequate supervision on projects. Removing all these problems requires the formulation of rules and regulations, institution building and monitoring and control over projects.

Targeting the supports of local economy and prioritiz-

ing the infrastructure and fixing the problems of people are recommendations that can be effective in the efficiency of applied policies in this area. At the same time, targeting the supports of local economy and prioritizing the infrastructures and removing people's problems in this area are amongst the recommendations that could be effective in the efficiency of the adopted policies.

In this context the participation of private sector, defining the position of the local economy in the urban and country economy, enhancing and regulating the local and regional skills are some suggestions that can be applied in this area.





## VI Housing and Basic Services: Issues and Challenges for a New Urban Agenda

### 35 Slum upgrading and prevention

The proportion of what is called slum areas is very negligible in Iran. But, there exist areas with housing deprivation, which based on the official definitions include areas with dilapidated urban fabrics, unauthorized and spontaneous settlements which are termed as 'irregular zones'. These 'irregular zones' fall into the following four categories:

- Dilapidated urban fabrics with valuable historical backgrounds,
- Dilapidated urban fabrics with rural backgrounds,
- Dilapidated urban fabrics with urban backgrounds, and
- Informal or unauthorized spontaneous settlements

During the 1996-2011 period, these areas, especially the informal or unauthorized spontaneous settlements, have significantly increased both in number and pro-

portion, due to rising urban land prices and existing inefficiencies of urban land management system.

The statistics on the number of people residing in these 'irregular zones' could be summarized as follows:

- The dilapidated urban fabric zone: Residence for about 10 million people, 2.9 million households, and 2.7 housing units, spread in 77 thousand hectares of dilapidated and valuable historical urban fabric land of the country,
- The informal or unauthorized spontaneous settlements zone: residence for 11 million people, 3.2 million households and 2.9 million residential units covering 56 thousand hectares of land in the country,
- Total area of the 'irregular zones': 133 thousand hectares, with a population of over 21 million people or 6 million households nationally.

The quantitative and qualitative characteristics of these zones are different compared to those of regular urban fabrics. Some of the most important features of these 'irregular zones' could be summarized as follows:



- The low per capita income of residents, compared to the city average; lower durability of the residential units and higher density of persons per housing unit;
- In urban irregular zones, about 1.5 million households live in houses of one room or less;
- There are more than 2.7 million dilapidated residential units in urban areas of the country that are in need of renovation.
- Informal or unauthorized spontaneous settlements are severely faced with the shortages of urban infrastructure and services.

During the last two decades, the Iranian government has made several efforts, including the collaboration of international bodies such as the World Bank, to regularize the above areas. In 2001, in cooperation with the World Bank, the Urban Upgrading and Housing Reform Project (UUHRP) program was started which included two parts of upgrading and enabling of informal settlements and capacity building for the National Strategy at the national level to prevent the growth of informal and spontaneous settlements zones.

Parallel to this plan and over the previous decade, the government has tried to expedite the upgrading and regenerating processes of the urban zones through adopting new approaches in the development of legal frameworks. The approaches have been based upon the idea of urban regeneration, seeking to integrate these settlements into the mainstream urban space.

The Government has been pursuing the realization of the following objectives:

- To create the ground for sustainable and pervasive improvement of the environmental conditions to achieve human development;
- To foresee future informal settlement expansion and pave the way for the construction of adequate and affordable housing,
- To make the grounds for the dwellers of the informal settlements to enjoy the civil advantages and deepen civil culture for them.

The following strategic principles present how the above objectives were to be realized:

- Integrating plan, budget, and the management of regularization and empowerment of the informal settlements at local level and at physical, social and economic domains;
- Reviewing urban development policies in order to regulate the process of supplying affordable land to the households;
- Prioritizing the quality improvement of residential environment and upgrading of housing condition with

the aim of gradual enhancement, and preventing the evacuation of the dwellers from the target zones in the informal settlements;

- Creating a linkage between the all-inclusive social welfare system and aggregate subsidizing nationwide, through supportive housing plans and housing sector subsidizing patterns to support the low-income groups;
- Regularization management of the informal settlements and dilapidated urban fabrics, based on the community participation and the enabling plans;
- Provision of rapid accessibility networks, civil services and the required civil spaces;
- Taking advantage of the economic and social potential capacities of the old and inner-area fabrics of the city;
- Formulate a comprehensive plan with preventive and foreseeing dimensions, the regularization and gradual enhancement of housing condition, urban revitalization and resettlement;
- Localization of the low-income housing plans.

## 36 Improving access to adequate and decent housing

Access of different groups of the society to adequate and decent housing has been one of the focal points of all governments after the Islamic revolution. This has given housing issue a special position in all Five-Year Development Plans of the country.

Amongst the most important objectives in the development plans for housing sector has been the promotion of adequate and decent housing and basic services for all households.

### *A review of implemented policies in the housing sector*

Since Habitat II, four five-year development plans have been prepared and implemented in Iran. Amongst the important goals of these development plans for the housing sector were improving access to adequate and decent housing and provision of basic services for all households.



### A. The Second Five-Year Development Plan 1995-1999

The main approaches for the housing provision in the Second Five-Year Development Plan were a heavier reliance on market mechanism both at the housing supply and demand sides, land allocation at the market prices and utilization of the earned revenue for building supportive housing and renovation of dilapidated urban fabrics. On the demand side, it was done through the incentives of savings, housing mass production, building smaller housing units, paying direct subsidies, bank interests, and government's less intervention with the construction activities. Amongst policies that was carried out at the supply side to realize the approaches of the Plan were land allocation at the market prices and liberalization of the land market aiming at reducing government's involvement, allocation of state-owned land at the market price and utilizing the related revenue for the construction of supportive housing, continuation of the policy of the serviced land supply with giving priority to the allocation of the above land to the mass housing developers.

### B. Third Five-Year Development Plan 2000-2004

The main approach in the Third Five-Year Development Plan was empowering market mechanisms and adopting policies for their efficiency. Accordingly, the main approach in the housing sector was regularization of the housing market and optimizing the market function through the financial and credit liberalization and encouragement of the private financial institutions to enter the housing sector through authorizing the banks to set their own interest rates of banking facilities, increasing the ceiling for housing loans, liberalization of the land market and reducing the government's role through reduction of the allocation of state-owned land and land sale through land tender in order to con-

struct and supply of rental and/or rent-to-own housing units, encourage housing mass production through tax relief policies and allocation of land and facilities.

### C. Fourth Five-Year Development Plan 2005-2009

The principle approach of housing in this plan was to strengthen the housing supply side through the enhancement of the direct involvement of the government instead of indirect guidance. Amongst the executive policies of this plan has been the implementation of the Mehr Housing Program (Maskan-e Mehr), the rural housing renovation plan, injecting direct banking facilities supported by the Central Bank of Iran (CBI) and government facilities into the Mehr Housing Program and Rural Housing Plans, the establishment of equality in the access to housing through the provision of supportive packages for the low-income households and stabilizing the land market through the allocation of the right to utilize land.

### D. Fifth Five-Year Development Plan 2010-2014

The previous goals and policies continued in this plan. Moreover, the approach of increasing the direct involvement of the government in the housing market and the wider implementation of policies to strengthen the supply side with the objective of controlling the housing market and improved economic justice in the housing sector was pursued by the planners.

The adopted policies in the sector resulted in the increase of housing production and removal of shortage at the general level. According to the current statistics the housing backlog per total households (one housing unit per household), decreased from 1642 thousands units in 2006 to 1165 thousands units in 2013 (Table 9).

**Table 9 Changes in the housing stock, number of households and housing backlog during 2006-2013 (thousands units)**

	2006			2011			2013		
	Housing stock	Households	Backlog	Housing stock	Households	Backlog	Housing stock	Households	Backlog
<b>Urban areas</b>	11432	12406	974	14782	15428	646	15555	16200	645
<b>Rural areas</b>	4428	5096	668	5173	5758	585	5382	5902	520
<b>Total</b>	15860	17502	1642	19955	21186	1231	20937	22102	1165

The indicators of the average built-up area and the built-up area per capita indicate the relative improvement, as the built-up area per capita has increased from 25 square meters in 2006 to 27 in 2013.

Despite the positive changes made in housing pro-

duction side, the housing indicators both qualitatively and also the enjoyment of different groups from the sector's productions is not still favorable. Statistics show that there are more than 3 million dilapidated housing units in the urban areas of the country as well as 1.5 million residential units in informal settlements

suffering from unfavorable conditions regarding built-up area, per capita living space, and access to urban facilities and amenities.

Moreover, the economic developments at the macro-economic level and increases in housing prices, as well as their inconsistency with the income growth of households has reduced the home ownership rate and increased tenancy. During the years 2005 to 2013 home ownership rate declined from about 72% to 67%.

Also, the housing affordability index, namely the

average price of a housing unit divided by the annual income of the household, increased from 8 to 12. The indicator has relatively decreased due to the housing real price deduction, reaching to 11 in the year 2015. For the low-income groups (the four lowest income deciles), the indicator has reached the critical ratio of 32 that has made housing ownership, without the direct assistance of the government, practically impossible for these groups (Table 10). Currently, the housing sector of the country is faced with the crisis of accessibility of these low-income groups to affordable, adequate and decent housing.

**Table 10 Low-income group's relative housing condition**

Description	the four lowest income deciles	Total society average
Housing unit ownership (%)	59.8	66.8
With non-durable housing units (%)	49	19
Affordability index	32	12

Due to this challenge, 'Mehr Housing Program' (Mas-kan-e-Mehr) has been widely implemented since 2007, with the purpose of decreasing final housing cost

through removing the land cost on which the buildings were constructed (Table 11).

**Table 11 General characteristics of 'Mehr Housing Program'**

No. of units with construction contract (1000 units)	1,980
Built-up area under construction (1000 square meters)	198,133
Allocated land (hectares)	31,957
Habitability (3.9 per unit), (people)	7,553,256
Net built-up area (1000 square meters)	145,253

This project has faced numerous challenges, the most important of which are the un- suitable site locations due to the location of state lands and the increased total volume of liquidity due to considerable banking credits that led to the change in the volume of monetary base and general inflation.

Following these challenges, the government, aiming at integrating social welfare and social security with housing plans, has put a "Social Housing Program(SHP)" in its the agenda. With the direct collaboration between all agencies involved in social and supportive policies and the MRUD, the Program is seeking to design and carry out housing provision projects for the 40% low-income groups within the framework of social welfare and enabling programs. The present government has tried to provide the middle-income groups with housing through such policies as development of savings and loans plans and increase of banking credits. Another approach pursued by the present government in housing provision schemes is to pay attention to the local and regional characteristics and develop housing plans according to the regional features. Totally, the new approach of the Iranian Government is based on the following policies:

- Develop housing provision plans within the framework of comprehensive social welfare policy;
- Optimum use of the market mechanism and Government's intervention in case of market failure;
- Expand savings and loans system in order to enhance the access of middle-income groups to adequate and decent housing.

## 37 Ensuring sustainable access to safe drinking water

Iranian Government has made a major investment to provide safe drinking water during the past three decades. Currently in the urban communities of Iran, 99.4% of households have access to potable water

networks and in rural communities 74% of households are enjoying potable hygienic water. The figures were 91% and 70% , respectively during the last decade.

At present, Iran is one of the countries that is faced with the drought crisis. About 90 percent of the country is located in the arid and semi-arid areas and renewable freshwater resources of the country are now around 130 billion cubic meters, 96 billion cubic meters of which are used (more than 92% of the renewable resources) in different sectors of drinking, industry, agriculture, etc. Considering 20 billion cubic meters as environmental water reservoir of rivers and wetlands, the country has reached its peak in water harvesting of recoverable national resources. It should be noted that in the current situation that the country is approaching to the peak of exploitable recoverable freshwater, it wouldn't be possible to supply water for the future consumption of the country, unless water consumption patterns are revised and optimum water utilization and transferring desalinated water (desalinization) for domestic consumption.

Also in this situation, it's necessary to pay attention to the following and put them in the agenda:

- Avoid wasting water in agriculture and potable water sectors;
- Increase utilization efficiency,
- Change the consumption patterns,
- Reconstruction and modernization of urban water networks,
- The use of excess and consumed water,
- Recycling and waste water treatment,
- To use unconventional water;
- Prevent water contamination;
- Prevent dropping of water tables;
- Increase the penetration into the water table and making artificial nutrition activities;
- Water transfer to low-water and arid zones from remote areas;
- Develop plans to cope with drought;
- Water provision in critical situations.

Most importantly, the pollution of water resources, increase of population and drought, exacerbates the problems of water scarcity

Iran has attempted for years to invest in modern methods of drinking water provision to provide a greater part of the population with more facilities in this regard, including the use of desalination technology in the

Iranian coastal south line. The share of desalination rate of Iran in 2013 was less than 3% of the total desalinization located in the Persian Gulf with the capacity equivalent to 106 million cubic meters per day.

To provide a sustainable provision and to enable sustainable access to safe drinking water, the Iranian government has put several policies in the agenda, the most important parts of which are as follows:

- **Enhancement of productivity and demand management in drinking water sector through preferred pricing, based on the consumption;**
- **Enhancement of supply and demand management, awareness raising on the public culture of water consumption, and design and implementation of the optimal pattern of drinking and safe water consumption in country, as well as effort to reduce the waste of water in the urban network;.**
- **Establishment of Comprehensive Planning in the sector of drinking water supply;**

Developing and implementing a comprehensive plan to achieve qualitative and quantitative indicators of water and sanitation, both at national and international levels in order to enhance national health and public health through taking advantage of extensive investments in order to develop Bacteriology and water chemistry laboratories;.

- **Diversification of financial resources in funding water projects.**

Financing, mobilizing and diversifying the financial resources with emphasis on non-governmental resources and attracting domestic and foreign investments, appropriate to the water and sanitation sector's development strategies.

- **Risk management implementation**

Development of risk management and crisis and passive defense in designing, construction and exploitation of the installations

- **Customer orientation and consumers rights**

Enhancing customer satisfaction and client rights through the establishment of systems to respond to customers' needs and rights

- **Using new technologies in water production and harvesting**

Diversifying the production and distribution of drinking water systems and utilizing unconventional water resources (such as rainwater harvesting, using air humidity, water distribution stations, desalination, water packing, double-networked systems, separating water in terms of usage, etc.)

### ■ Establishment and Reforms in drinking water pricing system

Developing cost-based pricing, modifying pricing methods and simplifying tariff structures for water services.

### ■ Development of monitoring systems

Developing and implementing a comprehensive system to utilize and monitor the quality and quantity of water resources in potable and safe water sector (especially nitrate) and enforcing necessary standards and regulations to prevent environmental pollutants as well as discharge of raw sewage into the natural environmental receptors

### ■ Reducing water loss and reconstruction of water installations

Planning and implementation of operational plans in order to reform, reconstruct, rehabilitate, and renovate installations, equipment and old water networks.

## 38 Ensuring sustainable access to basic sanitation and drainage

The nominal capacity of wastewater treatment plants are about 2 billion cubic meters per year and if the existing trend continues, the amount of wastewater produced in the country, including urban and rural areas will increase to 7.9 billion cubic meters in 2041.

Improvement of the hygienic standards in recent decades in Iran, has led to a rise in producing wastewater. Providing sustainable access to urban sanitation systems has become one of the central areas of planning system in Iran during the last decade. This very important issue has reduced the number of housing units with an unsanitary sewage system.

According to available statistics, the kitchen sewage of about 17.7 % of the total 15.8 million existing housing units nationwide in 2006 was discharged in the surroundings of the residential areas. This amount is about 13.1% in urban areas. Table 12 shows the proportion of different sewage disposal systems of the housing units in the country.

**Table 12 The proportion of housing units that enjoy different forms of sewerage facilities**

Year		Public drainage network	Private drainage network	Absorbing Wells	Special waste reservoirs	Disposed to Surrounding areas	Other forms
2011	Bathroom sewage	29.6	0.6	67.3	0.5	0.7	1.2
	Kitchen sewage	29.5	0.6	48.4	0.4	16.9	4.5
	other	29.5	0.6	46.4	0.5	19.6	3.2
2006	Bathroom sewage	22.6	0.9	74.2	0.5	-	1.7
	Kitchen sewage	22.3	0.9	51.5	0.5	17.7	7
	other	22.6	0.9	50.6	0.5	22.6	2.7

This table shows that the proportion of housing units disposing their bath and kitchen sewerage into the surrounding areas of the housing units has decreased from the 17.7 percent in 2006 to 16.9 in 2011.

## 39 Improving access to clean domestic energy

Attention to the production and consumption of energy derived from renewable energy sources and clean and renewable fuels has increased during the recent years in Iran. Utilization of renewable energy resources reduces urban pollution and the consumption of fossil fuels and at the same time finances part of the cost of urban management and pave the way to move

towards the green society.

Since 1996, fundamental and important measures have been taken in Iran, by the establishment of agencies and organizations that are involved in the management and policy making of promoting the use of renewable energy sources in the country (Table 13). These measures are as follows:

- Adopting the long-term and guaranteed purchase of electricity produced from all renewable energy sources.

- Imposing taxes on electricity consumption
- commitment to deliver the saved liquid fossil fuel or the equivalent amount of that to the beneficiaries of the renewable power plants
- Conducting research and innovative measures in localization of different energy production technologies from new energy sources
- Providing basic information for the construction of renewable energy installations

**Table 13 Measures taken and their outcome in the area of clean energy in Iran**

Number	Measures	outcome
1	Supply of power required by households in remote rural areas	More than 1000 households
2	Construction of photovoltaic projects	Capacity: 10.9 megawatt(MW)
3	Installation of 4 wind power plants	Capacity: 554 MW
4	Installation of wind farms across the country	Capacity: 128 MW
5	Construction of small hydropower plants	Capacity: 65.4MW
6	Construction of power plants from biomass sources across the country	Capacity: 9.6 MW
7	Construction of geothermal plants in the northwestern Iran	Capacity: 5MW electricity
8	Pilot installation of Central Receiver System Solar Power Plants	Capacity: 250KW

## 40 Improving access to sustainable means of transportation

One of the urban infrastructures that enhance the living conditions in the cities is the urban access network and transportation system that allows citizens' access to different destinations. Public transport infrastructures are prepared and maintained by municipalities. According to the Municipal Law, all streets and other types of pathways in cities are owned by the municipalities that are duty bound to develop and maintain the network of urban pathways in order to enhance their functionality and accessibility in transportation.

Public transport which aims to make cheap and convenient transport more accessible to the weaker members of society and to reduce reliance on personal cars in intra-city transportation, has been developed in quantity and improved by quality over the past two decades. This development has been the result of targeting the urban public transportation, reduced access time to the destination, strengthening the transportation fleet, changes in the pattern of fuel consumption, and ease of mobility through public transportation.

Over the last two decades the condition of public

transportation services in urban areas has gradually improved. Now, with the development of public transportation services, as well as increase in the transportation fleet, more people are using this mode of transportation and at the same time more vehicles are at the service of the citizens.

One of the policies implemented in urban public transport area has been the reduced consumption of diesel and gasoline fuels. To this end vehicles' engines were modified to be compatible to natural gas. Currently, natural gas or gasoline or a combination of both (dual-fueled taxis) is used in the public transport network. Holding down the price of natural gas creates a tendency in owners of dual-fueled public cars to use more natural gas rather than gasoline. Another successful policy in public transport in large cities has been shorter travel time to destination at a higher speed. This policy was first launched in Tehran Metropolis through the launching of the Bus Rapid Transit (BRT) system.

Rail transport in cities is another option that is less polluting to the environment and reduces the travel time considerably. Launching rail transport in metropolitan cities of Iran began a decade ago and is in progress now.

In the Transport Strategy of Iran, the convenient access to transportation via BRT systems and rail transport are amongst the goals that are pursued in public



transport. It allows the ease of access to intra-urban public transportation which currently has been formed in most major cities.

## 41 Challenges experienced and lessons learnt in these areas

During the previous two decades, Iran has faced numerous challenges in the housing sector, the most important of which has been the imbalances between household affordability and housing prices. The existing trends at the housing market have made housing provision almost impossible for the low-income and even a large part of the medium-income households.

In 2007, the government launched a scheme called Mehr Housing Program (Maskan-e-Mehr) to tackle the problem. It was planned to provide the mid-income households with free or low-cost land and low-interest rate loans, to make housing mass production possible for a large part of the households in need. Along with the above initiative, during the recent decade, the government has been trying to provide the residents of the urban dilapidated fabrics with housing construction loans in order to renovate their old and dilapidated housing units as well.

The housing production rose sharply by relying on the government support that caused the housing sector to have an acceptable operation from both the general and medium indicators points of view. However, this pattern of government support has resulted in new challenges in the housing sector. The increase of state support over the recent years has caused disruptions in the functioning of the market, among the most important of which is that the private-sector's investment was replaced by the financial assets of the banking system in Maskan-e-Mehr. The pattern of housing finance and reliance only on the injection of funds from the Central Bank- which resulted in the increase in the monetary base- has left notable impacts on the macroeconomic variables, including the inflation rate. Over the course of time, this very issue became a contributing factor in the increase of housing prices and as a result decreases of affordable and decent housing accessibility, particularly for the low-income groups.

The growth of informal settlements over the past two decades has been another challenge for the govern-

ment. It stems from such problems as uncontrolled growth of land prices in the cities and an increase in the intra-regional migration flows. To face this trend, much effort has been made since the 1990s. The dominant strategy is based on the enabling of local communities and participation of local institutions. However, the overlapping of the functions of the urban management agencies and institutions with that of the central government has neutralized the efforts. In addition, the overemphasis on physical aspects and ignoring the poverty alleviation programs is amongst the missing links that should be considered in this context.

Over the last years, the renovation of dilapidated areas within the city borders has been focused and the incentives such as construction tax redemption or low-interest loans have been among the schemes that have been carried out for the above urban fabrics. However, as the majority of these dwellers in these areas are amongst the low-income groups and the lack of linkage between the above plans with the low-income supportive policies, the households have been practically marginalized and driven to the informal settlements.

## 42 Future challenges and issues in these areas

### *1st Challenge: sharp fluctuation and instability in the housing market*

Periodical fluctuations were repeated in the housing boom and bust cycles many times. Since 1991, the sector has gone through four sequential cycles of boom and bust. Fluctuations in the housing sector mainly stem from the macroeconomic variables. Inefficiency of the Iranian land market and the increasing role of the exclusive players, along with the inappropriate interference of the urban management body in the market could be considered as other contributing factors in the persistence of instability of the housing market.

### *2nd challenge: the high prices of land*

The sharp rise in the land prices has been one of the major issues and challenges in the housing sector during the recent two decades. The increase of land prices over the recent years has given rise to the increase of the finished cost and sales prices and as a result created a deeper gap between households' affordability and housing prices.



### ***3rd challenge: housing provision is very difficult for the low and medium-income groups***

In the housing market, high price of land on the one hand and inconsistency between supply and demand patterns on the other, made it very difficult to provide, particularly the low-income with adequate and decent housing.

### ***4th challenge: inefficiency of the housing market***

The inefficiency of the housing market can be considered from two aspects:

- 1) Inconsistency of the construction patterns and housing supply with the pattern of demand for housing as a shelter
- 2) Separate and to some extent non-overlapping housing markets for the consumer and investment demand of housing that shifted a significant portion of housing investment demand towards the construction of luxurious, large housing units for the upper-income households.

### ***5th challenge: limited and inefficient housing finance system***

The housing finance system is not developed enough to be able to respond the demand of its applicants and is limited and small compared to the volume of demand.

- The banking system has a small share in the total housing finance;
- The mortgage market has shrunk to a great degree and got squeezed, with the ratio of the mortgage market value to the GDP being less than 1%.
- The housing loan is a negligible part of the housing purchase price.
- More than 75 percent of banking facilities granted during the previous years went into housing construction and supply that lacked enough efficacy;
- The investment market hasn't had a significant position in the housing finance system.
- Housing finance mainly relies on banking system and short-term monetary market;
- Loan repayment is difficult for low-income groups;
- Bank-e Maskan is the only bank committed to provide home purchase facilities in lieu of making deposits in the Housing Savings Fund;

### ***6th challenge: the problem of growing informal settlements***

Poor functioning of urban planning system and inefficiency of land policies on the one hand and the

decrease of the household purchasing power on the other, have resulted in the dramatic growth of informal settlements during the recent years. Considering the current situation and the annual increase of land prices, a considerable proportion of the new households are potentially prone to living in informal settlements.

### ***7th Challenge: high volume of old and dilapidated housing units in need of renovation***

- The majority of the urban areas have dilapidated fabric. About 77 thousand hectares of the urban land are part of dilapidated urban zone and in need of renovation.
- The number of housing units in urban and rural areas in need of renovation by 2026 will be 3 and 2.3 million units, respectively.

### ***8th challenge: inefficiency of the urban planning and management system***

- Urban planning system has failed to regulate the flow of land supply in an appropriate way to maintain a balance between the demand and supply of land;
- Despite extensive investment in new towns, they have not been able to gain the expected success in attracting people;
- Urban rules and regulations mostly lack the necessary compatibility with the characteristics of urban low-income groups.
- The over reliance of the municipal management income system to the revenue gained through construction activities and the sale of extra built-up area in urban housing (extra density) during the recent two decades, in practice, has increased land prices in the cities and thereby has caused an increase in housing prices.

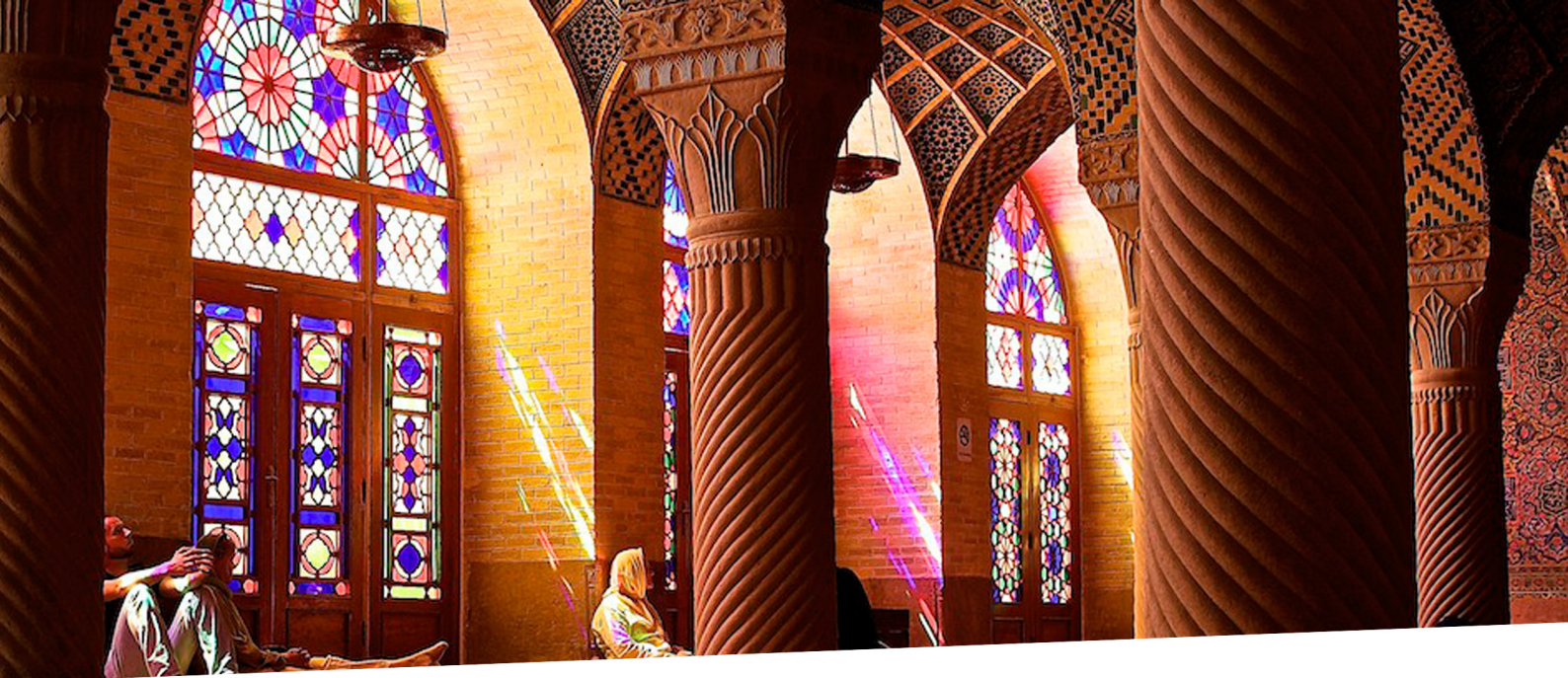
### ***9th challenge: The construction industry lacks optimum efficiency.***

- Construction period, construction costs and energy consumption in the construction sector is very high.
- Utilizing the industrial production method has not been generalized yet and the share of industrial house production is negligible.
- Market instability has increased the risk of investment in new technologies.

### ***10th challenge: regional inequalities in housing***

Severe regional inequalities in the utilization of housing production and distribution is one of the problems and challenges to be coped with. Most provinces at the

country's borders are facing income poverty on the one hand and unfavorable housing conditions on the other.



# VII

## INDICATORS

### 1 Percent of population living in “irregular zones”

• **1996:** NA (No data available)

• **2006:** 21

• **2011:** 30

By official definition, **‘irregular zones’** are areas with housing deprivation which include dilapidated urban fabrics, unauthorized and spontaneous settlements.

Source: UDRO

### 2 Percentage of people with access to adequate housing

• **1996:** 68

• **2006:** 77

• **2011:** 83

Adequate housing is defined as:  
Housing stock minus inadequate housing units.  
Inadequate housing units (HU) are:

- (a) HU that are 40 years old and more
- (b) HU with 1 room or less
- (c) HUs with more than 1 household

Source: MURD, Housing Comprehensive Plan, 2015.

<p><b>3</b> Percentage of people in urban areas with access to safe drinking water</p>	<ul style="list-style-type: none"> <li>• <b>1996: 99.1</b></li> <li>• <b>2006: 99.4</b></li> <li>• <b>2011: 99.4</b></li> </ul> <p>Access to safe drinking water is defined as: Households that are connected to urban potable water system. Source: SCI, Various Household Income and expenditure Surveys.</p>
<p><b>4</b> Percentage of people in urban areas with access to adequate sanitation</p>	<ul style="list-style-type: none"> <li>• <b>1996: 22.5</b></li> <li>• <b>2006: 28.2</b></li> <li>• <b>2011: 35.2</b></li> </ul> <p>Access to adequate sanitation is defined as: Households that are connected to urban waste- water system. Source: SCI, Various Household Income and expenditure Surveys.</p>
<p><b>5</b> Percentage of people in urban areas with access to regular waste collection</p>	<p>There is no official statistics on waste collection in urban areas of the country. But, in mid-sized, large cities and metropolises of the country, waste collection is about 100 percent.</p>
<p><b>6</b> Percentage of people residing in urban areas with access to clean domestic energy</p>	<p><b>No data available.</b></p>
<p><b>7</b> Percentage of people residing in urban areas with access to public transit</p>	<ul style="list-style-type: none"> <li>• <b>1996: NA</b></li> <li>• <b>2006: NA</b></li> <li>• <b>2011: 92</b></li> </ul> <p>Public transit includes buses, Taxis, and Metro. Source: Association of Public Transportation Organizations.</p>
<p><b>8</b> Level of effective decentralization for sustainable urban development measured by:</p> <p>i) Percentage of policies and legislation on urban issues in whose formulation local and regional governments participated from 1996to present</p> <p>ii) Percentage share of both income and expenditure allocated to local and regional governments from the national budget</p> <p>iii) percentage share of local authorities' expenditure financed from local revenue</p>	<p><b>No data available.</b></p> <p><b>See indicator 13</b></p> <p><b>No data available.</b></p>
<p><b>9</b> Percentage of city, regional and national authorities that have implemented urban policies supportive of local economic development and creation of decent jobs and livelihoods</p>	<p><b>No data available.</b></p>

<b>10</b> Percentage of city and regional authorities that have adopted or implemented urban safety and security policies or strategies	<b>No data available.</b>
<b>11</b> Percentage of city and regional authorities that have implemented plans and designs for sustainable and resilient cities that are inclusive and respond to urban population growth adequately	<b>No data available.</b>
<b>12</b> Share of national gross domestic product (GDP) that is produced in urban areas	<ul style="list-style-type: none"> <li>• <b>1996: 74</b></li> <li>• <b>2006: 80</b></li> <li>• <b>2011: 82</b></li> </ul> <p>Source: Central Bank of Iran.</p>
<b>13</b> Any other urban-related data relevant to the National Report  i) Share of provincial revenue from the government public budgets          ii) Ratio of provincial revenue to provincial public expenditure	<ul style="list-style-type: none"> <li>• <b>1996: NA</b></li> <li>• <b>2006: 11.4</b></li> <li>• <b>2011: 10.2</b></li> </ul> <p>Source: SCI, Various Statistical Yearbooks.</p>          <ul style="list-style-type: none"> <li>• <b>1996: 3</b></li> <li>• <b>2006: 3.3</b></li> <li>• <b>2011: 4.5</b></li> </ul> <p>Source: SCI, Government Annual Budgets.</p>





## National Habitat Committee Secretariat

Office of Deputy Minister for Housing and Construction

Ministry of Roads and Urban Development

Dadman Tower, Nelson Mandela (Africa) Blvd.

Tehran, I.R. IRAN

Tel: +98 -21-88646131-9

Internet: [www.mrud.ir](http://www.mrud.ir)

Email: [eghtesadmaskan@mrud.ir](mailto:eghtesadmaskan@mrud.ir)

