PREFACE

This national report orbits around the sustainable urbanization requirements in Tunisia. It is prepared in response to the international resolutions relevant to the preparation and organizing the third UN conference on Housing and Sustainable Urban Development, which will consider the progress made in achieving the agenda of Habitat II issued by the United Nations Conference Habitat II International Conference (Istanbul 1996). It will discuss the new challenges, emerging trends and the prospective vision of human settlements and sustainable urban development in order to set a new agenda in line with the sustainable development goals approved by the UN, under the development agenda of post-2015. This report outlines the features of the position of the Tunisian government regarding the issues to be discussed by Habitat III, in order to initiate an effective international cooperation aiming to make human settlements capable of providing the grounds of the human right for an adequate housing, a better quality of life and a decent living standards in the frame of development that meets the needs of the current generations without compromising the ability of the future generations to meet theirs.

On one hand, Tunisia is getting ready to participate in Habitat III as continuation to its participation in the actions of Habitat I (Vancouver 1976) and Habitat II (Istanbul 1996) and an effort to take advantage from the experience of countries that succeeded in providing the keystones of sustainable urbanization. On the other hand, it represents an emphasis to its commitment to the importance of fair and adequate access of the urban regions to essential and sustainable services as a contribution to achieve comprehensive socio-economic development. This national report was prepared by an expanded national commission gathering the participation of representatives of the Government, civil society, academic institutions and the private sector, the work was distributed on seven sub-commissions each one concentrated on one of the following subjects:

- Urban demographic issues,
- Land and urban planning,
- Environment and urbanization,
- Urban governance and legislation,
- Urban economy
- Housing and basic services
- Indicators.

The national commission has started its work since May 2015 and continued until the holding of the Third United Nations Conference of Housing and Sustainable Urban Development. discussions dealt with all aspects of the sustainable urbanization and led to the definition of issues and challenges of a new urban agenda. It has also prepared the exposed report, which summarizes the results of these actions with a technical assistance from a specialized engineering office.
Presentation of the Republic of Tunisia

The Republic of Tunisia is situated in the North of the African continent and exactly on the line separating the eastern and western basins of the Mediterranean Sea, which is a strategic location that has made Tunisia a country open to the rest of the world for thousands of years.

Thanks to its location, Tunisia witnessed the succession of several civilizations over three thousand years from the East (Phoenician, Arab and Turkish) and from the North (Roman and French). Currently, the Tunisian society is mainly Arab and Muslim.

Map 1 - The location of the Tunisian Republic in the world and in the Mediterranean Sea

Map 2 - The Republic of Tunisia

- **Surface**: 163,610 km²
- **Coastal line**: 1,300 km
- **Climate**: Mediterranean: Hot and dry in summer, Cold and rainy in winter
- **Population**: 10.983 million (2014)
- **Population growth**: 1.03 % per year (From 2004 to 2014)
- **Life expectancy at birth**: 74.9 years (2014)
- **Urbanization rate**: 67.7 %
- **Number of households**: 2,713,000
- **Housing number**: 3,289,900
- **Capital**: Tunis (2.3 million)
- **Main cities**: Sfax, Sousse, Gabes, Kairouan, Gafsa (population exceeding 100 thousand people).
- **Administrative division**: 24 governorates
- **Number of municipalities**: 283
- **Official language**: Arabic
- **Religion**: Islam
- **Currency**: Tunisian National Dinar (TND) (TND 1 = USD 0.49)
- **GDP per capita**: TND 7,656 (2014) USD 3,750
INTRODUCTION

Tunisia has witnessed a quick urbanization phenomenon since 1996, date of the second UN conference about human settlements. This phenomenon has recently been witnessing the influence of economic, social and political transitions since January 14th, 2011 –date of the Revolution, the revolution of liberty and dignity. The urbanization phenomenon during the period between 1994 and 2014 resulted in a high increase of the urbanization ratio, which is currently of about 68%, the urban population which represents 61% and the number of houses with 76%. The urban texture has also developed as a result of the increasing role and functions of major and medium cities and the evolution of some of them to the level of international megacities like the case of Tunis, which, became thanks to its developed infrastructure and its service level capable to compete with its similar cities especially in the Mediterranean level.

The implementation of projects and procedures relating to the goals and programs of the national action plan proposed in Habitat II (1996 – 2016), contributed to successfully achieve many objectives such as the upgrading of the existing housing reserve, the improvement of the urban texture in unorganized settlements, the improvement of cities, villages and rural conurbations productivity, and addressing extreme poverty phenomenon that is growing in cities, in popular neighborhoods, informal neighborhoods and in remote villages. However, the limited available resources at the disposal of municipalities and services in charge of urbanization management prevented the achievement of many of these goals, due to many obstacles.

In light of these effective yet influential factors on urbanization on the one hand, the demographic change with the increase of elders proportion and lifestyle development among different Tunisian society groups on the other hand; the urban population needs, witnessed a great development in terms of quality and quantity. The demand of citizens for a better life quality and decent living grew and become more urgent and necessary, which put big challenges for the authorities in charge of supervising the management of the local groups’ affairs and the management of urbanization. This is due to the limited available financial and technical resources at the disposal of municipalities and the country and the growing demands in economic, social, and cultural services, as well as in the fields of transport, healthcare, sports, housing and the protection of cities against floods, the rate of which has increased due to climate change and the over-exploitation of the natural resources.

Despite recorded progress in providing basic services to improve life quality and decent living indicators, the Government is willing, during the five-year plan of 2016-2020, to make the basic "major reforms"\(^1\) in social and economic development to establish an alternative development model, that is based on good governance, human development, social integration, economic efficiency, decentralization development and a fair territorial development. These major structural reforms are expected to occur in the coming five years and in the next two decades to 2036 in order to achieve the 17 sustainable development goals, which have been approved by the international group including the 11th goal relevant to sustainable cities.

---

The Tunisian society has undergone significant changes in the population pyramid structure over the past two decades. This was marked by the expansion of youth and elderly people base and the great change of lifestyle characterized by an increasing demand for basic services and life-quality attributes. These societal shifts have been synchronized with the urban area enormous development by the expansion of cities and the emergence of major challenges such as the difficulty in providing urban services of all kinds and ensuring a decent living for all people, notably low income groups. In light of this urban challenge, Tunisian cities, that represent the main source for enhancing GDP national crude, are now required to enhance the developmental movement in cities and rural areas at the same level in order to create job opportunities, reduce unemployment and provide adequate income for most social groups. This would improve the social conditions for people so the cities become a source of development and sustainable urbanization.

This report outlines the features of the urban agenda that is capable of meeting these challenges in the next twenty years (2016 - 2036) based on a detailed assessment of the achievements and results achieved since 1996 in the field of housing and sustainable urban development, with reference to the development plan guideline (2016 - 2020) adopted by the Tunisian government in September 2015. This has enabled the expanded national commission, that was established to create the National Housing report III, to open and discuss all the axes suggested by the United Nations (7 axes) and has come to the following results and concrete suggestions:

1. URBAN DEMOGRAPHIC ISSUES

Challenges: rapid urbanization, ageing population, demographic and economic disruption of linkages between urban and rural areas, lack of integration of youth and women in the developmental work which contributes to the increase of unemployment rates as a result of a slow development dynamism,

Suggestions: supporting rural-urban linkages in order to help developing the local economy and improve the population living conditions; activating the economic movement in cities; improving cities attractiveness; encouraging investment and partnership with the private sector; supporting decentralization and ensuring wider contribution of civil society in the preparation of development projects and monitor their implementation; enhancing youth and women's integration in the development process and raising the spirit of initiative in them in order to integrate them in labor market and adapting the urban environment so that elderly people continue to contribute in public life.

2. LAND AND URBAN PLANNING

Challenges: lack of spatial planning tools, inability of municipalities and local authorities to manage the issues of urbanization, inefficient urban plans development due to non-compliance with their guidelines, unavailability of land reserves that could to meet the demand of plots meant to be built for low income people and some sensible economic activities and the continuing expansion of informal urbanisation,

Suggestions: enshrine the principles of a forward sustainable planning and finding a planning dynamism and a responsible yet democratic urban development in order to enhance the competitiveness and Tunisian cities attractiveness to improve the performance of local and public authorities and civil society organizations in line with the urban, social and economic frame; creating integrated economic poles through providing plots for housing surrounded by green areas near the industrial and tourist zones which help limiting the expansion of information reconstruction and movement to and from work sites; wise management of resources and lands by following a participatory process to stop the informal urban migration; redistributing local management powers by abolishing the tutelage on local authorities and enshrining the free administration principle and adapting these powers with resources to ensure the interventions effectiveness; developing concrete mechanisms for financing urban development to enable local and regional authorities to control the real estate, roads and planned public equipments and implementing principal
networks in the expanded conurbations; implementing "agencies for development and urbanization» in large urban centers to be responsible for the observation of urban development and coordination between the of economic, social and urban development strategies.

3. ENVIRONMENT & URBANIZATION

Challenges: disparate lack of the necessary environmental services for the quality of life (sanitation and waste disposal, green areas, ...) and decline of agricultural land due to urban expansion and cities inflation, continuous risks of pollution, notably the risk of chemical and organic pollution and their negative impacts on people who live in cities and the urban environment; failure of preventing equipment and tools against the negative impacts of natural hazards and climate change; deal with traffic congestion.

Suggestions: ensuring the evacuation and treatment of wastewater; maintaining sanitation stations and collecting and managing household waste collection by the adoption of clean techniques that take into account the environment and the health of citizens; wise management of liquid and solid waste, sources of pollution, noise and different environmental disturbances according to the situation of each city. In addition, an early warning system and adequate rapid response plans should be implemented in each town to face the intense atmospheric pollution; creating identification and definition maps of threatened areas by natural disasters (such as earthquakes, floods, etc.) and areas affected by climate change, and disseminate the culture of positive interaction with these disasters. An early warning system must be implemented in the field of climate change to enhance the preventive measures. Establishing a participatory system that is responsible for the maintenance and rehabilitation of green areas and urban parks and protecting natural areas, notably those characterized by a fragile ecological system due to the negative impacts of human settlements and urban expansion. Moreover, the national sustainable development strategy for the period 2014-2020 is going to be activated to guarantee more balance among the social, cultural, economic and ecological dimensions and achieving a fair and integrated territorial development.

4. ADMINISTRATION AND URBAN LAW

Challenges: legislations are not inadequate, relating to urbanization and urban development, for low income people needs; lack of sustainable urban development attributes among the legislations relating to rehabilitation, housing and territorial development; lack of an integrative vision of legislative texts related to urban development; the massive dominance of centralization and lack of partnership in the new legal texts relevant to the governance of cities and conurbations; the gap between the text enshrining the rights of women and their actual situation.

Suggestions: developing the urban and territorial laws in light of the new constitutional principles including those enshrining decentralization, sustainable development and the right to an adequate housing; supporting the legal and institutional framework relative to fighting against urban phenomena that spoil the beauty of the cities; simplifying facilities and administrative procedures and delays of preparing and reviewing the development plans; reviewing property law system to solve the problem of frozen fees in order to reintegrate a great part of the land reserves within the economic cycle, controlling the land and fighting against the monopoly and speculation phenomena; activating the constitutional provisions relative to decentralization and reformation of legal system in the fields of territorial division of the Tunisian country; establishing a legal framework for local authorities and managing the local affair and financial system of local authorities; establishing a legislative basis to apply the participatory governance and develop partnerships and cooperation between local authorities; enhancing the adoption of gender approach and enhancing the participation of women in economic and social planning and public affairs.
5. URBAN ECONOMY

Challenges: weak developmental dynamism in urban areas and the decline of economic growth in line with the development of economic activities and the contribution of cities in the production of gross domestic product; increase of unemployment pace notably among youth, improving productivity and economic ties between the neighboring cities and rural areas to reduce the imbalance and poverty; developing financing resources of local public groups’ budgets and establishing a local taxation system that meets the requirements of establishing the “city policy” and incarnating decentralization; generalizing the participatory local development paths varying the types and mechanisms of housing finance and dwellers acquisition mechanisms and rehabilitating the existing dwellings.

Suggestions: updating the local taxation system to help preserving the financial balance of local authorities; yearning to establish local and regional financing mechanisms (funds or cooperative credit institutions) to help local communities enhancing their financial resources and revitalize their economies; reforming the funds of promotion of housing for the employees system and create a fund to support housing for low income group; creating long-term financing mechanisms to create land reserves; facilitating loans’ granting for the improvement of existing dwellings and adapt the mechanisms of loans’ granting according to the beneficiary situation and repayment capacity; master the active mechanisms to enhance employability; improving professional capacities of human resources and continue to support the strategic handicraft sectors with high employability capacity; enhancing the role of collective and solidarity economy; integrating the parallel economy and fragile employment within the structured business cycle; enhancing supportive procedures of production institutions that are responsible for improving their competitive capabilities and ensuring their viability.

6. HOUSING AND BASIC SERVICES

Challenges: an increase of informal neighborhoods’ rate as a result of a decline of social plots supply for low-income groups; lack of urban rehabilitation system within housing and urban policies; lack of efficiency concerning access mechanisms to adequate housing notably for low-income and medium social groups; difficulty in providing urban services including health and security services with the required quality, especially for needy families.

Suggestions: setting a new policy for the city responsible for controlling urban land prices to respond to the needs of low-income social groups of rehabilitated plots; controlling dwellers prices and developing construction methods; activating the partnership between the private and public sectors and implementing integrated urban and housing projects in which reasons and decent living conditions are available; ensuring good quality in basic urban and leisure services (lighting, energy, drinking water, sanitation, waste management and fighting pollution, green areas, ...); developing health control system of food and drinking water; mobilizing the non-traditional water resources by the adoption of sea water desalination for the great urban poles by coastlines and desalination of groundwater in the South and the Center; activating preventive policies to ensure safety and health security to urban and rural population; promoting the culture of energy conservation by encouraging the use of renewable energy and the adoption of green building techniques that save energy.

NATIONAL PLAN FOR HABITAT III:

1. Enhancing access to adequate housing by an affordable price that fits low and medium income social groups,

2. Supporting the protection and enhancement of cultural and natural heritage and the maintenance of old towns and city centers from the risk of neglect and deterioration.

3. Ensuring drinking water, sanitation services and clean energy access to all social groups, popular neighborhoods and notably slums with the required quality,
4. Improving use of resources and wise management of lands and promoting the production of social plots that would reduce the informal expansion of cities,

5. Reducing the level of pollution and the negative impacts of economic and social activities on the environment,

6. Resisting poverty, unemployment and delinquency by enhancing adequate job opportunities and supporting local development programs with high employability capacity,

7. Encouraging local and regional actors to develop positive social, environmental and economic relations among the urban, semi-urban and rural areas by adopting harmonious yet coherent urban and territorial plans development set for this purpose,

8. Empowering sustainable urbanization pathways and increasing the capacity of local authorities in terms of urban planning and management in order to establish cities and conurbations in which a decent living conditions are provided for all,

9. Improving urban transport services and enabling all the population to use safe, clean and sustainable means of transport.

10. Mitigating risks and natural disasters that increased during the last period taking into account climate changes.
The Tunisian population has increased by 25% since 1994 to reach 10.983 million people according to the 2014 population census, despite the continuous drop of the annual population growth rate\(^2\). The population growth rate was synchronized with the growth of the urbanization phenomenon, as the cities accommodated 67.7% of the overall population in 2014, while this rate had not exceeded 61% in 1994.

Graph 1 - Population increase (thousands) and the annual growth rate (%)\(^3\)

This increasing number of people in urban areas is due to the urban population natural growth on the one hand, and to the persistence of the exodus on the other hand, despite the drop of its pace during the previous decade. Furthermore, the last 20-year period was marked by an aging population. The age range rate of 0-14 years old dropped from 34.8% to 23.8% and the age range rate of 60 years old and beyond increased from 8.3% to 11.7% during the same period.

1.1 - Managing Rapid Urbanization

\(<\textbf{Characteristics of the situation}\>

The average population density in Tunisia increased from 56.5 people/km\(^2\) in 1994 to 67.12 people/km\(^2\) in 2014, an increase 19% during this period. However, the geographic distribution of population densities shows major differences from one region to another up to now. While the population density reaches 200 people/km\(^2\) in the coastal strip stretching from Great Tunis to Monastir, it does not exceed 100 people / km\(^2\) in the rest of the coastal strip except Gabes and then falls down to 55 to 75 people/km\(^2\) in the central steppes and to less than 55 people/km\(^2\) in the regions of South and Mid-West. The density growth in the coastal regions remains logical, considering the existence of the main cities; whereas it puts forward several problems in the interior areas given the inability of the natural environment to bear the intensifications of agricultural activities\(^4\).

Map 3 - The geographic distribution of population densities in 2014

The urban population, reaching 7.4 million in 2014, is distributed over 283 municipalities\(^5\) and occupies more than 300,000 ha\(^6\), i.e. a rate of 1.8 % of the country’s surface. In light of the data of the National Institute of Statistics and the multiple studies relevant to the urbanization

---

2. The annual population growth rate in Tunisia reached 2.35% in 1996 and 1.21% in 2004 then dropped to 1.03% in 2014, according to the National Institute of Statistics.
4. The study of the "national map of infrastructure and collective equipment in 2030". The Ministry of Equipment, Housing and Land Use Management- Tunis 2015
5. Each municipal area is considered as an urban area. The number of municipalities in Tunisia increased from 150 in 1975 to 283 in 2015,
6. The Ministry of Equipment, Housing and Territorial Development in 2015,
phenomenon in Tunisia⁷, it turns out that many of the issues relating to the Tunisian urban environments prevented any achievement regarding the improvement of urbanization and didn’t achieve the desired results in terms of service quality and the sustainable urbanization attributes.

➢ The geographic urban growth imbalance

The urban area is marked by an imbalanced geographical distribution. In fact, four major urban conurbations including Great Tunis (34 municipalities), Sfax (7 municipalities), Sousse (9 municipalities) and Nabeul–Hammamet (3 municipalities) i.e. 53 municipalities, attract 47% of the overall urban population. The rest are distributed among 230 municipalities, 11 of which accommodate between 50,000 and 100,000 people, 152 municipalities accommodate between 5,000 and 50,000 people and 67 municipalities do not exceed 5,000 people. Although this rapid urbanization has significantly contributed to improving the living conditions of a major part of the population and enabled them to access to basic services such as education, water, healthcare, sanitation and electricity; it has been characterized by imbalance. The Northeast and Central-East area, representing 17.2% of the national territory surface, attracts about 61.6% of the population, which significantly contributed to intensifying pressure on the fragile ecosystems, the coastal strip and the fertile agricultural lands, especially with the limited national strategy of Land Use Management and the weakness of urban planning mechanisms.

➢ Major achievements in improving the rapid urbanization management

The State strives to containing the horizontal urban sprawl phenomenon, reducing its negative impacts and rationalizing the use of the land heritage by intensifying the existing urban areas and encouraging the vertical construction by:

- Increasing the housing density from 25 dwellings/ha in 1996 to 35 dwellings/ha in 2014 with the new urban allotments.
- Reviewing the density rate of urban management plans to reach 50 dwellings/ha versus 33 dwellings/ ha right now,
- Striving to increase the spaces allocated for collective habitation,
- Allowing second floor in the individual dwelling areas since 2003,

- Implementing the urban monitoring system headed by the Urban Observatory of Great Tunis,

1.2 - Managing rural-urban linkages

➢ Quality of overview

The cities represent the bedrock of the development dynamism, which aims to push the pace of their development. Every city and urban area influences the adjacent rural areas, making rural development linked to cities, which remain the main element in the national territory structuring. Among these linkages and overlapping effects:

- Demographic linkages as the rural areas provide workforce for the cities, and the urban texture is impacted by the quality of these rural migrants,
- Economic linkages as the rural areas provide agricultural products for the cities,
- Facilitation of the rural and urban product transport and the improvement of the economic trade and healthcare services through the network of rural roads, roadways, ports and airports, which expansion indicates the structuring of the national territory and a manifestation of most of the rural-urban linkages.

These linkages have been revitalized by the Government since the independence by executing many programs aiming to provide employment in cities and rural areas to handle poverty aggravation, improve the attributes of the citizens’ living and enhance the value of the successes coming from the mainstreaming of education and healthcare in all the regions of the country notably the remote ones.

The approach used in this field mainly consists of giving priority to the economic dimension and the social advancement. Nevertheless, most of investments occurred in the coastal regions, which attracted 60% of public investments and 80% of private investments. As a result, regional development indicators in internal urban and rural areas are still low⁸. Furthermore, their activity is mainly based on simple family farming and on the limited development programs afforded by the State to these regions.

➢ Structured and affective programs in the urban-rural linkages

Since the aggravation of the economic crisis during the 80s and the decline of the productivity of public

---

7 - “The Tunisian urban system”, Amor Belhady, in European Journal of Geography – document 258 – 2004,
8 - The Tunisian Institute of Competitiveness and Quantitative Studies: the study of the regional inequality 2014- this study classified most internal regions among the least developed groups in terms of the development level which are the third and fourth groups, whereas most coastal regions are in the first and second groups.
institutions, the State has adopted a new economic approach based on market economy and the support of the private initiative. Moreover, some public corporations were alienated for the private sector. The role of the State has also declined and became limited in social sectors such as education, healthcare, and infrastructure.

In parallel, the Tunisian State strived to strengthen the infrastructure and support the linkage between different regions. Since the 80s, it has started to develop the national road network by implementing 4 highways, in addition to implementing or developing 9 airports and planning and preparing more than 30,000km of rural and agricultural pathways\(^9\), including 10,000km in irrigated regions. These pathways, in addition to paved roads, play an important role in facilitating the rural-urban linkages.\(^{10}\)

Despite the additional subsistence means, the revitalization of the economic movement, and the enhancement of the decent living attributes provided by public programs, which improves the rural-urban linkages; poverty and disguised unemployment still characterize many of these regions.

### 1.3 - Addressing urban youth needs

The Tunisian approach is based on the support of youth, as it is the driving force of creativity and innovation, despite the decline in its demographic weight in the last twenty years\(^{11}\). The Government is working on involving youth in the management of public affairs, decision-making and creating the appropriate environment to improve their skills and considering them as a part of the solution. In this regard, youth and culture centers, sport facilities, academic institutions and professional training centers have been supported so that their number has increased since 1994 with percentages often reaching more than double:

The Government has also worked on integrating youth in the social and economic development system by creating many programs and mechanisms aiming to improve the competences and skills of work seekers, especially from youth class, in order to improve their employment chances and facilitate their integration in labor market. These programs and mechanisms include "Introduction to working life program" (SIVP), "Contracts of Integration of Higher Certificate Holders" and "Contracts of Qualification and Professional Integration", etc., from which currently 125,000 youth benefit per year\(^{12}\) approximately. Despite all of these concrete achievements, which require major investments that sometimes exceed the abilities of the central and local authorities, the rate of attracting and integrating youth in the economic and political movement is still limited and below expectations due to the rapid development of the Tunisian society and the inability of the used programs to keep up with the pace of youth ambitions.

### Table 1 - The increasing number of youth-related institutions 1994 – 2014

<table>
<thead>
<tr>
<th>Institutions</th>
<th>1994</th>
<th>2014</th>
<th>Increase %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public gyms</td>
<td>68</td>
<td>187</td>
<td>175%</td>
</tr>
<tr>
<td>Private gyms</td>
<td>-</td>
<td>757</td>
<td>-</td>
</tr>
<tr>
<td>Grass stadiums</td>
<td>90</td>
<td>231</td>
<td>156%</td>
</tr>
<tr>
<td>Youth centers</td>
<td>252</td>
<td>321</td>
<td>27%</td>
</tr>
<tr>
<td>Cultural centers</td>
<td>184</td>
<td>220</td>
<td>20%</td>
</tr>
<tr>
<td>Public libraries</td>
<td>289</td>
<td>400</td>
<td>38%</td>
</tr>
<tr>
<td>Training centers</td>
<td>136</td>
<td>197</td>
<td>45%</td>
</tr>
<tr>
<td>Universities</td>
<td>83</td>
<td>198</td>
<td>138%</td>
</tr>
</tbody>
</table>

\(^9\) "The rural roads in Tunisia; current situation and perspectives" - A. Boutouta, 2013

\(^{10}\) The rural and agricultural ways play many roles as the economic aspect of these roads represent 91%, as of the social aspect, it is represented in facilitating healthcare services by 79% and providing the educational services by 81%.

\(^{11}\) The (15-29) age class rate, which represents the youth, dropped from 28.5% of the population in 1994 to 24.5% in 2014.

\(^{12}\) According to the statistics of the "National Agency of Employment and Independent Work" of 2014 and 2015.
1.4 - Responding to the needs of the aged population

The elderly people proportion, i.e. the age class of above 60 years, increased from 8.3% from the overall population in 1994 to 11.7% in 2014. The population projections expect that this proportion will reach 19.8% by 2034.

In the light of this demographic change, a legal system intended for the elderly people has been established. The elderly people, in Tunisia, benefit from a legal protection through different legislations, either common or private, that mainly aim to guarantee their basic rights within the family or in society. Many programs as well, have been developed notably to protect this class:

- **Eldercare and support within their natural environment**
  
  The social special eldercare, notably for those without financial and family support, aims to keep them in their natural environment, in addition to enabling them to have decent life conditions by:
  - Regular financial aids given by the State to the indigent elderly people, knowing that the number of those who benefit from this program increased by dozens of times during the last twenty years: from 2,800 to 12,300 indigent old beneficiaries,
  - Roaming groups aiming to give social and health services to the elderly people at dwellings with the assistance of State-supported associations; the number of these groups have been multiplied more than ten times: from 4 in 1992 to 43 groups in 2014, almost 5,000 aged are benefitting from its services,
  - Family deposit for the elderly people, in 1999, is a program that has been established to take over aged without support by host families according to legal conditions and with a monthly grant of 150 Dinars from the Government.
  - Institutional eldercare: eldercare centers, reaching 11 centers, provide social care and healthcare to around 616 aged persons,
  - Day clubs for the elderly people: provide cultural and entertainment services for the elderly people, which number has increased since their creation in 2003 from 3 clubs to 21 clubs in 2015.

- **Enhancing the value of the seniors inside the family and the society**
  
  This is through establishing a plan for informing, educating and communicating with the elderly people, aiming particularly to:
  - Promote the position of the elderly people inside the family and sensitize the younger generations of the necessity to respect the elderly people and give them priority in public spaces and public transport,
  - Make dwellings and public buildings (public commodities, gardens, etc.) elderly-friendly

- **Supporting private investment regarding eldercare**
  
  The State set an integrated policy in regards of eldercare and opened the door for public investors to create private shelter enterprises, pursuant to law no:94-114 on the protection of the elderly people. On this basis, five residential units have been created to shelter the elderly people and 12 social healthcare private enterprises have been established specially to serve the elderly people at home. Furthermore, geriatrics has been included in the curricula in the faculties of medicine of Tunis, Sousse and Sfax.

1.5 - Integrating gender issues in urban development

As many countries of the world, Tunisia, witnessed deep social changes as a result of the exodus of the population from rural areas to cities, population aging, weakness of social and family linkages, and the increasing rates of crimes, violence and homelessness, especially in the main cities. Therefore, the Tunisian approach is based on improving living and housing conditions as well as employing and implementing many programs to promote and integrate the different vulnerable social groups in urban life. This aims to:

- achieve a social development for all social groups without exclusion,
- achieve an awarding and fair economic growth,
- respect the cultural diversity of the society.

In regards of childcare that aims to provide the appropriate support for children, Tunisia worked on the establishment of an integrated system for a child-friendly educational and social revitalization, in order to have a generation with a strengthened sense of citizenship and civilized behavior, create a balanced personality for children and protect them from anything that could harm their health or their image within the family and the society as a whole. This system includes nurseries for those who are less than 3 years old, kindergartens (3 to
5 years old) and child clubs in educational institutions, cultural centers and youth centers for children who reached the schooling age. The number of nurseries and kindergartens has been multiplied several times during the last twenty years, thus the coverage rate improved especially for kindergartens:

Table 2 - The increasing number of children-specialized institutions 1994 - 2015

<table>
<thead>
<tr>
<th></th>
<th>1994</th>
<th>2015</th>
<th>Taux d’évolution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nurseries (less than 3 years old)</td>
<td>70</td>
<td>313</td>
<td>+350%</td>
</tr>
<tr>
<td>kindergartens (3 to 5 years old)</td>
<td>1115</td>
<td>4118</td>
<td>+270%</td>
</tr>
<tr>
<td>Coverage rate for all children</td>
<td>11.4%</td>
<td>33.0%</td>
<td>-</td>
</tr>
</tbody>
</table>

- Providing shelter for people with special needs

As part of incorporating the requirements of the legislative texts relating to people with special needs or children lacking family support, many institutions have been created, providing residence for a limited or unlimited period for those with no shelter and no moral or financial support, threatened children and all the other social cases that need special care. Among these institutions are the following:
- Centers of social support and guidance,
- Typical living units under the responsibility of childcare associations,
- Living units that shall embrace and provide residence for the disabled adults who have no family support,

In addition, a social aid mechanism has been created in order to reduce homelessness.

- Planning and preparing the urban environment for the disabled persons:

The outline act relating to disabled people of 2005 provided that the State, local communities and public and private institutions shall respect a set of principles and foundations and work on meeting the special needs of the disabled when planning public buildings and collective residential groups and facilitating transport and communication in accordance to specific technical standards.

1.6 - Coping with internal migration

The adapted economic choices impacted the internal and external migration movements. At the level of internal migration, many regions witnessed a significant decrease in population during the last two decades, particularly the border areas and the North-West areas. Besides, the population in rural areas has also decreased due to exodus.

In this regard, the number of people leaving rural zones in the last 5 years (2009 – 2014) reached (for different reasons shown in figure 2) about 99.3 thousand people. As for the migration between governorates, it included 0.8% of the overall population during the last five years, of which Great Tunis attracted 52% and the Mid-East region attracted 21 % whereas the North-West and Mid-West regions witnessed a negative net migration.

During the period between 2009 and 2014, 694,000 people left the national territory including 49 % of the age category between 20 and 29 years old. The rate of higher educated migrants was 23.9%, which could raise many issues relating to brain drain and the migration of the workforce regarding immigrants holding higher diplomas. Immigration abroad remains basically male-dominated as they are 83%.
1.7- Lessons learnt in these areas

Many factors led to increasing pressure on available natural resources and the concomitant spread of informal urbanization to the detriment of fertile agricultural lands, on the one hand, and the disorganization of city functions, due to migration for job seeking and improving the living conditions, on the other hand. Among the most prominent factors that contributed greatly to these problems: inequality between regions and social groups and the centralization of the profitable developmental activities that can improve the living conditions for the population, in some cities and not others.

On this basis, the sectorial, local and social integration aiming to limit the different disparities is the main challenge that Tunisia will work on, in order to guarantee justice and fair distribution of wealth, by enhancing the value of the available natural resources and the marginalized human resources.

As per the economic level, given the decline of the employment content of the used approach and its inability to meet the employment demand, especially for the youth and holders of higher diplomas, Tunisia has experienced a wave of immigration especially among youth, which might have negative impacts in the medium term.

The development and the diversification of the Tunisian economy and the improvement of its employment capability, in terms of quantity and quality, is considered the main goal for meeting the expectations of the population, achieving the goals of the revolution, limiting unemployment and attracting and employing the competence and expertise holders during the coming period, in order to make Tunisia a destination for investment and development.

1.8 - Future challenges and issues that could be addressed by a New Urban Agenda

- Regarding rapid urbanization management

- Challenges
  The main challenges of the next period consist of reviewing the legislative and institutional framework regulating urban planning, in order to level them up to the requirements of the urban and economic development in order to:
  - Improve the living conditions of the conurbations and urban dwellers,
  - Find balance between the different city functions and restructuring and habilitating the urban zones,
  - Revitalize the economic movement in cities to provide employment,
  - Encourage investment and partnership with the private sector,
  - Establish sustainable urban planning that considers all the social groups.

- Strategic approaches
  The major approaches for urban planning aim to the achievement of a fair and sustainable urban development for cities and conurbations through:
  - Applying the sustainable development principles for urban planning in cities and conurbations,
  - Supporting decentralization and ensuring a wider participation of civil society in preparing development
projects and following up their execution,
- Supporting the partnership with the private sector in achieving programs of public interest,
- Ensuring the engagement and contribution of youth in the development course and instilling values of self-reliance, initiative and creativity spirit in them to facilitate their integration in the labor market and, hence, restore their confidence and hope\(^5\),
- Developing the legislative framework so that it will keep up with the changes the cities have witnessed, knowing that the Land Use Management and Urban Planning Act has already been started to be reviewed towards executing what has been approved in the new Constitution, including principles relating to sustainable, fair and comprehensive development and the consolidation of the decentralization principle in the conduct of the local communities 'affairs.

➢ **Regarding meeting the needs of the elderly people**

- **Challenges**
  While the demographic shift witnessed by the Tunisian society seems satisfactory, population aging puts pressures and many implications on different sectors, notably:
  - The increase of the retired skilled persons who are still able to be productive for a period of 10 or 15 years after retirement
  - The increase of pressure on healthcare and medical services as a result of the probable chronic disease multiplicity and its increasing rate for the elderly people,
  - The difficulty of meeting the growing needs for decent housing for the elderly people
  - The decline in the family resources and capability of eldercare due to the growing mainstreaming of the nuclear family,
  - The decline of the participation of the elderly people in social and economic life.

- **Priorities**
  In pursuit of the objective of "a society for all ages", that provides decent living for the different social segments and preserves the dignity and value of the older person, the work priorities are directed towards the following goals:
  - Adapting the environment so that the older person can continue to contribute in public life particularly by appropriating the programs of urban planning, housing, transport and entertainment to the needs and particularities of the elderly people,
  - Providing prepared means of transport that fit the particularities of the elderly people and people with limited mobility,
  - Preserving the independence of the elderly people for as much time as possible and protecting them from poverty and destitution.
The land use management materializes the national and local choices for sustainable development. It permits to well structure the national territory, thanks to the good distribution of infrastructure and major equipment and the better control of available natural resources. It is considered as a long-term strategy field that targets to achieve complementarity between regions and reach the fair and comprehensive development to ensure the attributes of decent living to families and the quality of life to all the population, along with preserving natural resources and developing them for future generations.

2.1- Ensuring sustainable urban planning and design

The efforts of central and local authorities allowed to establish a comprehensive and interconnected urban network covering all the territory of the Republic and to improve the city production, which now provides 85% of the GDP. They also allowed covering all the conurbations, depending on their sizes, with urban management plans or with land use master plans, as perfect tools for decision making, land mastering and achieving economic, social, cultural and environmental sustainable development goals. In parallel, many legislative reforms have been made, which complement the code of territorial planning and urbanism, in addition to institutional reforms by creating an agency for the protection, and management of the coastal strip in 1996.

These reforms aim to manage the coastal regions, to support the urban infrastructure programs and the public structured equipments that provided, for every citizen, the opportunity to have urban services and contribute, to a certain extent, in the civil and political life provided by the city. Some major municipalities took the initiative to set an “urban development strategy” of its own, with the participation of all the local actors in Tunis, Sfax, Sousse, Jendouba, Siliana and others. This strategy aims to achieve the development goals of the millennium, including ensuring the environmental sustainability, spreading healthcare, educational and cultural services and eradicating poverty.

However, the results of these procedures remained limited. Even the sustainable urban planning remained relatively weak, given the limited competent personnel in municipalities and the non-readiness of the local administration to take charge of these issues as required, in addition to the lack of civil society contribution in most Tunisian cities, due to the juvenility of the associational system and the lack of its interest in local development issues.

As a result, the phenomenon of the non-application of the urban planning documents and the lack of effectiveness of these urban tools worsened, as the rate of application of the urban management plans is around 22 to 32%. As for the achievement of the urban planning components, it is around 23 to 30% for roads, between 15 and 20% for public equipment, between 10 and 15% for green spaces, between 15 and 25% for economic projects and between 50 and 70% for housing. Furthermore, the multitude of vacant spaces inside the urban zones represents an impediment for the rational use of urban space. Hence, some real estates, reserved for public equipment and green spaces, have not been used and have been kept blank for a long time, as they have not been purchased or compensated by the State or public groups, given the absence of funding mechanisms that allow creating a land heritage for equipments and roads.

Consequently, it became necessary to take effective actions that can consolidate the principles of a future sustainable planning and find the dynamism of a responsible and democratic urban development and planning.

The goal of the above is to support the competitiveness and attractiveness of the Tunisian cities and support the existing urban network that has been significantly developed for the last years and allowed the formation of metropolises and urban poles especially along the coastal strip (map 4).
Map 4 - Population growth in Tunisian cities and delegations in 2004 - 2014
2.2 - Improving urban land management, including addressing informal urban exodus

Urban sprawl, experienced by most cities since the 90s, resulted into an excessive increase in the consumption of lands, estimated at 60%, i.e. 1,200 ha in 1994 to 3,000 Ha in 2014, including 27% for Great Tunis.

Unregulated urbanization and the spread of unregulated neighborhoods, estimated at 1,400 neighborhoods approximately, are the most influencing elements in the urban sprawl that urban areas have been living for decades. According to official estimates, urban sprawl occurred in an unorganized and unregulated fashion out of urban management plans. The ranges are between 30% and 40% in the areas that are being urbanized. In the municipalities of the governorate of Manouba in Great Tunis, urban sprawl out of urban management plans has been estimated at 44.9% of the built masses. Besides, 1,005 ha approximately of lands that are considered non-residential in urban management plans of Great Tunis have been infested by unregulated building.\(^\text{18}\)

Map 5 - The urban sprawl and informal urbanization in Great Tunis

Map 6 - The urban sprawl and informal urbanization in Great Sousse

Map 7 - The urban sprawl and informal urbanization in Great Sfax

\(^{18}\) The national report on the environmental situation for 2012 – 2013, page 133.
The reasons behind urban sprawl

The urban sprawl is a phenomenon relating to the rapid demographic growth in cities that is marked by the decline of the population density that dwindles the farther we go from the city center. Studies on urban evolution in some of the Tunisian cities showed that the land use exceeds the requirements of population and economic development, which intensified the pressure on ecosystems especially for coastal cities and the decline of the density average in urban regions from 33 dwellings/ha in 2011 to 28 dwellings/ha in 2013 on the one hand, and the increase of the consumption of urban lands per capita from 120 m² in 1994 to reach 200 m² in 2014 on the other hand.

This rapid and continuous sprawl of cities was the main reason behind the rising cost of the connection to different public networks and the decline of the environmental, healthcare, sports, social and cultural services quality for an important part of the city population especially the indigent groups.

Among the most prominent causes behind this rapid and continuous urban sprawl:

- The lack of technical and financial resources and capabilities for most municipalities, whose role is limited to offer some environmental (like waste collection and the management of green areas, etc.) and societal services, with the inability to control the effective elements in the urbanization orientation and the support of the development dynamism,

- The weakness of the housing policy targeting people with limited income and the fragile groups and the preparation of the appropriate lands to their abilities,

- The concentration of some public equipment and economic projects on agricultural lands, which classification is changed individually with an average of 400 ha per year and the concomitant increase of informal building around this equipment.

This unorganized and continuous sprawl of cities leads to harming the urban area. Most of urban areas witnessed the increase of flood frequency inside and near neighborhoods and the spread of water logging regions with stagnant water and the consequent issues of insect spread, on the one hand, and the saturation of sanitary networks, especially those with low topography, on the other hand.

Some studies showed the impacts of unorganized urban sprawl on the decline of land efficiency, the permeability of rainwater, the rising flow factors and the water flow volume. An example for that is Sabkhet Sijoumi (the Sijoumi marsh), which is adjacent to the heart of Tunis, whose rate of built-up areas has increased for the last twenty years from 17.8% to more than 37% currently. The water flow volume, as well, created a state of continuous water logging even in summer all over the area.

However, such bad consequences have been avoided in other areas in Tunis. Urbanization expanded in an organized fashion on the northern banks of the lake of Tunis on a surface reaching 1 500 Ha after the regeneration and management of the area and equipping it with all networks in accordance with a detailed management plan established for that purpose (review the study of case no. 2 in appendices).

Improving the management of urban lands requires the combined efforts of all involved parties on the local level and improving the performance of the local public communities and organizations of civil society in regards to the urban, social and economic framework and the rational use of resources. The development method is based on the institutional and regulatory development, in order to sustainably enable society to plan, manage, and develop its urban growth and address the unregulated urban sprawl.

Map 8 - A Detailed Plan Development of the Northern Lake of Tunis

Most prominent actions and measures to address the urban sprawl phenomenon

Many actions have been taken in this matter, notably:

- Strengthening the urban planning tools: all municipalities (283) and most rural conurbations (700) have been covered with urban management plans that...
are updated regularly and on demand to cope with the situation of some informal neighborhoods or to include necessary urban sprawl areas,
- Protecting public interest easements such as those relating to public properties or lands with special arrangements (natural areas, forest and irrigated areas, high voltage networks, archeological areas …)
- Achieving a large number of projects that are relevant to floods protection which included a great proportion of cities and villages,
- Preparing a set of studies for the rational use of urban space, stop its expansion and set the architectural and urban properties for every city or region.

➢ Promoting the role of local public communities that are specialized in providing structured lands and social housing, including:

-The intervention of the Housing Real Estate Agency:
The Housing Real Estate Agency, the most important public intervener regarding land planning and preparation for housing, managed to plan and prepare 1094 ha from 1995 to 2014, with a rate of 55ha/year, which are distributed on all the governorates of the republic. These lands permitted to build around 43,000 housing units including 37% of social housing.

Graph 4 - Achievements of the Real Estate Housing Agency by dwelling categories (1995 – 2014)

Despite the limited production of lands compared to needs, the Housing Real Estate Agency succeeded significantly to find urban allotments model, whether in terms of providing necessary roads and networks and the plots allocated for gardens and public equipment in all their allotments, in terms of planning and preparing plots that are integrated and suitable for all social groups in one allotment, or in terms of preserving the environmental and urban dimensions in all its projects, which helps organize the urban space and stop the informal sprawl of cities on the detriment of agricultural lands.

Among the integrated projects achieved or started by the agency is the project of Zahra – Rades (with a 264-hectare-surface for 9,000 housing units) and the projects of Jardins de Tunis with a surface of 331ha for about 11,000 housing units. This project aims to create a major urban pole in the western area of Tunis that meets the standards of sustainable urban planning.

The agency also seeks in the coming years (2016 – 2020) to provide about 600ha for 21,000 dwellings on the developed lands in the cities that are witnessing a great urban pressure.

The project of the Housing Real Estate Agency in Zahra – Rades Suburb of Great Tunis

Picture 1- Project location

Picture 2 - Project design
- The intervention of the Industrial Real Estate Agency

The Industrial Real Estate Agency has contributed for the last twenty years to promoting industrial zones in most of the Tunisian areas by:
- Establishing and preparing industrial areas equipped with the necessary requirements of industrial projects.
- Building industrial units that meet to the needs of Tunisian and foreign investors.
- Make industrial land reserves that cover 7,650ha approximately and are distributed on 198 sites.

The new industrial areas covered 1,345 Ha and are distributed on 51 cities including 30% in Great Tunis.

These spaces had a positive impact on supporting the urban industrial activity and improving the investment atmosphere in Tunisia.

- The intervention of the Tourism Real Estate Agency

The Tourism Real Estate Agency was a driving element for the development of Tunisian tourism, thanks to the developed plots provided for the touristic investors. Among the most important projects of the agency:
- Achieving four integrated tourist resorts with an overall capacity of 170,000 beds approximately, which are: Kantawi in Sousse, Tabarka in Jendouba, southern Hammamet in the governorate of Nabeul and the Marina of Jerba island.
- Starting 15 new tourist resorts distributed on all the Tunisian territory according to four categories: beach products (11 resorts), environmental (2 resorts), familial (1 resort), and medical (2 resorts).

Map 9 - A detailed Plan of the resort project «Lella Hadhria» in Jerba Island

The three agencies are currently working on coordinating their programs, in order to create integrated economic poles by providing housing allotments and necessary equipment adjacent to industrial and touristic areas, providing housing and necessary facilities for the workers in these areas and contributing to fighting against the spread of uncontrolled building near the economic poles and near movements from and to workplaces.

➢ Enhancing good local governance to improve the management of urban lands

To implement the concept of good local governance in land management and enable the local authorities to organize and monitor the urban sprawl effectively, since the approval of the new Constitution in January 2014, the materialization of new strategic concepts has been initiated. These strategic concepts are based on:
- Redistributing public affairs management prerogatives, along with ensuring the abolishment of guardianship on local communities as a “real authority” and reinforcing the principle of free management and making prerogatives suitable for ensuring the effectiveness of interventions,
- Involving the citizens and the civil society in decision making and burden carrying to return the public affairs to their rightful managers,
- Employing the principle of progression in implementing and supporting decentralization, given the cost of the reforms and what it takes to move authorities and review the financial system and the property system in a comprehensive and detailed fashion,
- Supporting the local communities with the competent human resources and establishing administrative and financial courts taking over control, in accordance with the Constitution,
- Setting legal rules to improve and rationalize the management of financial and real estate resources and ensure transparency and good governance,
- Elaborating methods of urban planning and land allotments using a fair approach that allows a real sharing of the real estate values of lands and benefit all people especially the poor ones and those with limited income.

2.3- Enhancing urban and peri-urban food production

Providing food for urban dwellers is considered among the challenges to be addressed against the sprawl of cities
on the detriment of agricultural lands, in addition to the 
decline of the number of workers in the agricultural sector 
and the aggravation of the rural migration phenomenon. 
Considering the importance of rural areas adjacent to 
cities, in providing vegetables, fruits, meat and cheese, 
that they produce and market for the urban population, 
it is necessary to direct the use of city-neighboring rural 
space in agricultural activities to meet the needs of the 
urban market, hotels, hospitals, universities and others.

Therefore, Tunisia relied on the encouragement and 
facilitation of the rural areas product marketing, especially 
aricultural and fishing products (daily wholesale 
markets especially the market of Bir Kassâa and weekly 
markets). A set of texts relating to the organization and 
good management of these markets have been issued, 
including the directorial plan of wholesale markets for 
vegetables, fruits and fishing products issued in 1998. 
This leads to:
- Merchandizing about one million tons of vegetables 
and fruits per year through 21 weekly markets which 
covers the consumption of 7 million citizens, counting 
a consumption of 145 kg per capita of fresh vegetables 
and fruits per year,
- Promoting an average of 40 tons of vegetables and fruits 
per day in every wholesale market of regional interest, 
which equals 760 thousand tons per year, covering the 
needs of 4 million citizens,
- Promoting about 60 thousand tons of red meat through 
controlled slaughterhouses, noting that the annual 
average consumption per capita of this meat reaches 
12.3 kg (9.4 kg of mutton meat and 2.9 kg of bovine 
meat).

Based on the above, the infrastructure for promoting 
ariculture and fishing goods of is able, if the agricultural 
production continued as it is now, to provide food in 
urban areas and their outskirts and to meet the increasing 
demand on fresh agricultural goods on the medium term, 
under the condition of planning and prior programming 
and in accordance to economic and technical feasibility 
studies considering the consumption evolution and 
urban evolution of Tunisian cities.

2.4- Addressing urban mobility challenges

In the 90s, the transport sector witnessed many 
reforms, which basically are the development of the 
legislation and continuing to liberalize the sector and 
structure and improve its services. The technical tasks, 
in the ministry, have been transferred to the Office of Civil 
Aviation and Airports, the Office of Merchant Marine 
and Ports and the Technical Agency of Land Transports.

The reforms in the transport sector continued during 
the first decade of the new millennium. They included 
the improvement of quality, services and safety, freeing 
transport activities and developing infrastructure. This 
aims to establish a complementary system that allows 
Tunisia to be an international center of trade and services, 
in addition to updating the legislative framework and 
habitating the institutions working in the sector.

Regarding the urban transport, the travelling activity 
between cities with buses has been supported and the 
tasks have been assigned for the exploitation of suburban 
lines in Great Tunis, along with subjecting most transport 
activities to legal and technical specifications. In the same 
time, technical studies of the rapid railway network, 
metro network and transit stations in Great Tunis were 
launched, the first part of the project of the electrification 
of the southern suburb line has been achieved, the metro 
line has been extended to the Mourouj district since 2005 
and to the Manouba campus since 2006. However, the 
transport sector, during the last five years, witnessed a 
significant decline on the level of delivered services and 
especially for public transport for people, given the long 
waiting periods, the lack of readiness of the bus fleet 
and crowdedness, despite all the achievements in road 
infrastructure, whether to connect cities to each others 
or to facilitate the traffic movement inside cities. For 
example, the following projects have been achieved:
- About 200 km of highways so that this network reaches 
500 km,
- 100 km of numbered routes so that this network 
reaches 19,455 km,
- And more than 4,000 km of managed rural pathways 
so that this network reaches 50,000 km, 
This is due to the decline and disorder in public 
transport modes, as opposed to the flourishing of 
private transport especially in major cities.
Table 3 – The distribution of transport modes in the cities of Tunis, Sfax and Sousse

<table>
<thead>
<tr>
<th>Transport modes</th>
<th>Collective transport (%)</th>
<th>Taxi or private car (%)</th>
<th>Bicycle or motorcycle (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tunis</td>
<td>35</td>
<td>59</td>
<td>6</td>
</tr>
<tr>
<td>Sfax</td>
<td>19</td>
<td>61</td>
<td>20</td>
</tr>
<tr>
<td>Sousse</td>
<td>24</td>
<td>57</td>
<td>18</td>
</tr>
</tbody>
</table>

In addition, regional transport companies are facing many problems, especially:
- Bad management and indebtedness,
- Obsolescence of the fleet and the inability to renew it,
- Deterioration of road infrastructure especially in urban areas and its role in equipment breakdown,
- Lack of spaces for bus accommodation,
- Unresponsiveness of the stations to quality standards and especially the lack of sunshields and rain protectors for most stations, especially after damaging most of them during the revolution period.

2.5- Improving technical capacity to plan and manage cities

In the context of keeping up with technical and IT advancements regarding the production and exploitation of geographic information and seeking to improve the efficiency of urban and territorial planning, the following has been achieved:
- Setting digital atlases for governorates as data banks that help the regional counsels to follow up the development process and creating new projects,
- Developing the urban monitoring system and establishing computer systems to monitor the urban growth by:
  - Implementing the national program for geomatics since 1997 in coordination with the different involved parties, under which the national geomatics master plan has been established and recommended to set a national digital topographic database based on the topographic maps with a 1/250 000 scale to provide a digital map reference to improve the efficiency of territorial planning and management,
  - Establishing a geographic IT system for urban management plans (170 municipalities as a first batch),
  - Developing this system so that it becomes a follow up and monitoring mechanism for the urban growth and comparing it with what is programmed in urban management plans. In addition to the current observatories, such as the Tunisian Observatory for Sustainable Development and the Housing and Real Estate Observatory; it is planned to create observatories for territorial dynamics and a regional urban observatory in Great Tunis,
- Initiating to establish the real estate data system, helping to accelerate the resolution of real estate conflicts related to major projects,
- The National Mapping and Remote Sensing Center will be launching in the coming years the national infrastructure for geomatics including 4 data bases (flat image data base – topographic database – title database- real estate plots data base).

However, the efficiency of these tools is still limited because of the weak human resources dedicated to it. Therefore, a great part of these tools remains in vain and requires updating and urgent intervention to enhance the value of these achievements. Meanwhile, a database core must be created in each municipality; with all what it takes of training for the technicians and employees of the municipal technical departments, in addition to private financing to purchase all the necessary equipment and maintenance.

- Supporting the specialized institutions in academic training and urban planning and creating new academic institutions, in addition to the National School of Architecture and Urbanization, Faculty of Letter of Tunis and the Higher Institute of Environment, Urbanization and Building Technologies,
- Enhancing training and recycling programs for

---

21 Source: directorial examples of roads and transports and strategic studies for the development of Tunis, Sfax and Sousse 2002 -2010
22 And with help from the Canadian International Cooperation Agency
the administrative personnel specialized in urban planning, coordinating with the urbanization ministry and the center of training and decentralization support incorporated in the Ministry of Interior and the Association of Tunisian Cities.

2-6- Challenges experienced and lessons learnt in these areas

➢ At the level of territorial planning

- The limited overall perspective vision of development on the level of major urban conurbations and on the level of regions and the absence of updated master plans for many of the urban and sensitive areas included in the land use master plans program23,
- The difficulty of applying the recommendations of land use master plans due to real estate problems and the difficulty to mobilize the necessary financial resources,
- Lack of coordination among different public interveners and the dominance of the sectorial approach in planning instead of the horizontal approach.

➢ On the level of city planning and the management of its urban space

- The non-efficiency of the policy adopted in city development and the lack of coordination between different interveners,
- The difficulty of programming and creating equipment and structured facilities given the absence and lack of building spaces,
- The emergence of scattered unregulated districts on agricultural lands and the concomitant deterioration of the urban scene and decrease of the agricultural lands.

➢ Lack of control in urbanization tools and in applying the urban arrangements

Through evaluating the urban planning tools, some real estate and financial difficulties were deduced, which had bad consequences on:
- The effectiveness of local communities and even the Government in executing the components of land use master plans and urban management plans,
- The ability to activate the real estate control mechanisms such as the real estate reserve perimeters and the real estate intervention perimeters,
- Preserving the right of way of programmed roads and reserved sites for public equipment and green areas,

This resulted into:
- Directing urbanization towards the main road axes, in which the necessary facilities are available, as linear bands that harm the beauty of urban sceneries,
- Freezing some properties intended for public equipment and green areas, as they haven’t been purchased in time to achieve these equipment on the one hand, and not enabling their owner to exploit them on the other hand,
- Scarcity of lands and their rising costs inside cities and the consequent exclusion of the social groups with limited incomes who resorted to the unorganized real estate market out of urban management plans to build their dwellings.

➢ City centers functions imbalance, through:

The loss of the ability of old city centers to preserve their distinctive urban activities, which were the source of their power and attractiveness. This is due to:
- The obsolescence and deterioration of their built space and the decline of the level of their public spaces’ management quality, urban scenery and architectural beauty,
- The difficulty of access and the crowdedness of the traffic movement with the absence of decent public transport networks,
- The absence of a regular maintenance of buildings, especially the collective buildings given the absence of owner syndicates.

➢ The lack of coordination between adjacent municipalities:

Especially with major urban conurbations that include more than one municipality, on the level of programming equipment, organizing urban movements and the perfect management of wastes.

2.7- Future challenges and issues in these areas that could be addressed

➢ Reviewing the strategies relating to territorial and urban planning, through:

- Implementing the participatory principles and local governance in setting the tools of territorial and urban planning,
- Establishing and developing new complementary poles to be radiance centers and development driving
locomotives, along with supporting the current poles to relieve pressure on major urban poles and on the coastal strip and protecting it from attrition
depending on the perspective and urban planning processes that take over the preparation and ratification of the planning documents on a regional level, instead of resorting to central authorities.
-Enabling local communities to have access to the necessary human and financial resources to improve their effectiveness and efficiency.

➢ Setting the legal framework for a new city policy that ensures its evolution and sustainable development, by:

- Simplifying the procedures and cutting short the deadlines in preparing the territorial and urban planning tools,
- Setting practical mechanisms to finance urban planning, in order to make the regional and local communities capable of the real estate control and of the possession of roads and programmed public equipment and providing main networks in urban sprawl areas.
- Creating agencies for planning and urbanization in major or urban areas in charge of:
  - Monitoring the urban evolution using geomatics systems,
  - Coordinating between the economic, social and regional development strategies
  - Studying common folders regarding urban planning, infrastructure, public facilities, transport, traffic and conceiving the appropriate solutions for them and following-up their execution.

➢ Setting an active real estate policy in service of all sectors on the national and local levels through:

- Creating land reserves for future urban projects that meet the needs of social housing, adjust the real estate market and create functional balance between the different activities and sectors. The task of creating and managing land reserves is entrusted to a non-sectorial horizontal structure that will, afterwards, put these reserves at the disposal of public interveners,
- Setting new procedures aiming to accelerate the real estate operations and unfreeze the real estate fees through supporting the involved institutions (the Office of Topography and Cadastre, the Real Estate Court and the Real Estate Property Administration),
- Creating a real estate information system that can be used by all the interveners in the public and private territorial and urban space planning.

➢ Creating a private fund that finances the purchase of necessary real estate for roads and public equipment and for making land reserves and real estate registration operations,

➢ Preserving the old cities and urban and architectural heritage by preparing their necessary conservation and maintenance plans; registering and reviving the historical monuments by re-employing them and re-integrating them in the economic cycle.

➢ Promoting the transport sector and developing it to a sustainable transport through improving the services of collective transport and rail transport and supporting the infrastructure, in addition to supporting partnership projects between the public and private sectors,

➢ Setting a complementary plan to train the regional and local personnel, in order to master the follow-up of the urban and territorial planning studies and the issues relating to sustainable urban planning and city management.

---

24 - Orientation note of the development plan of 2016 – 2020, Tunis, September 15th 2015
Providing the elements of environment safety and ensuring the grounds for the quality of life are considered among the basic conditions of sustainable urban development and urbanization, according to the international and national documents, which set the work principles and the sustainable development requirements. Therefore, the national work plan for Habitat II included programs relating to environmental issues relating to urban environments in most of its axes.

3.1- Axes of the national work plan of Habitat II regarding urban environment and its execution

The sustainable urbanization principles can only be implemented with securing cities and urban areas that enjoy environmental facilities and services and, thus, provide the quality of life for people and workers in cities. This requires the integration of the environmental and social dimensions in the programs and projects of urban development in general, and housing in particular.

The confirmed need for the quality of environmental services and the facilities of life quality in Tunisia emerged in cities and in major population centers. This came, particularly, as a result of the rapid evolution of some cities during the last decade, which now attract about 71% of the overall dwellings.

However, great parts of the urban space have been infested by unregulated building (informal neighborhoods) with the lack of the simplest environmental services, such as sanitation and waste management. This unregulated urban space also lacks the respect of decent urbanization conditions, including appropriate sidewalks, paved roads, green spaces and availability of relaxation and picnic spaces for urban population.

Given the importance of these issues that aims to establish sustainable human settlements, national work plan for Habitat II included, in most of its nine axes, procedures and programs relating to environmental services and to the essential elements of life quality, such as:

- Developing informal neighborhoods and giving them the priority to have the appropriate basic facilities,
- Ensuring water sanitation and domestic waste collection by following ecological techniques that allow to preserve the environment, the citizen's health and the quality of life,
- Protecting the natural areas, notably those characterized by fragile ecosystems, such as reserves, coasts and areas threatened by drift, drought, desertification and the negative impacts of human settlements and expansion,

Under the execution of these procedures and programs, the following has been made in the last two decades:

- The continuation of the expansion of wastewater collection and treatment services to include, in 2014, in addition to the major and medium urban areas, a significant number of small cities, informal neighborhoods and some rural areas with gathered housing. The number of municipalities benefiting from the services of the National Sanitation Utility increased from 100 municipalities in 1995 to 176 municipalities in 2014 covering 6.6 million people, so that the rate of connection to sanitation networks rose to 86% of the urban population. The national sanitation network is constituted of 116 waste water treatment plants in 2014, (50 waste water treatment plants in 1996), processing around 230 to 236 million m\(^3\) of waste water per year during the period of 2011-2014. Despite all of these efforts, the quality of waste water treatment services was fluctuating, given the obsolescence of the sanitation equipment (stations, pumps and canals) and the decline of the output of some plants because of the rapid increase in the quantity of collected water. Therefore, among the most prominent challenges of the near future is improving the quality of processed water and removing these obstacles, which require additional funds that have to be mobilized from different national and external sources so that the urban wastewater treatment system functions correctly.

- Restructuring waste collection system, especially domestic ones, and rational management:

This is by creating 14 controlled landfills and 44 transformation centers capable of receiving around 1.765 million tons of domestic and similar waste yearly, i.e 77% of the overall amount of these wastes. Informal
landfills (about 400) are starting to be removed.

Despite the advancement achieved in solid waste management through revitalizing the management systems of some types of wastes, such as plastic\textsuperscript{27}, used oils, special medical wastes and others, waste is still a disturbance for people because of the decline of the quality of waste collection services in districts and streets, since many municipal departments are not able to remove all waste.

Among the main causes behind these problems:

- The imbalance between the available resources for municipalities to clean and remove waste and the rapid increase in the volume of daily produced waste, as the domestic waste average increased from 0.6 kg per capita in the 90s to more than 0.85 kg in 2013\textsuperscript{28} reaching 1.5 kg in some cities,

- An almost total absence of the selective sorting of domestic waste, the use of recycling and value enhancement, which made the controlled landfills, in some places, sources of disturbance for neighborhoods and for cities. Overcoming these obstacles represent one of the biggest obstacles of the coming period.

\textbf{Map 10 - The distribution of controlled landfills and waste transformation stations}

\textsuperscript{27} - The number of the plastic waste collecting and recycling points reached 372 points and the average of collection is between 10 thousand tons per year and 15 thousand tons per year since The National Agency for Solid Waste Management was launched in 2008 (the national report on the environment situation of 2012 and 2013).

\textsuperscript{28} - According to the national report on environment situation 2012 – 2013.
Strengthening the spread of green areas:

In cities, major conurbations and near informal neighborhoods. The average rate of green areas increased from 4.04 m² to 16 m² in 2010. These results have been achieved thanks to planting trees along streets and in districts and creating 39 urban parks distributed in 23 governorates covering more than 3000ha, most of which are at the disposal of municipalities. However, the chaos witnessed in Tunisian cities just after the revolution inflicted some damage to these green areas, which still perform their recreational functions for people and protect air from harmful gases pollution. Maintaining these urban parks and green areas and taking care of the beauty of cities are among the biggest challenges of the next period, in order to consecrate the sustainable urbanization.

Removing pollution sources: with all their forms, since the protection of population from chemical and organic population hazards remains the biggest challenge for city dwellers and workers. Industrial areas are regarded as an important component of the urban texture in urban areas, as they provide employment and a varied source of economic production and a driving engine for development. Therefore, the sustainability of these activities can only be achieved through their environmental habilitation.

The industrial areas benefiting from the National Sanitation Utility services reach 62%, including 5 000 industrial units, including 3 300 units connected to the sanitation networks and 915 units of them are considered polluting and about 661 units are equipped with machinery for the primary processing of wastewater. The processed wastewater of 78% of these industrial units does not meet the standards for casting water in sanitation network and causes the disorder, even jamming, for sanitation units.

In this regard, according to the recent reports, more than 40% of the factories are still casting industrial highly polluted water in the environment or in sanitation networks, 429 m³ of this water are still streaming in the different environments and in urban areas surrounding the cities. For all of these reasons and given the weakness of the environmental control systems on factories, thinking of other mechanisms for the removal of chemical and organic pollution is a must, which is considered among the biggest challenges Tunisia will encounter in the next future to provide the quality of life and health security for all Tunisians.

Map 11 - Biggest sources of chemical pollution in Tunisia

3-2- Protecting cities from air pollution

Given the attraction of Tunisian cities for most industrial and power generating institutions, gas emissions and emitted substances that get stuck in the urban atmosphere have kept going and caused the low
quality of air. Air pollution is considered one of the most serious environmental problems the Tunisian cities are suffering from. The people of major urban areas in Great Tunis, Sfax, Gabes, Bizerte and the cities of the mining basin in Gafsa are considered the most affected areas by air pollution. In light of the growth of the number of the air pollution periods, in which the nitrogen oxides and carbon monoxide exceed the limit of Tunisian and International norms of air quality, a national network for the monitoring of air quality has been established. It is constituted of 38 fix stations and 3 mobile laboratories equipped with machinery for continuously measuring chemical pollutants (ozone, dust stuck in the air, sulfur dioxide, nitrogen oxides and carbon monoxides).

Map 12 - The national air monitoring stations network

The results of the monitoring of fix and mobile sources show that the air quality in urban environment is generally good, even though norm excess has sometimes been recorded. These norms excess cases are often related to climate changes, especially in crossroads and in conurbations neighboring industrial poles. From the results of the continuous follow-up of air quality during the last years, the following conclusions have been drawn:

- The presence of a notable effect of means of transport that contribute by about 30% to air pollution coming from car exhausts,
- Recording many excesses of the maximum limits announced in Tunisian norms in Ozone during the summer period in many of the stations adjacent to areas with a significant traffic density,
- Recording bigger excesses in the concentration of nitrogen dioxide in the air in Kairouan, Sfax, Gabes and Bizerte and in sulfur dioxide especially in Gabes.

Graph 5 - The maximum ozone averages in one hour (microgram/ m3) 2012

Although the air quality situation in urban areas is generally satisfactory, it is necessary to keep making efforts through rationalizing the transport pathways inside cities and urging to stop the air-polluting industrial elements by encouraging the polluting establishments to use modern technologies and green economy approaches. Accordingly, Tunisian cities cannot meet the requirements of sustainable urbanization unless they make all kinds of industrial institutions use the methods of sustainable development production and consumption that shall preserve the environment and the sustainability of resources.

32 - The Tunisian norms are considered similar to international norms, if not stricter, according to the experts of the National Agency of Environmental Protection, Tunis 2015
33 - The Tunisian norms of air quality, m t 106.04 for 1994
34 - This measurement regards the ozone in the lower layers of the atmosphere, which is very dangerous, and not the natural ozone enveloping the globe in the higher layers of the atmosphere
3-3- Addressing climate change

The location of Tunisia on the banks of the Mediterranean Sea contributed to the intensification of negative effects of the climate changes all over the Tunisian territory. Among these effects, we find:

- The increase of the average temperature in summer and in winter: the annual average of temperature increased by 1.4°C all over Tunisia during the 20th century.
- The rising of sea level: sea level has been recorded to rise about 3.1 mm per year since 1992 in the coasts of the Mediterranean and it is expected to rise in Tunisian coasts by 8 to 12 cm by 2030 or 2050.

These changes will have an influence on:

- The quality of groundwater in contiguous coasts, as 53% of it has been subject to salinization, which results into a disorder in providing the cities with healthy drinking water and food produced in irrigated areas along the coastal strip,
- The aggravation of the shore drift phenomenon, as about 100 km of shores of the overall 1300 km of the coastal strip is threatened by drift with about 40 km very likely to drift in the Gulf of Hammamet, areas of Monastir, Jerba Island and the Kerkena archipelago that require urgent intervention. This phenomenon troubles also the touristic activities,
- Threatening the buildings close to low coastal areas, which require reviewing urbanization laws in coastal areas.

These negative elements can affect the population living style in urban areas, most of which are in coastal areas, and also for the river-neighboring inland cities. Studies have shown that the number, frequency and volume of floods will rise due to the climate change which will affect the rain distribution with the intensification of drought, on the one hand, and floods in most areas of the country, on the other hand, especially that many Tunisian cities have been suffering floods for decades. This is due to the spread of unregulated urbanization, in low areas or in valleys obliterated by drought periods, and the concentration of infrastructures. Budgets and great technical efforts have been dedicated for the protection of cities (national map of the regions under the threat of floods).

However, these actions still require more support to overcome the new barriers created by the climate to the situation of cities that suffered and still suffer from floods, which is the biggest catastrophe Tunisia is facing.

Picture 3 - The danger of floods in the city of Bousselem – governorate of Jendouba

Emany achievements have been made for the preparation of Tunisia for the fruitful interaction with the probable climate change (elaborating studies and creating mechanisms for monitoring the coasts and rain distribution and for the follow up of climate elements) and to limit the so-far-recorded negative effects of climate change. In addition to these changes, Tunisia is still making significant efforts to contribute to limiting the gas

---

35 - Many different studies related to the climate change in Tunisia have been done. Among the most prominent ones are: "Setting a strategy about adapting the agricultural development challenges and future vision of 2030: an approach based on sustainable development", publication of ITES, Tunis – 2015, p 327

36 - "This map was made by the services of the Ministry of Equipment and Housing in 1986 and was updated in 1996. Villages and cities were classified based on how threatened they are by floods."
emissions that cause the climate change. This is achieved through many programs that aim to reduce the energy density in all fields where energy is used, and to rely more on renewable and clean energy which, today, contribute only by 5% to meet the overall need of energy. In this regard, the measures of facing climate change require updating urbanization patterns and building norms and the manner of exploiting climate elements in a rational way in urbanization and city-building programs, which are among the biggest challenges that Tunisia will face in the future.

3.4- Disaster risk reduction:

Natural disasters that occur constantly in Tunisia are floods, sudden snowfalls and landslides, which pace has increased recently. Considering their negative implications on the daily life of cities dwellers and rural areas, which always require intervention and entrusting protection and prevention equipment that have previously been set-up, these disasters are considered among the biggest challenges of the sustainable urbanization that should be addressed very soon.

Tunisia also suffers from earthquakes in the areas that witness many significant geological breaks, such as the break of “Ghardimaou – Jedaida” through which flows the Madjerda River in its bigger part, the break of “Bouficha Hammamet – Nabeul – Ras Eddar”, a part of which passes through the coast, and the break of “Gafsa – Mareth – Jorf area” and many secondary shallow breaks. According to geological studies, Tunisia is situated in an area with a relative stability and does not suffer from high magnitude earthquakes on the Richter scale.

Many maps setting the earthquakes-threatened areas in Tunisia are to be considered when making programs of infrastructure and other equipment. However, this type of precautions, which aim to direct urbanization out of the threatened areas, have not always been followed when planning the cities that are threatened by earthquakes. Furthermore, making practical plans for the urgent intervention when these disasters occur allowed limiting the seriousness of these catastrophes, thanks to the mobilization of equipment and the dedication of all regional departments for the matter. Nevertheless, the related authorities still have not been trained to improve their effectiveness and still have not been qualified to well face disasters and to limit the negative effects of catastrophes and prevent the spread of eventual epidemic diseases. This is also among the biggest challenges of sustainable and sound development Tunisia have to address in the coming period.

3.5- Reducing traffic congestion

Rapid urbanization and urban sprawl, on the one hand, and the gradual development of some service centers outside the major urban centers, on the other hand, contributed in making service and work centers far from dwellings, which contributed to increasing the citizens need for transport for their different matters. As a result, situations of suffocation and traffic jam occur in most of the major urban centers, especially Great Tunis, despite the rapid and steady development of the road network. The rapid increase of the proportion of the individual-car-owning families, which exceeded 27.2% of the overall households, contributed to the dominance of private cars over the vehicle fleet, as the rate of the use of private means of transport is estimated to be between 60% and 70% in the major cities.

---

38 - For example, the western suburbs of Great Tunis shelter 37% of the population and provide only 12% of employment.
39 - The road network includes 360 km of finished highways, 230 km in progress and 191 thousand km of classed roads, the traffic density is estimated to be 0.14 km/km²
40 - According to the general population and housing census of 2014
3.6- Pathways of sustainable cities in Tunisia

The start should be with the conviction that development can only reach its goals, consisting of consecrating the right of all citizens especially those with fragile social status, in fulfilling their living needs and in the attributes of decent living, by taking care of the requirements of development on the local level.

For this matter, the pathway of preparing the local program of sustainable development or the “local agenda 21” started, which is considered a developmental pathway where all actors participate on the level of the local community. Each community, whether urban or rural, is made of citizens, administrative and technical departments, village councils and civil society. This local program of sustainable development also represents a reference document that allows the communication between all different people and actors. It also recognizes the requirement of sustainability, according to the local requirements, and clarifies for all parties the development priorities, on the level of the city or the village, and how to integrate the three dimensions of sustainable development locally, until citizens become contributors and directly responsible of the advancement of their city or village.

Under an active partnership between the ministries that are relating to urbanism, local development and environment, on the one hand, and the municipal work, the municipal councils and the volunteering of the civil society and citizens, on the other hand, the local communities that entered this pathway reached 157 cities and 5 villages, including 26 cities and 3 villages that managed to cover the different stages of the pathway by preparing the final document of the local work program, 56 cities are in the final stage and 75 and 2 villages are still in the first stages of the pathway.

The results achieved by this local participatory pathway\(^43\) state that it contributed in making citizens more responsible for their city or village. This was by developing their citizenship spirit and increasing their desire for the direct and voluntary contribution in advancing the city or the village from all aspects. This pathway also allowed mainstreaming the culture of consumption rationalization and following a more appropriate behavior for cleanliness and life quality for many of those who participated in the stages of the pathway of preparing the program of local and regional Agenda 21. Currently, those who are involved and responsible of the follow-up to this program are being trained and having their capabilities


\(^{43}\) “A study, in the institutional and legal framework, of the local Agenda 21 in Tunisia, the State Secretariat for sustainable development, March/August 2014
enhanced continuously, along with working on helping all municipalities engage in this pathway and follow up its execution.

Highlighting the importance of these local developmental pathways, the new Constitution dedicated the 7th chapter to urge actors engage in development and stakeholders pay the required attention to the local level when elaborating development programs on the national and regional levels. This contributes in activating decentralization, which can make services that are necessary to push the development movement closer to citizens wherever they are.

Among the most prominent challenges of the next stage is ensuring the activation and acceleration of these local pathways that, in the same time, push the developmental mobility towards better levels and contribute in limiting the social and environmental problems, coming from this mobility, thanks to integrating the social and environmental dimensions in every developmental work.

3.7- Future challenges and issues in these areas that could be addressed by a new urban agenda

While Tunisia, in the last two decades, made a concrete progress regarding equipping cities with the appropriate facilities for environmental services along with a significant improvement in the life quality of most city dwellers, including those with fragile social statuses, the rapid sprawl of cities and the continuation of the spread of unorganized and unregulated urbanization was sometimes a cause to reduce the quality of the environmental services.

Considering the difficulties and obstacles that prevented the achievement of the targeted rates in improving life quality, on the one hand, and the pace of the increase of the daily needs of the population for environmental services with the appropriate quality, on the other hand, we come across the following suggestions. These suggestions, which are the main axes of the work plan of the next stage, orbit around approaching the attributes of sustainable urbanization, which the relevant international and regional documents point to, as a materialization of the cities where life can be decent.

➢ Comprehensive work axes:

- The activation of the national strategy of sustainable development that is used for the period of 2014-2020 especially the challenges related to ensuring more balance between the social, cultural, economic and environmental dimensions and achieving a fair and integrated territorial planning,

  - Drafting a complementary strategy for development sustainability that works on

  - Preparing and using a “charter for the contribution in advancing the quality of life”.

  - Establishing a database of the life quality in cities and villages in accordance with set evaluation standards.

➢ Habilitating the facilities and environmental equipment and improving their services quality:

- Developing the wastewater treatment system, maintaining the old plants and expanding the sanitation services so it will cover all cities, especially the small ones, and the inland rural areas,

- Developing the indicators of the environmental safety and the quality of life and well managing the liquid and solid wastes and all the sources of pollution, noise and different environmental disturbances according to the situation of every city,

- Creating a system that uses the partnership between governmental departments, the civil society and the private sector that takes charge of the green areas and urban parks, habilitates them and diversifies their recreational and educational functions so they become a “citizenship house”.

➢ Fighting air pollution and taking care of air quality

- Improving the national network of air quality monitoring so that it becomes a credible national reference supported by related international institutions,

- Developing the legal framework relating to air quality monitoring in industrial establishments,

- Environmental adaptation of the industrial institutions to limit the gas, liquid and solid emission, especially the institutions active in chemical industries and phosphate in Gabes, Gafsa and Safax,

- Adapting the national legislations, in comparison with international norms, regarding monitoring air pollution that is caused by means of transport,

- Establishing an early warning system and plans of quick intervention to fight the cases of extreme air pollution that are suitable for any city,

- Establishing a national IT system that allows the

---

44 - The Ministry of Environment and Sustainable Development.
digital modeling of the air pollution cases and preparing perspective maps,
- Elaborating studies on the diseases caused by air pollution and mobilizing citizens to get guided by them,
- Establishing a measurement laboratory (metrology) specialized in air quality.

➢ Reducing traffic jam

- Ameliorating the public transport sector by using a better governance, whether inside institutions or between them and the State,
- Increasing the part of public transport for travelers compared with individual transport by increasing the supply volume and improving the services quality,
- Reviewing the policy of territorial planning by integrating the principles of sustainable transport starting from city planning and going through the different mechanisms that are used by land use master plans and urban transport plans,
- Promoting the awareness raising campaigns about pollution caused by means of transport and their energy consumption, integrating a method of responsible driving and the regular maintenance of vehicles and the necessity of diagnosing engines,
- Promoting regional development through accelerating the execution of road infrastructure projects to connect the inland regions and breaking their isolation,
- Encouraging remote working.

➢ Reducing the dangers of natural disasters

- Integrating the concept of “dangers expectations” in the process of planning and urban management,
- Focusing on the necessary measures to face the climate changes by establishing a system that sets measures in urban planning,
- Taking into consideration the factors of climate change and the greenhouse effect in strategic sectors in development plans,
- Working on activating and improving the “urban cooling and heating” system and advancing its productivity,
- Preparing maps of “identifying and defining the regions threatened by natural disasters” under a strategic study that uses projections in 2030 that relies on maps of “land occupation” and others of “public networks”,
- Implementing the “culture of practical interaction with dangers” and training citizens on the effective contributions in emergencies,
- Ensuring the continuous training of manager and interveners in the urban domain on different levels (national, regional and local),
- Involving academic institutions in the interaction with natural disasters by directing scientific researches in this field,
- Establishing an early-warning system regarding climate changes to support the prevention procedures,
- Developing and promoting the current disease-monitoring systems so that they will meet the new requirements related to climate changes,
- Elaborating the “earthquake code” that includes the specifications of earthquake-appropriate building and the safety procedures when such disasters occur.
The urban governance and legislation are considered among the essential elements regarding sustainable urban development. The presence of good legislations in accordance to the approved international standards contributes to achieving the desired purposes, and, in contrast, the opposing legislations impede these ends. The revolution of January 14th, 2011 revealed the mistake of the previous directions and public policies and many shortcomings in the ruling legislations. The territorial and urban legislations and choices were not spared from these breaches that Tunisia had witnessed before the revolution. Therefore, promoting urban governance and legislation, today, is considered a fundamental demand or rather a developmental necessity imposed by the respect of human rights and the attributes of justice and sustainable development, through the humanizing of all legislations and especially the legal arsenal relating to urbanization.

4.1- Improving urban legislation

- Presenting the legislative, institutional and technical mechanisms relating to organizing the urban domain:

  The legislative system for applying and organizing the territorial and urban domain is based on a set of texts, among the most important ones are:
  -The land use management and urban planning Act, issued by law no. 94-122, which is considered the main legal reference for setting the rules and mechanisms relating to planning and managing the territorial domain, organizing the urban space and establishing the conurbations.
  -The protection of the archeological, historical and traditional arts heritage Act, issued by the law no. 94-34 which provided the legal and regulatory mechanisms for the protection of archeological sites and the maintenance of cities and historical landmarks situated inside conurbations.
  -The Local Taxation Act issued by law no. 97-11,
  -The Real Rights Act issued by law no. 65-5,
  -Law no. 76-85 about reviewing the legislation relating to the expropriation for the public interest as it was amended and completed by law no. 2003-26,
  -Law no. 90-17 relating to the legislation relevant to the Housing Promotion,
  -Law no. 83-87 relating to the protection of agricultural lands,
  -The water Act issued by law no. 75-16,
  -Law no. 2005-90 relating to urban parks.

- Evaluation and conclusion

Because of the frequent obstacles that occurred along with the execution of the work plan axes of Habitat II dealt with the urban and territorial domain in a mostly technical way rather than a social way, which puts the safety of human beings and their right to an adequate standard of living among their priorities. This legislation lacks the integrationist character that takes into consideration the social, economic, and environmental dimensions. This led to negative implications on urbanization and the sustainability of development in cities, in addition to the weakness of the provisions relating to the fair and balanced development between the different regions of the country and also between different urban areas.

Furthermore, the urban and territorial legislations translated the followed developmental choices during the last period, which show that it maintained the territorial disparities and the structural and functional breaches that characterized the urban and territorial domain, such as:
- Inequality in benefiting from infrastructure and the essential urban services,
- The urban sprawl of cities in detriment of agricultural lands,
- The spread of unregulated neighborhoods with high population density that often became hotbeds for poverty, unemployment and crime,
- Over crowdedness and traffic pressure
- Outbreak of phenomena working against the
beauty of cities, including the anarchic implantation in the main avenues, streets and public squares, the anarchic advertisements and the unregulated exploitation of public properties, etc.

As for the institutional mechanisms, even if they got supported by new creations, as the National Agency of Waste Management and the regional authority of land transport organization, their situation is characterized by many drawbacks, the most important of which are:
- The multiplicity of real estate and urban interveners, whether in conception or execution, with the lack of coordination and using the sectorial approach more than the integrated approach for territorial planning and urbanism.
- The weakness of the institutional, human and financial capabilities of the local groups, which limited their role in organizing the territorial and urban domain and making land reserves,
- The absence of the long term funding mechanisms in making land reserves,
- The weakness of the domain-based, urban and environmental governance.

**Pathways of promoting the legislative and institutional framework**

- Developing the territorial and urban legislations in light of the new constitutional principles, especially those consecrating sustainable development and environmental safety, the right to appropriate housing and the right to decent living and social justice and the balance between regions and promoting the role of the local level in setting the priorities of sustainable development,
- Following the integrated and sustainable participatory approaches in urban planning,
- Supporting the legislative and institutional framework regarding facing natural disasters that threaten urban safety,
- Supporting the legal and institutional framework considering the urban phenomena that work against the beauty of cities,
- Ensuring the complementarity between economic and social planning and the territorial planning legislatively and institutionally,
- Developing the institutional and human capabilities of the local communities in general and in the urban planning field in particular,
- Cutting short paths and reducing administrative procedures and deadlines in preparing and reviewing urban management plans,
- Reviewing the system of real estate legislation, which allows to:
  • Solve the problem of frozen fees to reintegrate a great part of the built-up space in the economic and development cycle,
  • Control real estate and fight the monopolization and speculation phenomena,
  • Establish land reserves for the organized urban extension and provide building spaces for housing projects and the structured collective equipment.

4.2- Decentralization and strengthening of local authorities

**Evaluation and conclusions**

The application of decentralization and the strengthening of local authorities in Tunisia is very limited, except the short experience of the urban planning field as the decentralized pathway had been applied for a period that didn't exceed 7 years (from 1998 to 2005). During this period, the task of preparing urban management plans and ratifying them was given to the local authorities but they did not succeed as they were not able to perform the tasks given to them because of the lack of human resources. Therefore, it can be said that before the revolution there was not a real administrative decentralization but rather an administrative deconcentration and nothing else. This is due to the inexistence of the attributes of decentralization, consisting basically of freedom of management, autonomy, and administrative and financial independence. Furthermore, elections and pluralism were absent, which limited municipal councils and made their financial and administrative independence fictional, due to the dominance of the highly centralized State legislation in all fields and its intervention in the slightest details.

The situation of the local communities, today,
is characterized by weak governance, limited institutional, human and financial capabilities, weak supervision levels and lack of human qualifications in many specializations of the municipal actions. The problems of local communities, after the revolution, were aggravated after the nomination of private delegations and the continuous absence of the elected regional councils.

In addition to these existing problems, new problems emerge, which are raised by the implementation of the provisions of the new constitution, and are relating to:

- The mainstreaming of the municipal system on all Tunisian territory,
- The way prerogatives are distributed between the State and the three local communities (municipalities, regions and territories)
- Funding decentralization and urban development.

Future pathways

- With all of these problems, it should be affirmed that the decentralization activation pathway has already been launched and it has started to have an increasing pace since 2013. This is revealed through the preparation of the project of the local communities and the project of a fundamental law for local elections that are in the expanded counseling period before being exposed for the assembly of representatives,
- Starting to consecrate the pathways of decentralization and local governance as they have been adopted in preparing the economic and social development plan 2016-2020, as it appears through the plan’s orientation document prepared by the central authorities regarding the planning process.
- Activating the Constitution provisions related to decentralization. At first, the legal system in all sectors relative to decentralization shall be reformed in the light of the provisions of the Constitution. This requires the promulgation of many legislations relating to:
  • The territorial division of Tunisia, the municipal, regional and territorial elections, the legislative framework organizing the local communities and managing the local affairs, the financial law of local communities, collaboration and partnership, the higher council of local communities,
  • Funding decentralization from fiscal and other non-fiscal sources. The non-fiscal sources can come from the State partially or totally giving-up some revenues and transferring them directly to local communities, in addition to reforming the fiscal system towards supporting the financial decentralization for local communities, which could allow to develop their financial capabilities and their own resources,
  • Developing the institutional and human capabilities for local communities to help them exercise their expanded prerogatives and elaborate development strategies. Among most important axes are training, qualification and improving the supervision levels,
  • Making more suitable provisions that organize the local communities according to the new Constitution regarding decentralization and participatory democracy,
  • Implementing the participatory governance and developing the partnership and cooperation between local communities, on the one hand, and the local communities, civil society and the private sector, on the other hand, in addition to developing partnership between the State and local communities especially by contracting mechanisms.

4.3- Improving participation and human rights in urban development

Evaluation and conclusions

Achievements have been made in the execution of the sustainable local development pathways, through the incorporation of many cities in the programs of elaboration of Agenda 21, which included about 157 cities and villages. However, the participation of citizens and the components of the civil society in public life, particularly urban development, remained limited and sometimes fictional and restricted to the participation of some associations, given the limited margin of liberties.

Furthermore, the city policy, which drew its
features in the urban strategy of the year 1996, did not succeed to materialize the functional coordination between the different interveners and did not lead to a sustainable and balanced urban development that, with its comprehensive concept, materializes human rights. What really happened is that projects and sectorial interventions that lack complementarity and coordination between them were developed. In addition, these projects lack the attributes of integration, sustainability and effective participation.

Therefore, some urban projects were not successful enough to remove disparities between cities, regarding infrastructure concentration and the benefit from essential urban services, or implementing an integrating economic mobility that creates employment on the local level. Some of these projects were the national projects for upgrading informal neighborhoods, which were launched in 1992 and covered all the municipalities of the republic, and the projects of municipal investments within the program of municipal development and the program of supporting the informal neighborhoods in major cities.

Approche participative d’après la nouvelle Constitution (janvier 2014):

La nouvelle Constitution a concrétisé la participation du citoyen et de la société civile dans la préparation des programmes de développement et d'aménagement territorial et a concrétisé le suivi de son exécution (article 139). D’autre part, elle a accordé une attention particulière à la participation de deux catégories de la société : les femmes et les jeunes (article 133 de la Constitution qui garantit la représentation des jeunes dans les conseils des collectivités locales).

Par ailleurs, la nouvelle constitution instaure les droits de citoyenneté et de participation ainsi que d’autres droits relatifs au développement urbain dans son avant-propos et dans plusieurs articles :

- Le droit au développement durable (article 12).
- Le droit à une vie décente (article 21).
- Le droit à un logement décent (article 24 alinéa 1).
- Le droit à l’eau (article 44).
- Le droit à un environnement sain (article 45) : c.à.d. le droit aux présentes générations et futures à un environnement qui préserve la santé de l’Homme et qui lui fournit les ressources naturelles nécessaires pour une vie décente.

There are many problems that impede the participation of the civil society:
- The participatory pathways are not without difficulties and impediments, when it comes to the organizational, material, and human application,
- The circumstances of the participatory pathways that in some cases can limit the efficiency of the participation,
- The difficulty of the access to information,
- The limited capabilities of the organizations of civil society and the difference in goals, priorities and working methods,

As for the participation of youth, the following has been noticed:
The activity of youth outside the official institutional frameworks is increasingly rising, more than half of the youth is working in the informal sector, the increase of the rate of youth that are not covered by education, employment and training. This category is the most likely to be excluded, only a small number of Tunisian youth are active in the associations of civil society, despite the increasing number of these associations.

Future pathways
- Integrating the social neighborhoods in their urban environment and improving the living conditions inside them by supporting the efforts aiming to reform and habilitate informal neighborhoods, equip them with infrastructure, provide collective equipment and improve housing and urban environment,
- Ensuring a sustainable urban development along with respecting human rights, especially: the right to participation, the right to decent living, the right to appropriate housing, the right to safe drinking water, the right to a safe and clean environment, the right in essential urban services and the right to residence and transport,
- Integrating human rights in local policies and creating committees, in charge of human rights, within the councils of local communities,
- Promoting the participation of citizens and the components of civil society and ensuring the continuity of the participatory method so that it is not occasional,
- Designing plans and programs that shall introduce social and economic integration for youth with their participation,
- Supporting and implementing the right to access to information,
- Elaborating mechanisms that support the transition of Tunisian youth from the demanding and protesting attitude to the positive citizenship spirit.
- Implementing the legislative mechanisms that materialize the right to a proper environment and activates it in reality.

4.4- Enhancing urban safety and security
Considering that the human being is the key element of all protectionist legislations which protect him at an individual, familial or social scale, the new Constitution provides the protection of the human being and makes the State in charge of this responsibility, and this is in many articles including article no.7, 14, 15, and 17 and also in chapter 2 relating to rights and liberties.

Problems
Based on the international report of human settlements of 2007, which states that the main threats against urban safety and security are basically urban crime, violence and natural hazards, the Tunisian reality can focus on the element of crime and violent events in urban areas, considering what has been previously mentioned regarding the elements of poverty and natural hazards.

In this context, it is noticed that the crime and violence rates are linked to the size of cities; the more the population is, the more important is this rate. In addition, crime rate increased after the revolution due to the political and social instability that Tunisia has witnessed since 2011.

Crimes are constituted of all the physical attacks and assaults on someone else's body by beating or by mugging or theft, sexual molestation, fraud or blackmailing. There are also crimes against properties and crimes against the public order and other economic and cultural crimes, ...

The Constitution approved the principle of the legitimacy of sentences in article 28, which stipulates that the sentence is personal and is only under a text of a previous law.

Among crimes, the following can be mentioned:
- Crimes of fraud and misappropriation of funds or theft,
- Narcotics with all their types,
- Entering someone else's property with the intention of committing a crime,
- Offending morality,
- Intentional homicide and premeditated homicide,
- Violence in stadiums,

46 - The study of removing the obstacles impeding the participation of youth, The International Bank and the National Observatory for Youth - Tunis 2014 (134 pages)
- rape with all its types
- smuggling, which is among the great problems that threaten public safety and security,
- Terrorism, which is among the lesions that every citizen shall fight in accordance to the law of terrorism approved by the assembly of representatives in July 24th, 2015 and which shall be implemented quickly,
- Internet crimes with all their kinds,
- Environmental crimes, including water, air and living resources pollution, wasting environmental public property and making noise,
- Informal implantation on someone else’s property or the State’s property,
- Violating the cultural heritage, whether physical or non-physical,
- Traffic infractions which are all offences, contraventions and felonies coming from traffic accidents.

Future pathways: how to make our cities safer and more secure?

This is possible by using many complementary approaches:
- The security approach: all security departments fight violence and terrorism and conduct effective operations to support safety and security in urban areas, in addition to activating the anti-terrorism law,
- Activating the role of the municipal police and expanding its intervention field to make the security service closer to citizens and enable local communities to contribute in making security policies,
- Traffic safety, by developing the national strategy for traffic safety and consolidating the traffic infrastructure and implementing warning and monitoring mechanisms in main avenues and crossroads,
- Fighting natural disasters by:
  • Using the precocious warning when any natural disaster occurs to allow urgent intervention and prevent losses in properties and lives,
  • Ensuring the establishment of safe buildings when giving building permits along with working on respecting the standards of legal and regulatory provisions proper to the installations of public maritime domain properties and water public properties by leaving a minimum space not less than 25 m to the borders of these properties,
  • Building capacities and training personnel on the quick intervention when any natural disaster occurs,
- The social approach: addressing the aspects of poverty and destitution by well targeting the indigents who have no support and who benefit from permanent and circumstantial aids, free healthcare cards, low-tariff cards and also from economic and social integration programs that create livelihoods.

4.5 - Improving social inclusion and equity

Social inclusion:

The comprehensive society is “a society for everyone”, where everyone enjoys rights and duties and plays an essential role. On this basis, social inclusion shall be based on the respect of all human rights and essential rights, cultural diversity, social justice and the needs of groups with special needs (indigents, disabled, children without support, etc.). However, the policies of social inclusion in Tunisia before the revolution (1996 -2010) did not allow addressing many social challenges, especially poverty and unemployment.

It is expected to encourage economic activities with high employment capabilities that allow the creation of decent job opportunities, supporting social integration and limiting exclusion.

Equity

The advancement of women’s situations is a constant preoccupation, considering the essential role that women play in development and different fields. Women’s sector witnessed many achievements, which is translated by the fact that Tunisia joined many conventions relating to equity, including:
- Ratifying the optional protocol of the convention on the elimination of all forms of discrimination against women 2008,
- Lifting all reservations concerning the CIDAW convention in 2011,

Among the most important gains for women in Tunisia is the Code of Personal Status issued in 1956 and amended in 1993 for the consecration of the concept of cooperation and complementarity between spouses, in addition to the amendment of 1993 for the consecration of the principle of non-discrimination between genders.

After the revolution, the new Constitution approved rights enjoyed by Tunisian women and added new rights, by which the State ensures the equity of chances between men and women in assuming different responsibilities in all sectors and ensures working on achieving equity between men and women in elected councils.

However, women’s situation, even if it is good constitutionally and legislatively, remains below expectations. In fact, there is a gap between texts consecrating women rights and strengthening their roles, on the one hand, and the actual situation of women in reality, on the other hand, given that:

- The illiteracy rate for females at the age of 10 years and beyond is estimated to be 25% versus 12% for males,
- The weak integration of girls in some specialties of professional training,
- The weak integration of girls in some specialties of professional training,
- The weak integration of girls in some specialties of professional training.

Also, there is a difference between the situation of women in big cities and their situations in inland areas, notably materialized in their weak participation in public life.

4.6- Future pathways

- Supporting the social approach in economic and social planning,
- Promoting the presence of women in labor market by integrating them in new professional specializations and supporting their initiatives regarding project establishment,
- Completing the legislative framework by issuing a law for the protection of women from violence and facilitating the support of women that are victims of violence,
- Enhancing the value of the effective role of women in civil society and supporting their participation in developmental activities,
- Promoting the policies and programs relating to supporting the participation of women via the media, communication, training, habilitation and education,
- Completing the legislative framework relative to fighting women-targeted violence and elaborating and executing a communicative plan about this matter,
- Encouraging the family support that ensures the reconciliation between career and family.
Urban Economy

Urban economy addresses the study of the city from the angles of production, services and the integration of urban and rural areas in order to strengthen the opportunities of achieving sustainable and balanced urban development. Urban economy with its various components, especially local economic development, municipal financing, housing and the creation of decent job opportunities, is considered a necessary ingredient of urban development policies in order to reduce poverty and destitution and provide the elements of a decent life for all.

5.1 - improving municipal local finance

Since 1996, local financing witnessed many changes and reforms, some of which are related to the modernization of the legislative and regulatory frameworks, while others focused on strengthening financial resources. The purpose behind this was to enable local communities to build their capabilities towards increasing responsibilities and growing local needs in order to fully play their role which allows them to realize their visions and programs and tighten their interventions in service of local development in terms of legislative reforms and support for financial resources.

- Legislative reforms

- Issuing the Local taxes Act under Law no. 11 dated 1997 which aims to improve the resources of local communities by establishing a solid Fiscal base at municipalities that enables them to induce the pace of extractions and diversify the tax base in order to ensure the financial balance of municipalities.

- Revision of the 1975 Organic law of municipalities under the basic law, and no. 48 dated 2006 in order to reduce the intervention of the central authority while supporting the elements of decentralization, the strengthening of citizen participation in municipal work and the development of municipal administration and disposition.

- Revision of the Organic law no. 35 dated 1975 for the budget of local communities in accordance with the Basic Law no. 2007-65 for its compliance with the requirements of regional and municipal work. This allows bringing inclusivity to the structure of the budget of local public communities at the level of resources and expenses and to facilitate the dissemination of the “Adab™” system together with more devotion to budget transparency and its ability to undergo financial analysis, analytical accounting and audit of the financial situation.

- Substantial reform of the law of local communities thanks to the requirements of the Constitution of 26 January 2014, which among its most important features is to establish a real decentralized system able to materialize the principles of management of free measure, participatory democracy, open government, subsidiarity, good governance and subsequent control. The reform also systemized and supported funding for local communities (Title VII of the Constitution, Articles 131 to 139).

- Supporting financial resources:

- Development of domestic resources: The usual resources completed in the balance of all the municipalities witnessed an increase of 33.3% during the period from 1992 to 2014 (from 137.8 MD to 432 MD), according to data from figure 9.

Graph 9 - The development of domestic resources to municipalities for the period 1994-2014

Note that domestic resources of municipalities have experienced significant declines during the years 2011 and 2012, namely after the revolution.

- Evolution of the State transfers: State transfers witnessed a remarkable development since 1992, with a

---

48 - The "Adab" system is a system adopted by the Tunisian administration for the rationalization and good management of public expenditure.
general increase of 330.1% (from 66.5 MD to 286 MD) and a percentage of annual growth averaged at 10%, according to data from figure 10.

**Graph 10 - The development of municipal resources derived from State support 1994-2014**

Note that the State, since the year 2011 and due to the decline in the own resources of municipalities following the events that have affected the country after the revolution, pumped exceptional support for the budgets of local communities which reached during the last four years an amount of 321.4 MD.

**Graph 11 - The Evolution of State transfers to municipalities per capita from 2005 to 2011**

- Assessing the financial status of municipalities: Municipalities are living on the impact of a structural and financial crisis due to a limited domestic resources collection with weak State transfers. The crisis worsened after the revolution, with the decline of own resources and rising payroll costs. This situation can be assessed by a few pointers:
  - Limited resources from Local taxes and State transfers: Municipal financing in Tunisia represents less than 4% of the State’s budget which is far from the level registered in some countries. Domestic financing also represents about 1.2% of GDP compared with 27% in the countries of the European Union.
  - State credits transfers, while rising in overall, saw a decline in their representation for the resources of the municipality and the residents of municipal regions, where State transfers represent less than a quarter of municipal resources at about 15 dinars (calculated per inhabitant) in 2005, regardless of the specific case of the year 2011. This situation of inequality between the real financial means of municipalities on the one hand, and the costs it bears on the other hand, especially since these costs are rising remarkably due to municipalities embarking in programs for the modernization of their administrative mandates, recruitment programs and new expenses (contributing in the completion of landfills, the costs of green areas exploitation and care and maintenance of sports facilities, etc.).

- Decline of domestic resources and rising payroll costs as reasons for the Aggravation of municipalities’ deficit: Municipalities have witnessed a significant decline in their domestic resources in 2011 as their resources shrank by more than 37% (254 MD in 2011, compared to 414 MD in 2010) coinciding with an excessive increase in management expenses due mainly to the unprecedented development in the payroll expenses in the majority of municipalities during the year 2011 as a direct result of recruiting 11,334 employees (contractual, temporary and casual workers), in order to meet the social demands of this class of workers who represent a fragile social group. This development led to the deterioration of the financial situation of the municipalities, which was already in a critical position before the revolution. This made many municipalities unable to secure their payroll and basic services costs. The indebtedness of municipalities also doubled since the size of outstanding debt in the end of 2011 for the municipalities exceeded the amount of 130 MD, which represents more than half of its domestic resources for that year.

It is also worth noting that payroll expenses reached half of the total resources of municipalities (56%) and
exceeded the total domestic resources recorded in 2011 (112%) which led to a total ruin on the level of financial balances of many municipalities.

- The inability of municipalities to provide self-financing and its impact on the completion of the municipal investment scheme:

**Graph 12 - The Evolution of the Municipal investment scheme during the period 1987-2011**

Municipal investment declined since the beginning from the mid-nineties (fixed prices calculation) which explains the decline of the developmental role of municipalities. In the recent period, the situation worsened so that municipalities were unable to provide self-financing for the completion of the municipal investment program which in turn led to a decline in the level of completion of projects (less than a quarter of the projects, or 22%, received final approval for funding during half the stage) pushing towards a widening sense among citizens of the inability of the municipality to respond to their aspirations and needs, especially during the recent period where municipalities were unable to rebuild the headquarters, warehouses and renew the equipment and supplies that had been burned and looted during the revolution. Municipalities bear financial expenses which are sometimes higher than their actual financial capabilities, leading to the accumulation of debt and a diminished ability to provide self-financing.

- An investment and a financial system dominated by the sectorial approach which deepens the disparities between municipalities. The sectorial approach dominates the method for determining municipal investments where consistency is missing with the rest of public investments, on the one hand, and with the programs of neighboring municipalities on the other hand, resulting in the limited effectiveness of public investment. In addition, municipal resources are varied and reflect differences, particularly between urban and suburban areas.

The method of assigning credits allocated from the State depends mainly on the proportion of real estate-based tax. This method contributed on deepening the differences between municipalities. The municipalities facing difficulties at the level of the provision of services normally suffer from low extractions which resulted in a decline of credits allocated from the State's budget, which caused more in depth difficulties for these municipalities. The adoption of a total and partial support system took place in the year 2002 for the benefit of 132 municipalities suffering from limited resources, which should have been replaced by the introduction of structural reforms on the domestic financial system. This has led to the adoption of investment programs in the form of funds that do not reach the level of a functional program in the context of a local approach, which could not meet the needs of people and thus contributed to deepening financial difficulties for those municipalities. All of these difficulties coincided with the weakness of briefing and subsidy mechanisms at the financial and programming levels:

- The weakness of the intervention mechanisms of the Loans and Local Groups Helping Fund made it difficult to face the deterioration of the financial situation of municipalities. This is due to the inadequacy of the intervention made by the fund with developments in the sector due to poor business briefing, poor financial and technical support especially among smaller municipalities.

- The limited role of regions in the development of investment programs for their own municipalities due to the lack of a regional view that ensures consistency and integration between the various local programs, on the one hand, and not considering joint projects between neighboring municipalities to consecrate the idea of joint action, on the other hand.

- The intended development of municipal resources, prospective methodology:
  The Constitution of 26 January 2014 established a new system of decentralization based on the development of the role of local communities from a dependent structure to a decision-making and an effective actor in development efforts. This would be achieved by...
enabling them with new prerogatives that qualify them to accomplish the new tasks entrusted to them. This also requires the rehabilitation of local communities particularly in the development of financial resources. Therefore, the development of new financial strategy which would be based on:

- Maintaining during the transitional stage, the same ordinary annual growth index for local financing, estimated at 7%.
- Introducing new structural reforms that can be summarized as:
  * Improving management capabilities of tax offices,
  * Performing base development,
  * Improving tax collection mechanisms,
  * Updating the Local tax system in a way to preserve the financial balances,
- Seeking to create local and regional financing mechanisms (funds or cooperative credit institutions) in order to help local communities to strengthen their financial resources and revitalize the economic movement.

This will enable the development of local communities’ resources to reach 8% (1,400 MD) by the end of 2019 compared to the State budget, knowing that the current ratio does not exceed 4% (700 MD).

5.2- Strengthening and improving access to housing finance

The housing finance sector is endowed with a continuous attention by the State; it has undergone a number of changes dictated by the need for adequacy of funding with the families financial means and the national economy, in addition to the needs of balancing public finances.

5.2.1 - New housing finance mechanisms:

The housing finance system is based primarily on the following mechanisms:

- Financial institutions:
  - The Housing Bank:
    The Housing Bank has become, since the events of 1989, the main financier for the housing sector. It evolved over the years, where it became a provider of 35% of the total funds allocated to the sector; it also witnessed many changes dictated by the economic and social changes that have affected the country. Among the most important interventions and achievements of this bank:
    - The housing savings system: a system created in 1973, which was managed by the Housing Bank under an agreement with the Ministry of Finance that defines the target groups, the terms of savings and the access to credit. The saver benefits from an exempt on surplus savings from income taxes. This mechanism has witnessed, over the past twenty years, many amendments in line with the requirements of social groups and the rising cost of housing. The system intervenes to finance the acquisition of a new residence with a certified land developer, to build a residence, or to make an extension for an existing one; it also includes several savings systems49. Despite the simplification of loans conditions for obtaining loans and giving the beneficiaries a grace period, the system has witnessed a remarkable decline in recent years in terms of deposits and loans assigned, primarily due to the high rate of inflation in the sector and the development of the competitive programs by the bank.

  - The development of the direct loan system: Proceeding from the year 2000, the Housing Bank developed the direct loans mechanism; a system of loans granted based on regular resources of the Bank concessional terms which enabled to respond to the needs of different social groups, but had a negative impact on the returns of the housing savings system.

  - The creation of a new housing savings system: The Housing Bank created a new savings system in 2001, similar to that of commercial banks, in order to support the cost-effectiveness of the bank and to attract new clients. This system experienced a relative development compared to the rest of the systems which could fund all real estate operations (financing housing construction, acquiring new or old dwellings, financing the acquisition of plots intended for building ...).

- Commercial banks:
  In the framework of developing the system of housing financing sector, the State allowed the commercial banks in 1997 to develop their own savings systems in order to support the financing sector system and develop the direct loans without prior savings. This sector has been growing over the years so that the commercial banks intervention reached about 65% of the overall financing of the housing sector in the last years.

Nevertheless, this system remains unfair for those who are not engaged in the banking system, that is to say,
there is a targeted class of low income groups who are not covered by these mechanisms.

- Treasury funds:
  - The housing promotion fund in favor of employees:
    The Fund’s interventions since 1994 witnessed many changes, among those are:
    - Expanding the scope of intervention to include the workers with income ranging between the minimum guaranteed professional wages and 4.5 times this wage,
    - Facilitating the conditions of obtaining loans so that their interest rates become compatible with the capabilities of the beneficiary groups, i.e. between 2.5% and 5.75%, with extending the repayment period to 25 years and allowing a grace period, ranging from a year to three years,
    - Enabling some employees with a grant that can reach 10% of the price of the house,

Table 4 - The achievements of the housing fund for employees since 1996

<table>
<thead>
<tr>
<th>Achievements in 1996-2014</th>
<th>Evolution of the number of financed dwellings per year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of dwellings</td>
<td>Value (MD)</td>
</tr>
<tr>
<td>17,350</td>
<td>410</td>
</tr>
<tr>
<td></td>
<td>1,060</td>
</tr>
<tr>
<td></td>
<td>360</td>
</tr>
</tbody>
</table>

However, the Fund’s activity saw a decline especially in recent years, mainly due to higher construction costs and the scarcity of land dedicated for this type of housing.

- Social security funds:
  Each of the National Pension and Social Security Fund and the National Social Security Fund took over the assignment of loans in order to complete financing the acquisition of a house from a land developer, building a house or acquiring a plot according to specific conditions. This loan is assigned in the range of TND 15,000 with an annual surplus estimated at 6.75% which is extracted directly from the salary of the beneficiary in a maximum period of 20 years. Due to financial difficulties experienced by the social funds, the size of entrusted loan has also noticeably declined in recent years.

5.2.2 - Old housing financing mechanisms

- National Fund for housing improvement: contributes to a number of programs and projects, including:
  - Programs and projects, for «the elimination of the primitive dwellings» which are managed as a part of a national validated plan,
  - Maintenance operations: restoration, rehabilitation and sewage operations are carried out by the owners of the properties to maintain their dwellings,
  - Restoring, rehabilitating, or providing the necessary facilities for residential buildings which are carried out by local communities under collective operations intended for groups of individual housing, and which are aimed at improving housing, environmental and urban conditions for citizens.
  - Rehabilitation and urban renewal operations entrusted by the State to the competent institutions and structures in the area, repair operations of damaged housing as a result of natural disasters or emergencies and temporary relocation of the affected families. Despite the availability of various mentioned financing mechanisms, other segments of society remain not covered by these mechanisms. On this basis, special programs have been created such as:

  - The national program to eradicate primitive housing, which began in 1986 and was completed in 2007. It included the removal and compensation of 94 thousand dwellings, including 80% in rural areas and 20% in urban areas.
  - The National Solidarity Fund, launched in 1992 to construct new dwellings to replace the primitive huts existing back then and to improve the existing decent housing together with the construction of new residential communities. The Fund’s interventions included, since the year 1993 to the year 2005, approximately
63 thousand dwellings distributed as follows: construction of 43 thousand new dwellings and improvement of 20 thousand dwellings.

5.2.3 - The problems recorded in the field of housing finance:
- The housing increasing rates exceed far the increasing rate of prices at the national level,
- The inadequacy of the cost with the potential income of the poor and middle class groups,
- The lack of land that is adequate and suitable for building,
- The absence of a relevant mechanism to fund land reserves.

5.2.4 - Proposals:
- Reforming the system of advancement of housing fund for employees by expanding its interventions to cover new social classes in order to enable them to own a house,
- Creating a fund to support housing in favor of low-income social groups. Its incomes would be derived from the taxes coming from changing the land use from agricultural to urban inside the urban management plan
- Adapting loans given from the Fund’s resources to the beneficiary’s conditions and ability to repay,
- Reforming the National Fund for the housing improvement system by supporting its resources and expanding the scope of its interventions,
- Facilitating the conditions of assigning mortgages,
- Accessing to external financing sources to fund housing,
- Creating mechanisms for long-term funding allocated to the formation of land reserves,
- Facilitating the conditions for assigning loans dedicated to existing housing improvement, particularly in terms of recovery time.

5.3- Supporting local economic development
During the past couple of decades, the State focused on supporting local economic development through adopting special development programs intended primarily to infrastructure development, supporting human resources and encouraging private investment as well as improving citizens’ living conditions, in addition to supporting areas facing specific problems. In this context, three national development projects have been completed:

➢ The Integrated Rural Development Program:
This program aims to reduce the phenomenon of rural exodus by improving living conditions in rural areas, creating rural roads, providing lighting and drinkable water and building and improving dwellings.

This program is divided into two generations:
- The first generation project, launched since 1984, included 217 intervention areas spread over all the states of the republic. Its overall cost is estimated at 355 million dinars. First generation projects contributed in raising the incomes of beneficiary families and introducing economic and social prosperity to the intervention areas, which encouraged the continuation of such projects.
- The second generation of this program began in 1993 and continued until the year 2007. It included 91 projects spread over two parts at a cost of about 268 million dinars.

This program contributed to the realization of seven development projects for the integrated development of rural areas and for the benefit of nearly 62 thousand citizens. It enabled the creation and electric mechanization of six deep wells, the creation of 256 ha of irrigated areas, the creation of 75 superficial wells, the planting of 1,513 ha of fruit trees and the creation and paving of 79.4 km of rural roads in addition to the delivery of drinking water for 2,675 beneficiaries.

➢ The integrated urban development program:
The integrated urban development program aims to provide the popular neighborhoods with urban services and basic social facilities. This was done in complementarity with other urban programs (National program to refine popular neighborhoods and the national sanitation program). The regular sectorial programs address social and public facilities and also support the advancement of operation and activities of employment programs for the benefit of job seekers and families with low incomes, to improve their living conditions and to integrate women in economic life.

With a mandate from the General Delegation for Regional Development and the relevant municipalities, the Rehabilitation and Urban Renewal Agency conducted follow-up studies during the period (1992-2006) and completed various infrastructural works (65 km of roads and 29 km of sewage and 1,200 of lighting points) benefiting 29 neighborhoods of about
218 thousand people at an overall cost that amounts to about 21.5 million dinars distributed on four portions:

**Table 5 - Distribution of loans allocated to integrated urban development program**

<table>
<thead>
<tr>
<th>Portions</th>
<th>Time period</th>
<th>Number of project</th>
<th>Cost (MTD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First and second portions</td>
<td>1992 – 1997</td>
<td>11</td>
<td>5.0</td>
</tr>
<tr>
<td>Third portion</td>
<td>1997 – 2001</td>
<td>13</td>
<td>10.9</td>
</tr>
<tr>
<td>Fourth portion</td>
<td>2002 – 2006</td>
<td>05</td>
<td>5.6</td>
</tr>
<tr>
<td>Total</td>
<td>1992 - 2006</td>
<td>29</td>
<td>21.5</td>
</tr>
</tbody>
</table>

This program has enabled the completion of all infrastructure elements, in addition to the creation and strengthening of 559 micro-projects for small professions and the training of 2,416 developers (M/F) which contributed to the creation and support of 3,177 jobs. Three centers were completed to support collective living together with 3 green areas, 10 artisanal areas, 5 industrial areas and the development of two industrial areas.

The program was reinforced by the addition of five developmental projects in the areas of Gafour, Bou Arada (Siliana), Feriana (Kasserine), Dowar Hicher (Manouba), and Kalaat Snan (Kef) with a wholesale cost estimated at 15.6 MD for the benefit of 35 thousand people. It enabled the creation and the strengthening of 208 projects in small professions, 356 projects in traditional industries, 1,038 developers (M/F), three artisanal areas and 7 industrial stores, the paving of 29.2 km of roads, extending sewerage network by 6.3 km, putting 757 lighting points, building a children's club, and implementing five green areas, which contributed to the creation and strengthening of 973 job positions.

**Regional development program:**

The regional development program is a mechanism to nourish the developmental effort in regions and to enhance the development pace in both rural and the less developed urban areas by:

- Implementing projects in order to improve living conditions which include electricity, drinking water, environment, and ecological improvement, roads, passages, sanitation, culture, youth and childhood, and health infrastructure as well as participating in financing village councils' projects by providing self-financing.
- Establishing and supporting job opportunities in both agriculture and fisheries and handicrafts sectors by offering in-kind aid to beneficiaries.
- Improving the limited income citizens' dwellings through purchasing building materials.
-Rehabilitating the industrial areas situated outside of the regional development areas.

-Self-financing coverage of some projects financed by both the Tunisian Solidarity Bank and The Bank of Financing of Small and Medium-Sized Enterprises.

-Disbursement of grants for the benefit of needy families' children in order to pursue professional training courses and to cover the handicrafts training centers expenses transmitted to The National Union of Tunisian Women.

5.4- Creating decent jobs and livelihoods

➢ The employment reality during the period of 1996 to 2014:

In Tunisia, the unemployment is structural and is characterized by its high rate (14.8% in 2014 compared to 18.3% in 2011 and 15.6% in 1994) and its rates discrepancy among regions, girls and youth and especially holders of university diplomas. Moreover, the national economy remained unable to create job opportunities with the required pace taking into consideration the adopted development model which is based on weak added value investments. In addition, the various components of human resource output system (The Vocational Training System, The University System and The Education System) do not correspond to labor market requirements. Furthermore, the economic system is characterized mostly by small enterprises which are unable to provide the supervision necessary for newly recruited employees who generally lack expertise and work experiences together with the capacities and qualities that will enable them to integrate the labor market.

To reduce unemployment, Tunisia has worked on providing job opportunities for everyone and finding the appropriate solutions to limit this phenomenon. Many decisions were taken in this matter:

-Supporting the projects’ financing system by establishing the Tunisian Solidarity Bank in 1998. It was an embodiment for the country's orientations such as self reliance and promotion of work for personal interest as well as a pushing factor to enhance job creation together with working for employers. Since its creation until mid 2014, it has been possible for the bank to finance more than 142,000 projects and create more than 234,000 new job opportunities. This bank is also funding microcredit projects established in 1999 and conducted by the non-governmental associations. The establishment of the Bank of Financing of Small and Medium Enterprises in 2005 allowed offering soft loans in order to support Small and Medium Enterprises. The number of financed projects reached more than 3,200 projects by the end of 2014.

-Establishing the National Employment Fund in 2000 which is responsible for financing all the processes in charge of ensuring job seekers qualifications and providing employment possibilities. This fund first took care of regions of priority and groups with specific needs. These fund interventions were reviewed in 2003 and 2009 in response to the changing characteristics of unemployment during this period. In a second phase, these programs were restructured in 2012 in accordance with a strategic direction aiming to set new mechanisms and programs to meet the job seekers’ aspirations and to provide the employers with the required skills and competencies required in the labor market. The new programs, which consist of four projects, have been started by adopting a new methodology based on trial and assessment before general application. These programs are the following: Check for Improving the Employability Program, Check for Employment Support Program, Supporting the Promoters of Small Size Enterprises Program and Partnership with the Regions Program.

- Developing the National Employment Agency to a National Agency for Employment and Independent Work in 2003 where it primarily conducts the mission of energizing the labor market nationally, regionally, locally, and sectorally especially through the employment offices network. The agency is also working on developing communication about employment and professional competencies for companies and job seekers. In addition, the agency implements programs of employment promotion and youth integration and provides the promotion of small enterprises and private work. The number of employment offices has increased from 66 offices in 1996 to 91 in 2014. Besides, twelve initiative spaces were established to work on intensifying training sessions aiming to set enterprises in coordination with the relevant agencies.

On the other hand, the labor Act in Tunisia witnessed fundamental reforms in 1996. Now, it aims to guarantee to employees the right to decent working conditions as defined by the International Labor Organization by creating adequate job opportunities for men and women, expanding and activating social coverage for all as well as strengthening the national tripartite dialogue and respecting principles and fundamental rights at work. Furthermore, common framework agreements have witnessed several reviews which had led to the improvement of work conditions and wage increases.

---

50 - According to the orientation note of the development plan 2016-2020. * The development model has proved its limitation since the late 90s, where the growth rates were below the levels recorded in the like countries and the unfair distribution of the development fruits among regions and social categories.
It should also be pointed out that the social security sector is playing a significant role in improving the individuals’ and families living standards and maintaining the social stability. The social coverage structures offer also significant contributions in supporting the social development. The legal coverage currently includes approximately 83% of the working population in 2013, compared to 72% in 2007.

In 2013, the social partners (The Government, The Tunisian General Labor Union and the Tunisian Union of Industry, Trade and Handicrafts) signed the social contract.

5.5- Most important issues, challenges, and lessons learnt

In spite of the efforts made for limiting the increased unemployment, many deficiencies and problems were considered as an obstacle that have limited many efficient measures to be taken and the alleviation of unemployment:

- Working-age people continue to increase while the economy capacity is limited and incapable of generating enough job opportunities and absorbing the educational system graduates.
- The new structuring of the additional work demands. The holders of higher education diplomas represent nearly two thirds (2/3) of the additional demand due to their accelerating graduation pace (from 50,000 in 2005 to 87,000 in 2013);
- The growing phenomenon of youth reluctance to participate in professional life. A recent study\(^1\) showed that 32.4% of youth do not study or participate in training programs. In addition, they neither work nor look for jobs.
- Limited employment structures services and the lack of efficient employment mechanisms and programs.
- Limited profitability of the education and training system which is clearly visible in the imbalance between supply and demand for the higher education diplomas holders whose basic competencies required in the labor market are weak, in addition to limited initiative and entrepreneurial culture among youth.
- Reluctance among youth to participate in vocational training in some disciplines (like textile and clothing, leather and footwear, building and public works, and agricultural specialties) as a result of the negative and stereotypical image of people about vocational training due to the absence of professional culture and the moral value of work, in addition to the absence of prospective visions among participants in vocational training because of insufficient coordination and complementarities with educational and higher education systems as well as the absence of crossing points between vocational and educational systems as an embodiment for a lifetime vocational system.

Considering that employment represents one of the main challenges for the coming period, especially when it is related to reducing the unemployment rate and its intensity. In the coming period, we will work on the following guidelines:

- Continuing to support the traditional strategic sectors with high job opportunities,
- Encouraging investment in the new and promising sectors,
- Supporting the social and solidarity economy role,
- Pushing local and regional initiatives of employment,
- Integrating the parallel economy and the fragile employment within the structured economic cycle,
- Strengthening the supervision functions, supporting new promoters and ensuring the sustainability of the newly-established projects,
- Improving the educational, higher education and vocational systems performance and hing them to the labor market needs.

\(^1\) National Observatory of Employment and Vocational Training in collaboration with the International Labour Organization in 2014.
Housing and basic services

The housing sector is often described as a major and important contributor in human life. Tunisia has worked to ensure the provision of housing for all society groups especially for the social ones and to improve living conditions in popular neighborhoods. This is hereby made part of the national strategy for housing which has been formulated in 1988 and partly reviewed on several occasions.

In 2014, the Government, together with professionals, researchers in collaboration with the World Bank, participated in developing a new strategy for housing to diagnose the current situation and find relevant solutions to issues that have prevented ensuring adequate supply of social dwellings especially for limited-income people.

6.1- Slum upgrading and prevention

Diagnosis of the situation:

Informal neighborhoods in Tunisia are known as “popular neighborhoods”. They are characterized by their unstructured yet informal accommodation. They grow in number especially on the outskirts of big cities outside the legal construction range. An exception to that is the first generation of popular neighborhoods which have been built and subsequently integrated during the last century's sixties and seventies. These neighborhoods occupy inappropriate sites of construction because they have been built on agricultural lands or dangerous sites by limited-income social groups who depended on their private income and through self-construction. Those buildings basically lack infrastructure, services and the connection to basic networks making them urbanely and socially informal neighborhoods yet not integrated with their surroundings.

Programs and measures:

In Tunisia, informal neighborhood’s treatment processes went through several phases in deep ties with the followed economic and development policies and with urban transformations that the country has witnessed. This phenomenon has been treated depending on three phases:

-Phase of removing informal neighborhoods and re-housing (1956-1975): This policy was not successful because this approach requires a lot of funds that may overburden the country’s budget. This made removing and re-housing processes limited and insufficient. This led to the continued spread of informal housing as a result of continued and rapid urban growth on the one hand and the public sector inability to respond to low-income groups needs on the other hand.

-Phase of urban development projects for developing and equipping a limited number of great neighborhoods in big cities (1980-1992). This period was characterized by dependence on integrated, heavy, and manifold yet expensive interventions with dependence on foreign funds.

-Phase of urban development insertion as a permanent element of housing and urban policies (since 1992 to date): intervention was widely spread in most of Tunisian cities.

Many programs and projects have been approved and implemented. These programs concern popular neighborhoods rehabilitation and living conditions improvement inside them through developing them by renewing or expanding various basic infrastructure networks (roads, drinking water, sanitation, street lighting and rainwater draining), building facilities and...
collective public equipments (schools, clinics, sports centers, playgrounds, and green areas, etc.) and building economic and industrial spaces in addition to dwellings improvement.

Through these various national programs of popular neighborhoods (Urban Development Projects, Support program of Popular Neighborhoods in the Big Cities and the National Rehabilitation Program of Popular Neighborhoods) almost 1,110 popular neighborhoods were rehabilitated at an estimated cost of 625 MD for approximately 3.1 million people, which means more than a quarter of the country’s population who live in approximately 575 thousand dwellings.

Picture 6 : Farhat Hached neighborhood
Municipality of Mhammdia Fouchana - Tunis
Before intervention

Picture 7 : Farhat Hached neighborhood
Municipality of Mhammdia Fouchana - Tunis
After intervention

Picture 8 : Bokhzar neighborhood - Municipality of Sousse - Before intervention

Picture 9 : Bokhzar neighborhood - Municipality of Sousse - After intervention

The program of rehabilitation and integration of neighborhoods, programmed during the period starting from 2012 to 2018, is currently under implementation and it includes 120 popular neighborhoods at an estimated cost of 508 thousand dinars for approximately 685 thousand inhabitants who live in approximately 133 thousand dwellings. And this through rehabilitating approximately 970 km of roads and setting up 250 km of wastewater treatment pipes and approximately 150 km and rainwater disposal pipes, implementing about 20 thousand light poles, improving about 16 thousand dwellings, building 66 multidisciplinary halls (individual sports center and cultural, youth and associational space) and rehabilitating 54 stadiums and 42 industrial spaces within or near the concerned neighborhoods.
Table 6 - Popular neighborhoods rehabilitation programs that have been implemented or those under implementation

<table>
<thead>
<tr>
<th>Program</th>
<th>Number of neighborhoods</th>
<th>Program cost (M.D)</th>
<th>Number of beneficiaries (Thousand)</th>
<th>Number of dwellings (Thousand)</th>
<th>Elements</th>
</tr>
</thead>
</table>
| Urban Development Program 1980-1992 | 35 | 52 | 190 | 26 | - Infrastructure and collective facilities (schools, clinics)  
- Developing plots - Rehabilitation and renewal of Hafsia neighborhood in Tunis |
- Housing improvement |
| Program of rehabilitation and integration of neighborhoods 2012-2018 | 120 | 508 | 685 | 135 | - Infrastructure: roads, sanitation, rainwater draining, public lighting, collective equipment, handicrafts zones and industrial spaces.  
- Housing improvement |

(Rehabilitation and Urban Renewal Agency. 2015)
Results:

The national rehabilitation programs of popular neighborhoods have permitted to:
- Improve urban services and housing conditions.
- Integrate popular neighborhoods within their urban surroundings.
- Improve sanitation environment in neighborhoods (removing sewers- black wells)
- Reduce the population growth through increasing the number of dwellings, improving their quality and removing the inadequate ones.
- Regulate the real estate situation of neighborhoods encouraging families to improve their dwellings by themselves.
- Insert economic mobility and intensify activities inside neighborhoods which led to small handicrafts activities development.

Despite the multiple positive effects of urban rehabilitation programs and the important successes reflected in living and housing conditions improvement in many neighborhoods in various country regions, these interventions need to be developed in order to avoid imperfections through:
- Empowering communications with people and adopting the participatory methodology to sensitize them about the importance of a sustainable urban construction. Promoting coordination among all stakeholders in the programs that are often based on purely sectorial interventions,
- Intensifying interventions related to employment and productive activities mainly because completed projects have not managed to reduce the unemployment rate in popular neighborhoods.

Suggestions to prevent informal neighborhoods formation

It should be noted that the urban rehabilitation policy in Tunisia focused on the informal housing treatment side rather than the preventive side. As a consequence, there is practically no limit to these informal neighborhoods formation and thus they continue to spread, especially with the continuing variance between the increasing pace of population growth and migration on the one hand and economic growth and big cities limited ability to provide job opportunities on the other hand.

Therefore, urban lands prices must be controlled in order to meet limited income social groups’ needs of developed plots. Land developers must be encouraged to double their productivity of social dwellings rather than merely produce luxurious dwellings. This also requires the regular updating of urban development plans because this would allow more spaces and allotments for social housing projects.

6.2- Improving access to adequate housing

Diagnoses of the situation:

The provision of adequate housing for all social groups represents one of the most basic priorities of housing and construction policy in Tunisia since the previous decades. This helped to improve housing quality in general through removing primitive dwellings and finding several mechanisms to finance housing. In addition to the private housing programs such as The National Program of Eliminating Rudimentary Lodgings, The National Fund for Housing Improvement and the Social Housing Promotion Fund (see title 5.2), the country initiated after the revolution a new housing program towards low and middle-income groups in 2012 which is “Specific Program for Social Housing” and consists of two elements:

- **The first element**: Removing primitive dwellings and replacing them with new dwellings, repairing, or expanding the old ones; This element is for social groups who live in a primitive dwelling that lacks adequate facilities and does not respond to the minimum health and technical specifications like huts, over-populated blocks and falling dwellings. The social groups, who are nominated to benefit from this program, are arranged according to the following criteria: the dwelling state, the family’s monthly income, registration in needy families list, the number of handicapped in the family, the number of children and relatives in charge.

  This element completion is financed by the Government budget with credits amounted to almost 200 million dinars. Eight thousands and nine hundred nineteen beneficiaries were counted with an estimated cost of 193 million dinars.

- **The second element**: Implementing social housing projects and developing plots for limited income groups: The second element of the program aims to provide about 20 thousand social dwellings for limited income families with an estimated cost of 1,000 million dinars. Lists of these families have been adjusted through a call

---

52 - Adequate shelter means more than a roof over one's head. It also means adequate privacy; adequate physical accessibility; adequate security; security of tenure; structural stability and durability; adequate lighting, heating and ventilation and adequate facilities.
for application in all governorates where 123 thousand demands were registered. Public land developers were assigned to implement 3,400 dwellings with an estimated cost of 180 million dinars where private land developers will be assigned to implement 4,650 dwellings with an estimated cost of 248 million dinars. Moreover, 139 individual social dwellings were completed in Tebourba and Manouba and 972 dwellings have been launched over several governorates. Social plots will be developed and provided. Private real estate will also be purchased in order to provide a real estate stock for the program.

Generally speaking, what could be noticed in relation to the housing production is the sector’s maintaining of its vitality over the past twenty years where the quantitative indicator of achievement remains in a remarkable level at a rate of 7 dwellings per thousand people in a period of one year, the same indicator that has been registered in 1996. In terms of quality, it varies depending on the achievements’ methods and content and what resulted in terms of the existing housing stock’s characteristics level.

For achievement methods, they are divided into two groups:

- Organized construction through land developers (public and private): 22% of the total housing production.
- Authorized self-construction by households: 78% of the total.

Note that the unauthorized construction, or the informal one, represents about 38% of the total annual housing production.

Picture 10 and 11: Examples of new neighborhoods implemented by land developers

Table 7 - Authorized housing production according to actors 1997 - 2006 – 2014

<table>
<thead>
<tr>
<th>Year</th>
<th>Households</th>
<th>%</th>
<th>Private promoters</th>
<th>%</th>
<th>Public promoters</th>
<th>%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1997</td>
<td>31,256</td>
<td>82.8</td>
<td>3,959</td>
<td>10.5</td>
<td>2,555</td>
<td>6.8</td>
<td>37,770</td>
</tr>
<tr>
<td>2006</td>
<td>38,889</td>
<td>78.3</td>
<td>8,645</td>
<td>17.4</td>
<td>2,150</td>
<td>4.3</td>
<td>49,684</td>
</tr>
<tr>
<td>2014</td>
<td>30,836</td>
<td>75.5</td>
<td>8,814</td>
<td>21.6</td>
<td>1,180</td>
<td>2.9</td>
<td>40,830</td>
</tr>
</tbody>
</table>

(Source: Housing General Directorate - 2015)
In terms of dwellings quality, the rate of individual dwellings is still heading the total varieties of housing units as shown in the figure 12. In addition, the number of dwellings improved in the last twenty years as a result of one-bedroom-dwelling decrease from 14% in 1994 to 4.3% in 2014 and the increase of three-room-dwellings from 30.5% in 1994 to 46.3% in 2014 as shown in figure 15.

**Graph 14 - Distribution of dwellings by type**

For many households, it is noted that the total number of completed dwellings is always higher than households’ number as shown in the following table:

**Table 8 - Statistical data about dwellings and households 1994-2004-2014**

<table>
<thead>
<tr>
<th>Year</th>
<th>1994</th>
<th>2004</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dwellings number</td>
<td>1 865 522</td>
<td>2 500 830</td>
<td>3 289 903</td>
</tr>
<tr>
<td>Households number</td>
<td>1 704 185</td>
<td>2 185 839</td>
<td>2 712 976</td>
</tr>
<tr>
<td>The rate of households that own their dwellings</td>
<td>78.3%</td>
<td>77.4%</td>
<td>78%</td>
</tr>
</tbody>
</table>

**Graph 15 - Distribution of dwellings by rooms’ number**

However, despite these obvious excellent results, the sector witnessed many difficulties over the last twenty years. Those ones manifested themselves in informal neighborhoods’ growth, the aged and deteriorated existing housing stock and the dramatic rise of dwellings for sale prices. The possibility of purchasing a new house is no longer limited income groups’ problem but middle-income groups’ one as well.

➢ *Suggestions and future challenges*

- Striving to provide land reserves for social housing.
- Integrating dwellings’ cost by reducing the building materials cost and construction expenses.
- Developing construction methods and using modern technology to provide social housing at the lowest possible cost.
- Reviewing laws and facilitating the administrative procedures to activate leasing mechanism and benefit from previous experiences;
- Inserting the social plots developing and the programs of Rehabilitation and Urban Renovation Agency within the development plans;
- Activating the partnership between the public and private sectors and implementing integrated urban and housing projects in which there are all favorable conditions for adequate living.

**6.3- Ensuring sustainable access to safe drinking water**

The national stockpile of water resources is estimated at 4,875 million m³, 55% of which is derived from the surface water and 45% of the groundwater. However, this stockpile is currently exposed to heavy exploitation especially for the surface water which daily exploitation indicator rises from 81% in 1980 to 114% in 2010. This
encourages to keep these resources and to draw attention
to the negative impacts in case this over exploitation
will continue as a result of various economic activities
development.
Tunisia succeeded to provide urban areas with full
amount of drinking water in the field of safe drinking
water. The national connection rate to the drinking water
network also increased from 69.1% in 1994 to 83.4 % in
2004 to reach 88.1% in 2014.

Issues:
The water resources shortage represents one of the
most important problems that impede the sustainable
access to drinking water. As a consequence, the country
is yearning to mobilize the necessary water resources in
order to maintain balance between supply and demand,
which is likely to break down in 2030 where demand
for water will exceed the available traditional resources
making it imperative to resort to the untraditional
resources exploitation like sea water desalination.

In addition, the dry desert climate in the South of
the country necessitated the exploitation of deep water
resources which is characterized not only by its saltiness
(more than 2 g/l) but also the surface water which is non-
renewable, resulting in negative effects on this region,
especially with the increasing demand for high-quality
drinking water.

Suggestions and future issues:
To avoid negative impacts of impure drinking water,
we will work on:
- Developing management activities of health risks of
drinking water through the implementation of a remote
observation system in Tunis. This system will enable a
regular supervision of distributed drinking water quality
which allows a quick intervention in order to avoid the
drinking water exploitation in case it does not comply
with the specifications of physical-chemical and bacterial
side.
- Developing the use of untraditional resources by
adopting sea water desalination for major urban centers
of coastline and saline groundwater desalination in the
South and Center areas.
- Encouraging the private sector to invest in that field
in partnership with the public sector.
- Improving the quality of drinking water and reducing
salt in it to the limit of 0.5 g/l.

6.4- Ensuring sustainable access to basic sanitation
and drainage
Tunisia has made a remarkable progress in the field of
health and in the elimination of many infectious diseases.
Deaths from infectious diseases, which represent a
source of concern to the public health officials like
(H1N1 Pandemic, Bird Flu Pandemic, Swine influenza,
Corona and Ebola Virus), have declined thanks to the
generalization of vaccination programs for children,
improving the health protection level for people and
developing the connection rate to drinking water and
sewerage networks. In addition, the evolution, which is
recently recorded in zoonotic diseases and those spread
by insects and pests, may be triggered by environmental
problems and climate change. The conditions remain
favorable for the development of waterborne diseases
in rural areas. More than one family out of six is still
deprieved from the connection to sewerage networks.
We notice from the statistical data 1994-2014 that rates
of connecting dwellings, in urban areas, with electricity
and drinking water networks are constantly improving
(Table 9).

Even though the connection rates to the sewerage
network maintained the same evolution pattern, they still
differ according to regions: 18.3% in Sidi Bouzid, which
is the least-connected with sanitation network while that
rate reaches 91.3% in Tunis.

The National Sanitation Utility is now intervening in
60% of all municipalities that accommodate about 87.5%
of the urban population. Some cities, which population
exceeds 10 thousand, are still not covered by the National
Sanitation Utility which requires planning alternative
technical methods of sewerage to improve sanitation
condition in these cities.

The connection to the sanitation network in urban
areas is expected to reach 90% in 2020 compared to 78%
now.

55 - According to the orientation note of the development plan 2016-2020 - Tunisia September 15th,2015
56 - the orientation note ( The same source)
57 - Orientation document of the development plan 2016-2020 – Tunisia September 15th,2015
Map 13 - Rates of sewerage network connection in urban areas of the governorates 2014
Table 9 – The connection rates of dwellings to networks in urban areas during the period of 1994-2014

<table>
<thead>
<tr>
<th>Year</th>
<th>1994</th>
<th>2004</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rate of connectivity to the electricity network</td>
<td>85.9</td>
<td>98.9</td>
<td>99.8</td>
</tr>
<tr>
<td>Rate of connectivity to the drinking water network</td>
<td>69.1</td>
<td>83.4</td>
<td>88.1</td>
</tr>
<tr>
<td>Rate of connectivity to the sewerage network</td>
<td>59.8</td>
<td>75.4</td>
<td>78.0</td>
</tr>
<tr>
<td>Tunis</td>
<td></td>
<td></td>
<td>91.3</td>
</tr>
<tr>
<td>Sidi-Bouzid</td>
<td></td>
<td></td>
<td>18.3</td>
</tr>
</tbody>
</table>

Source: National Institute of Statistics (General Census of Population and Housing 1994-2014)

➢ The provision of health services

The health facilities are currently covering all of the country’s regions thanks to the implementation of the basic health centers (2,085), university hospitals, centers and specialized institutions (29 institutions), regional hospitals (33 hospitals), and local ones (109 hospitals) in addition to private clinics (81 clinics) in all conurbations. These equipments have enabled to improve medical services level provided to citizens especially in urban areas. Moreover, the indicator of the number of people per doctor went through a significant improvement over the past twenty years; from 1,600 people/doctor in 1994 to 785 people/doctor in 2014.

Table 10 – Infrastructure of primary health care indicators and technical-medical equipments in 2014

<table>
<thead>
<tr>
<th>Indicators</th>
<th>On the national level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of people per doctor in frontlines</td>
<td>785</td>
</tr>
<tr>
<td>Number of people per primary health care center</td>
<td>5,174</td>
</tr>
<tr>
<td>Number of beds (public sector + private) per 1,000 people</td>
<td>2.1</td>
</tr>
<tr>
<td>Number of radiation detection devices per 100,000 people</td>
<td>2.09</td>
</tr>
<tr>
<td>Number of dental chairs per 100,000 people</td>
<td>3.55</td>
</tr>
<tr>
<td>Number of analysis units per 100,000 people</td>
<td>1.77</td>
</tr>
</tbody>
</table>

➢ Future challenges and issues:

The most important challenges for the coming period in the health care field are basically relating to improving healthcare services which decline has became a source of concern for many parties. In addition to this problem, the country’s priorities for the next decade in the healthcare field are about gaining the ability to succeed in:

- Supporting health control programs of environmental factors affecting public health like The National Program for Prevention of Aquatic Diseases, The National Program for Prevention from Food Borne Diseases, Vector Control Program, and Environmental Health Programs.

- More development of hospitals and healthcare institutions to efficiently meet the sustainable development concept in the field of efficient management of hospital waste.

- Supporting health education programs especially those relating to the environmental health towards schoolchildren, women, neighborhood committees and agricultural development groups in rural areas.

- Encouraging epidemiological studies to monitor the impact of environmental contaminants on health in Tunisia and setting targets to improve environmental health.
6-5- Improving access to clean domestic energy

All urban dwellings and most rural dwellings enjoy electricity services while two thirds of households enjoy energy services for daily activities such as cooking and partly for heating. These energy services have been provided from the traditional fossil energy sources because renewable energy sources do not exceed 3% of energetic mixture adopted in Tunisia. These services concern the exploitation of solar energy that is mainly used for solar heating and wind energy which is used for generating electricity. The National Solar Water-Heating Program in the housing sector succeeded in implementing 750,000 m² of solar panels in the housing sector during the period of 2005-2014. A target was set up to reach 3.2 million m² in 2030 within the national strategy for developing renewable energies.

For this purpose, a financing integrated mechanism was implemented especially in the housing sector and is working on:
- Facilitating grants accorded through the National Agency for Energy Conservation of two hundred dinars (TND 200) for the 200 liters solar water-heater the collector area of which is included between one square meter (1m²) and three square meters (3m²), and a grant of four hundred dinars (TND 400) for the 300 liters solar water-heater the collector area of which is included between three square meter (3m²) and seven square meters (7m²).
- Granting loans with soft interest rates for those who are going to purchase the solar water-heaters, which cover an important proportion of their cost, and these loans will be retrieved over 5 years through electricity bills.

The number of photovoltaic, relating to the national electrical supply network (low tension) and installed during the period 2010-2014 in housing sector, reached about 1,600 devices with a total tension of 15 thousand kilowatts. The number of photovoltaic marketing and implementing companies have grown to reach a total amount of 137 companies, 78 companies of them were active in 2014.
In parallel, improving access to clean domestic energy requires:
- Reviewing the strategies related to energy based on renewable and more efficient energies, on the one hand, and working to find transformation alternatives for renewable energies projects, on the other hand.
- Promoting awareness and environmental behavior in order to rationalize the use of energy.
- Encouraging green building construction which economizes energy.
- Supporting scientific research in different fields of energy, especially the renewable energy and the dissemination of successful experiences in this field.
- Encouraging cooperation with foreign scientific institutions to implement training programs for professionals in the fields of renewable energy.

6.6- Improving access to sustainable means of transport

Despite the great progress that has been made in paving roads, opening highways, provide airports and railways and the significant development in transport fleets number, meeting the population needs for means of transport is still insufficient as much as most of the people use their private means. In addition, 68% of the total population uses their private means (private car, bike, or motorcycle) while 32% uses public means of transport (bus, train or subway)\(^{58}\).

Graph 19 - Means of transport used in 2014

Following the basic principles of a sustainable transport, the central and local authorities must meet the significant challenges in the coming period to overcome the obstacles which the field of transport suffers from in Tunisia like the low quality of transport services at all levels and in all sectors as a consequence of the absence of a well-developed policy in this field which is suitable for the development of the population’s needs, their way of living and ambitions. The relative high rate of traffic accidents and especially deadly ones, are among the most prominent indicators of great fluctuations which the transport system, as a whole, suffers from and which is caused by the citizen’s behavior, the roads and paths quality, and the weak supervision. Statistics\(^ {59}\) show that the deaths number over the last ten years (2004-2014) is still high reaching 1,500 victims/ year and recorded a relative peak of killing accidents after they rarely occurred in the past.

These challenges are about gaining the capacity in:
- Inserting the urban transport and the sustainable means of transport element within urban planning and taking into consideration this element as a basic and important component when setting up the urban and detailed management plans,
- Programming the roads implementation and save paths for bikes when preparing the urban planning documents.
- Coordination between the neighboring municipalities concerning the urban transport.
- Rationalizing transport among cities.
- Developing sustainable transport systems especially public ones in order to reduce the adverse environmental effects resulting from the use of vehicles using traditional fuels.
- Reducing the use of private cars and using «Cooperative transport» in order to reduce air pollution resulting from carbon dioxide emissions.
- Encouraging pedestrian traffic, facilitating their movement inside cities through the allocation of appropriate spaces for them and freeing sidewalks as an application for the pamphlet “Drive less, Walk more”.
- Providing transport services and easy access to public transport facilities.
- Improving urban services through which the population needs could be met.

---

58 - Source: National Institute of Statistics - the general census of the population and housing 2014 (modified)
59 - The National Road Safety Observatory – Statistics of 2014
### Indicators

<table>
<thead>
<tr>
<th>Number</th>
<th>Indicators</th>
<th>2000</th>
<th>2005</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>The percentage of people who live below the poverty line</td>
<td>32.4</td>
<td>23.3</td>
<td>15.5</td>
</tr>
<tr>
<td>02</td>
<td>Percentage of urban population with access to adequate housing</td>
<td>97.3</td>
<td>99.4</td>
<td>99.7</td>
</tr>
<tr>
<td>03</td>
<td>Percentage of people residing in urban areas with access to safe drinking water</td>
<td>69.1</td>
<td>83.4</td>
<td>88.1</td>
</tr>
<tr>
<td>04</td>
<td>Percentage of people residing in urban areas with access to adequate sanitation</td>
<td>59.8</td>
<td>75.4</td>
<td>78.0</td>
</tr>
<tr>
<td>05</td>
<td>Percentage of people residing in urban areas with access to regular waste collection</td>
<td>-</td>
<td>-</td>
<td>75.0</td>
</tr>
<tr>
<td>06</td>
<td>Percentage of people residing in urban areas with access to clean domestic energy (renewable energy)</td>
<td>-</td>
<td>-</td>
<td>0.5</td>
</tr>
<tr>
<td>07</td>
<td>Percentage of people residing in urban areas with access to public transport</td>
<td>-</td>
<td>-</td>
<td>25.4</td>
</tr>
</tbody>
</table>

#### Level of effective decentralization for sustainable urban development measured by:

<table>
<thead>
<tr>
<th>Number</th>
<th>Indicators</th>
<th>2000</th>
<th>2005</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>08</td>
<td>1- Percentage of policies and legislation on urban issues formulated by local and regional authorities</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td></td>
<td>2- Percentage of share income and expenditure allocated to local and regional authorities from the national budget</td>
<td>Not available</td>
<td>Not available</td>
<td>36.3</td>
</tr>
<tr>
<td></td>
<td>3- Percentage share of local authorities’ expenditure financed from local revenue</td>
<td>Not available</td>
<td>Not available</td>
<td>4.0</td>
</tr>
<tr>
<td>09</td>
<td>Percentage of city, regional and national authorities that have implemented urban policies supportive of local economic development and creation of decent jobs and livelihoods</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>10</td>
<td>Percentage of city and regional authorities that have adopted or implemented urban safety and security policies or strategies</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
</tr>
<tr>
<td>11</td>
<td>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</td>
<td>Not available</td>
<td>35.0</td>
<td>47.0</td>
</tr>
<tr>
<td>12</td>
<td>Share of national gross domestic product (GDP) that is produced in urban areas (M.D)</td>
<td>17,249.1</td>
<td>38,838.6</td>
<td>80,816.0</td>
</tr>
</tbody>
</table>

---

61 - There are no slums in Tunisia but some popular neighborhoods that are not necessarily poor.
Conclusion

Through assessing the National Action Plan achievements planned for the Second United Nations Conference on Human Settlements 1996-2014, we could notice the remarkable progress made in achieving the target of a “sustainable urban development and the obstacles faced by the central and local authorities that failed to overcome some of them despite efforts. The assessment showed the existence of new challenges in Tunisian cities’ management and development especially in large ones like Tunis, Sfax, Sousse, Gabes and Kairouan. Those challenges resulted from various factors, most notably the economic growth decreasing pace, development policies and urban legislations which do not keep in pace with the increasing urban population needs and their aspirations to a better life. These challenges led to the emergence of difficulties and issues such as; the inability to find a real estate stock for urbanization and especially for providing an adequate social housing for low and middle income social groups and limiting the sprawl of cities at the expense of agricultural lands on the one hand, and the growing phenomenon of poverty, unemployment and crime and the influence of all of these on the urban life quality, on the other hand.

The stakeholders (administration, civil society, private sector) take the initiative to deal with the problematic issues and identify the future issues of urban development within their priorities. This is reflected through the orientation note for the next plan (2016-2020) and the National Committee for Habitat III agenda where all the concerned parties agreed on a future National Action Plan which could be addressed as a “New Urban Agenda” for Tunisian cities. This agenda has been formulated on the basis of what had been stated in the sustainable development goals approved by the General Assembly of the United Nations on September 25th, 2015 and especially the goal no.11 relating to the cities. This goal paved the way for strategic orientations and periodic goals which cover the period 2016 – 2030.

The New Urban Agenda is represented in the following orientations:

1. Enhancing access to an adequate dwelling with a reasonable cost that is suitable for limited and middle income social groups’ capacities.

2. Supporting the protection and revival efforts of cultural and natural heritage and the old towns and city centers maintenance in order to save them from the risk of neglect and deterioration.

3. Ensuring the access to drinking water, sanitation services and clean energy with the required quality for all groups, neighborhoods and especially popular neighborhoods.

4. Improving the use of resources and the efficient management of lands and increasing social plots production which may limit the informal sprawl of cities.

5. Reducing the pollution level and the negative impacts of economic and social activities on the ecological environment.

6. Fighting poverty, unemployment and crime by enhancing the adequate job opportunities and supporting the local development programs with high employability capacity.

7. Encouraging the local and regional active parties to develop a positive social and environmental relationship between the urban, semi-urban and rural areas by depending on urban and territorial management plans for the purpose.

8. Enhancing the sustainable urbanization processes and increasing the local authorities’ capacities of participatory urban planning and management in order to implement cities and conurbations for everyone.
9. Improving the urban transport services and enabling all people to use safe, clean and sustainable means of transport.

10. Mitigating risks and natural disasters that increased during the last period taking into account climate changes.

The Habitat III National Committee promised to work on the implementation of all of what have been mentioned in the themes of this agenda starting from the formulation of a new urban policy – “The City Policy” and the review of development and housing laws currently in force in order to support and involve the efforts of local communities and stakeholders in improving urban development and life qualities in Tunisian cities. In addition, the planned actions to be done are also an opportunity to embody the new principles mentioned in the Constitution of January 2014 which cover cities and decentralization, good governance and local democracy principals.
CASE STUDIES

These studies may concern a certain number of pilot projects carried out on the national territory and which respond to the sustainable development principles. These studies had a positive effect on the economic and social conditions of people by improving their living quality, including in particular:

I. PROMOTION PROGRAM OF POPULAR NEIGHBORHOODS IN BIG CITIES (2007-2009)

II. THE PROJECT OF CLEANSING THE NORTHERN LAKE OF TUNIS

III. THE PROJECT OF THERMAL REGULATION IN NEW BUILDINGS IN TUNISIA
I. Popular neighborhoods promotion program in the big cities (2007-2009)

I.1- Program objectives:

The Promotion program of Popular Neighborhoods in Big Cities was a quantum leap in the field of improving the living conditions and the rehabilitation of popular neighborhoods programs. It was characterized by comprehensiveness, integration and complementarity in the light of a leading development strategy which the equilibrium between the economic and social dimensions is one of its main basics. It was also characterized by the combination between further implementation of the housing strategy with the outstanding social dimension and the development and diversification of intervention elements together with the basic infrastructure and public facilities in order to create income resources and job opportunities. The Promotion program of Popular Neighborhoods in Big Cities' objectives involved the improvement of people' living conditions and working on the social and urban integration of popular neighborhoods surrounding big cities in their urban context through:

- Rehabilitating or extending the basic infrastructure networks (roads, extending the wastewater treatment pipes, rainwater draining pipes and generalizing street lighting).
- Building collective facilities and equipment (green areas, playgrounds, individual sports centers, and neighborhoods' stadiums).
- Improving housing, embellishing facades and improving the dwellings sanitation conditions.
- Creating dynamism for the economic development through building economic and industrial spaces and through enhancing productive activities, handicrafts areas, employment and training in the concerned areas depending on the available skills and capacities in the intervention area and in the local and regional environment.

I.2- Elements of the program:

The achievements represented in the framework of this program are:
- Extending about 326 Km of roads.
- Extending about 70 Km of wastewater treatment pipes.
- Extending about 17 Km of rainwater draining pipes.
- Implementing about 3900 street lighting points.
- Developing 24 stadiums in the neighborhoods and building 17 individual sports centers.
- Rehabilitating 16 green spaces
- Building 16 handicrafts areas and an industrial space.
- Improving 3254 Dwellings.
At the level of the productive activities and employment which basically aimed to promote employment, reduce unemployment; improve the individual income and the economic conditions inside the beneficiary neighborhoods, many procedures were held in the framework of this program:
- Financing 670 projects especially for handicrafts.
- Financing 1,575 projects for developing micro jobs by The Tunisian Solidarity Bank.
- Giving 2,765 micro loans.
These activities enabled to create 7,148 job opportunities distributed among the neighborhoods concerned with the intervention.

I.3 Geographical distribution of projects:
The program included the development of 26 neighborhoods distributed over 15 governorates, 14 of those neighborhoods are in Great Tunis (Tunis, Ariana, Ben Arous and Manouba) and 12 neighborhoods in 11 other governorates (Bizerte, Beja, Nabeul, Sousse, Sfax, Medenine, Kef, Jendouba, Kairouan, Siliana and Zaghouane). The whole area of the concerned neighborhoods reached about 1048 ha while the beneficiaries’ number of this program was 166 thousand people accommodated in about 32 thousand dwellings.
I.4 Costs of the program:

The cost of the program amounted to approximately 101.9 MD, distributed as follows:
- Infrastructure: 62.9 MD
- Collective equipment: 16 MD
- Housing improvement: 3 MD
- Productive activities and employment: 20 MD

I.5- Stakeholders and the implementation process:

In order to coordinate efforts between different stakeholders at the level of various intervening sectors and structures and on the central and regional level whether it is concerned with the program realization or in relation to its implementation and supervision, a committee was established that included the relevant sectors and stakeholders. All of the intervening parties in this program were centrally and regionally enlisted to ensure its success, especially:

- The Tunisian National Solidarity Fund (The project owner).
- The Ministry of Equipment, Housing and Land Use Management represented by The Rehabilitation and Urban Renovation Agency: The project associate who took in charge the infrastructure, collective equipments and housing improvement elements.
- The Ministry of Development, Investment and International Cooperation represented by The Regional Development General Commission: preparing feasibility studies of handicrafts areas, carrying out economic and social surveys to identify the beneficiaries of the employment programs and supervising the productive activities and employment.
- The Ministry of Finance: Transferring the credits allocated for the program entitled to the infrastructure and collective equipments.
- The Ministry of Social Affairs: preparing social research for housing improvement.
- The Ministry of Environment and Sustainable Development: Preparing technical studies of green areas and implementing them in Great Tunis governorates (Tunis, Ariana, Ben Arous and Manouba).
- The Ministry of Youth and Sports: Contributing to the finance of neighborhoods' stadiums and the implementation of individual sports centers and neighborhoods' stadiums.
- The Ministry of the Interior Affairs (Municipalities and Regional Councils): Providing the necessary real estate for collective equipments and receiving attributes in order to exploit them.
- The National Handicrafts Office and Development Organizations: Financing Handicrafts projects.
- Contractors and engineering offices: preparing studies and implementing construction after concluding contracts with the project associate.

At the level of projects implementation, the Rehabilitation and Urban Renewal Agency was delegated by The National Solidarity Fund and the relevant ministries to implement the infrastructure, equipments and buildings. The Regional Councils, in coordination with the The Regional Development General Commission and other relevant structures, were assigned to activate mechanisms in order to create small projects and provide income resources. This program implementation was characterized by adopting exceptional procedures. In addition, the credits were available and flexible and this was an important asset that helped to respect the implementation deadlines.

Institutional and Financial Structure

Element : activities and Employment

Infrastructure Element

Contry's budget and other Sources of Financing

The Regional Development General Commission

The National Solidarity Fund

The Ministry of Environment and Sustainable Development

The Ministry of Youth, Sports and Physical Education

The National Fund for Housing Improvement

Ministerial Leadership Committee

Rehabilitation and Urban Renovation Agency

Credits

Bénéficiaires : micro crédits Micro business Handicrafts

- Contractors
- Engineering offices
- Public utilities

Contracts

Agreement

Agreement

Agreement

Agreement
I.6 – Program Completion Period:

The implementation of the program was divided into three parts during the period (2007-2009), distributed as follows:
- Part 2007: Included the development of 10 neighborhoods spread over 8 governorates (Tunis, Ariana, Ben Arous, Manouba, Bizerte, Nabeul, Zaghouane, and Sousse).
- Part 2008: Included the development of 08 neighborhoods spread over 7 governorates (Tunis, Ariana, Ben Arous, Kairouan, Beja, Sfax, and Medenine).
- Part 2009: Included the development of 08 neighborhoods spread over 4 governorates (Tunis, Kef, Jendouba, and Siliana).

I.7- Evaluation of the program:

The Support program of Popular Neighborhoods in Big Cities has achieved an important success in addition to the importance of quantitative recorded achievements which had been targeted by the program. These achievements proved that this program had reached its goals on many levels; improving living conditions of people, improving the economic development and employment, improving the overall image, improving the environmental condition of the concerned neighborhoods and integrating them socially and economically within their urban surrounding. The achieved successes could be summarized as follows:

- **Living and Sanitation improvement level:**
  - Integrating the popular neighborhoods within the big cities urban texture, breaking its isolation and making the access to and the transport inside them easy which helped facilitate the public transport to educational and health institutions.
  - Improving the connection to the network of drinking water and rainwater draining and solving problems related to the rainy seasons (water stagnation, floods, too much mud, bad smells, and dwellings isolation...).
  - Improving health conditions of people by eliminating the diseases caused by the use of stagnant water and saving water resources from the population resulting from waste and polluted water.
  - Facilitating the intervention of municipalities' sanitation services through household waste collection and removal.
  - Motivating people to rehabilitate and improve their dwellings and supporting self-construction which contributes to improve dwellings’ facades inside neighborhoods.

- **At the economic and social level:**
  - Establishing a socio-economic dynamism inside neighborhoods through productive activities development, small business growing number, attracting small investors, developing services sector and implementing telecommunications networks.
  - Enhancing the sense of security and crime rates decline inside neighborhoods as a result of security procedures support, in addition to the provision of additional working hours for small traders especially in winter thanks to public street lighting.
  - The established collective equipments contributed to enhancing people collective life. Moreover, the individual sports centers and neighborhoods’ stadiums led to framing youth within specialized sports clubs and providing the appropriate space for practicing entertainment and sports activities. In addition, green areas and children’s entertainment spaces represented a place of entertainment and where people, from different neighborhoods, can meet. They were also a space to teach children proper environmental behavior and the sense of community and where people become more sensitized to the environmental issues and the dangers that threaten the environment.
  - The contribution of handicrafts and commercial activities in improving the sources of income for some households, which helped to change the pattern of consumerism and the emergence of new social and economic classes and reduce the feeling of poverty and social marginalization.
  - Improving integration into modern life and strengthening social cohesion between people.
  - Real estate and land value appraisal inside neighborhoods as a result of their living conditions improvement.
II. Project of cleansing and restoration of the northern Lake of Tunis

II.1- The project goals:
The project of cleansing the northern lake of Tunis aimed primarily to:
- Rehabilitation of the Northern Lake of Tunis which has been long used as a dumping area for waste water and rain water coming from the capital northern neighborhoods.
- Contributing to the redirection of urban sprawl movement, which Tunis is witnessing, towards the central axis of the city which helped saving the agricultural lands, located in the city’s surroundings (El Ahouaz), as much as possible.
- Paving the way to an ordered and harmonious development of the capital urban sprawl through establishing a new city.

II.2- Tunis Lake condition before the project:
- The surrounding deterioration and the ecological situation degradation drainage basin.
- The accumulation of mud, waste and stagnant water.
- Spread of bad smells.

The condition of northern Lake of Tunis before intervention

II.3- The project:
- Cleansing the lake’s drainage basin, removing waste, improving the water quality and rehabilitating its banks. After these works and as a direct consequence to them, the water of the northern lake becomes pure and naturally renewable depending on tide movements. Fully renewing water process requires a period of time between 17 and 24 days. The lake becomes a pole where marine sports are held on the national and international levels.
- Composing a real estate stock of 1327 Ha (500 Ha of which were buried as a part of cleansing framework) to absorb urban development operations and real estate development.
- Rehabilitating Les Berges du Lac area.

It is expected that Les Berges du Lac area (1327 Ha) rehabilitation will enable to set an urbanization program aiming to establish about 11.7 million m² of constructed spaces:
- 5.85 million m² allocated to housing (providing 33500 dwellings)
- 5.85 million m² allocated to offices, activities and services areas, and public and sports services.

It is expected that the Lake’s project will enable to provide about 140 thousand job opportunities.
II.4  The project realization:

- The project of cleansing the northern lake of Tunis is considered to be one of the first projects in Tunisia for the successful partnership between the public sector (The Tunisian Republic) and the private sector (Dallah Al-Baraka group – Saudi Arabia).
- The Lake has been cleansed over 30 years (1989-2009), repairing its banks and developing 7 plots of 471 ha.
- Two hundred and fifty two Ha were yielded in order to implement an integrated urban project (Tunis Sports City) which is based on academies, sports spaces in all kinds of sports implementation and housing, administrative, commercial, tourist, and leisure complexes establishment.
- The overall completed investments within the project framework are about 515 Million Dinars.
- The area is going to be gradually developed during the period (2016-2030).

The condition of northern Lake of Tunis after intervention

- The development of the north west and south west extension which adds a strategic dimension to its developmental plan. Regarding the area's importance, a strategic study was conducted to guarantee an integrated development to the area with its both urban surrounding and water body. A master plan was set through this study and it is currently being developed in the form of a detailed development plan and divisions.

A model of the North East and South West Area Project

- The last part of the North East area management:
  - The division of Minaa neighborhood (62 Ha) in La Goulette: it represents the only sprawl for La Goulette area.
  - The division of Aamal neighborhood (14 ha) in La Goulette: it is going to be allocated for various services activities relating to businesses.
  - Amusement park (106 ha): in the buffer zone of Tunis–Carthage Airport which is a muddy area that is going to be developed gradually because of the land's nature.

A model of the North East project
The development and animation program of the water body:

In parallel with the lake's banks development, a development plan of the water body was prepared. It included a development plan which contains 24 projects with entertainment, sporting and cultural nature that have been programmed on the short, medium and long term, according to the lake's banks urban development. Among the projects which accomplishment has been launched: a project of a fixed floating restaurant, a project of water surfing center, a project of an aqua space across the island of Chikli...

II.5- Evaluation: Success elements of the project

-Among the project's elements of success we particularly mention:

-Strong determination to win the ecological challenge and the bet on the region's development.
-Equal contribution between partners (to share risks and benefits)
-Adoption of the international standards in implementation and management including:
  - A management system that relies on high qualifications and on transactions' transparency.
  - A funding system based on Islamic financial mechanisms.
-Adoption of the lake's phased development, according to the potentials and needs.
-Achieving positive increasing productivity during the implementation and development progress.
III The project of thermal regulation in new buildings in Tunisia

III.1- The Project goal:

Given the situation of the energy deficit that Tunisia is facing since the years two thousand and the proliferation of high energy-consuming buildings because of their non-adaptation to the country’s climate particularities, the poor thermal quality of their envelopes and energy inefficiency of their technical equipment, it became necessary to move towards a sustainable building, eco-friendly and energy and water saving. In order to promote the construction of sustainable buildings, the Tunisian Government started in 1999 the establishment of a thermal regulation for new buildings which aims to:

- Improve the thermal comfort inside new buildings
- Reduce energy consumption in these buildings,
- And reduce, accordingly, emissions of greenhouse gases due to the use of fossil fuels in these buildings.

and this through:

- The adoption of architectural design adapted to the climate,
- The use of local building materials and low embodied energy,
- The use of technical devices with high energy efficiency.
- The use of renewable energy systems.

III.2- Stakeholders:

The project has been accomplished by the contribution of:

- Ministries: (Ministry of Equipment, Housing and Spacial Planning, Ministry of Industry and Energy).
- Specialized institutions and agencies: (National Agency for Energy Conservation, Technical Center of Construction Materials, Ceramics and Glass, Technical Center of Mechanical and Electrical Industries).
- Organizations and professional associations: (Assembly of Tunisian Engineers, Assembly of Tunisian Architects, National Association Consulting Firms and consulting engineers, The National Chamber of Real Estate Syndicalist).

With the support of international organizations (the Global Environment Fund, French Global Environmental Fund, French Development Agency, the United States Development Program).

III.3- Situation before completion

During the eighties, Tunisia interested a positive energy situation. The energy balance by a surplus of 3 million tons oil equivalent, but since the year 2000 the country became an importing of oil due to production on one hand and the increase consumption on the other hand. In the same period, the construction sector has witnessed a remarkable growth (1.9 million houses in 1994, compared to 3.2 million houses in 2014) without considering the energy conservation component. Consequently, buildings with thermal quality and envelopes ( uninsulated roofs and exterior walls, high rate of glass openings and carpentry and glazing of very low thermal performances) have proliferated.

Nationally, the building sector currently is the highest third energy consumer with a rate of 27%. Prospective studies demonstrated that this sector would be second in 2020 and first in 2030 (without counting the consumption of related industrial and transport sectors) and especially if the country wouldn't adopt any energy conservation strategy.

However, the building sector can be considered currently the highest consumer of final energy if we add the energy consumed by the industrial branches for manufacturing of construction materials and products and the transportation branches to the transport of construction goods and materials.

Distribution of National Energy Consumption by Sector
Reasons of the high energy consumption of the construction sector:
- The climate change in Tunisia as around all the world, caused a very high temperature in summer and so much cold in winter,
- The improvement in the living standards of the Tunisian households,
- The improvement of welfare level which lead to the remarkable rise of household energy consumption: the consumption of one family increased from 0.31 tons of oil in 1990 to 0.41 tons of oil in 2006. Also, the air conditioners market witnessed a 30% growth year, in addition to the increase of use of home electronic equipments with low energy efficiency.

Distribution of National Energy Consumption by Sector

III-4- Implementation Method

The pilot projects phase:
The project has adopted an innovative approach starting by an experimental phase of anticipation to be used to prepare the appropriate conditions for an effective and sustained application of the new buildings' thermoregulation. This step has been also completed according to an approach based on the participation and agreement between all key stakeholders in the construction sector. Thus, 43 pilot projects have been completed including 36 housing projects done by authorized land developers along with 7 service projects.

These projects are distributed throughout all regions according to the climate zoning Tunisia and categorized as follows:
- 9 social housing projects
- 7 economic housing projects
- 20 high-standards housing projects.

Furthermore, the residential projects were subdivided by category (individual, collective, adjacent and double dwellings). These projects were completed by the contribution of public and private real-estate promoters.

As for buildings intended for services, they are subdivided as follows:
- 1 office building
- 2 hotels
- 2 commercial buildings
- 1 teaching school (Middle level school)
- 1 medical building (private hospital)

In parallel, thematic studies have been prepared to consolidate this experience; some of the major results are:
- Subdivision of the territory of Tunisia in to climatic zones, in fact, the territory was divided into three regulatory climatic zones, delineated so that in each zone the climate is similar in terms of temperatures in summer and winter, durations and rate of sunshine, hot and cold periods as well as rainfall and humidity.

Climatic Zoning of the Tunisian Republic
- Determination of the rate heat loss of the building.

**The heat loss through the outer shell of the house**

- Thermal bridges: 20%  
- Walls: 20%  
- Ground: 5% to 8%  
- Roof: 25% to 30%  
- Airing and Ventilation: 20%  
- Windows: 30%  

**Project evaluation phase:** The execution and the evaluation of the pilot projects have allowed to get the following best energy efficiency measures:
- Architectural design adapted to the climatic characteristics of the sites of the building with a reduction of glazed openings and good distribution according to the directions,
- Use of thermal insulation on building roofs and exterior walls according to the building’s climatic zone.
- The convenient choice of construction materials (Local materials; low grey energy and high thermal performances)
- The use of glass with high thermal performance and high optical efficiency according to the building’s climatic zone
- The use of renewable energies, especially, the solar thermal energy for heating domestic water,
- The use of systems and technical devices with high energy efficiency (lighting, heating, air conditioning, etc.).

These projects also helped identify the additional cost resulting from the thermal minimal standards use in buildings which are divided as follows:
- 10% for social dwellings projects
- 5% for economic dwellings projects
- 3% for luxurious dwellings projects
- 7% for buildings intended for services

**The legal framework setting phase:**

The law no 2004-72 dated in August 2nd, 2004 related to the mastery of energy provides the obligation of the new buildings and the extension of existing ones to apply the minimal technical characteristics of energy conversation fixed by a joint decision of the minister in charge of Equipment and housing and the Minister in charge of energy. Thus, after fixing the minimal technical characteristics of energy conversation to be adopted for new buildings, the following texts have been prepared and / or promulgated:
- The decision dated July 23rd, 2008 fixing the minimal technical characteristics that aims to save energy for the construction and extensions of office of similar use.
- The decision dated June 1st, 2009 fixing the minimum technical characteristics that aim to save energy buildings interested for collective housing.
- The decision dated on December 17th, 2010 modifying the decision dated on July 23rd, 2008, that aims to widen the circle of office buildings.
- Preparation of a decision fixing the minimum technical characteristics that aims to save energy in hospital building construction and expansion projects.
- Preparation of a decision fixing the minimum technical characteristics that aims to save energy in hotels construction and expansion projects (The decision is still under working).

These decisions aims to subject new buildings to an energy efficiency study carried out, depending on the building, either by the architect who designed the project or a consulting engineer according to a computer system for the buildings classification according to the annual needs of thermal comfort. Each candidate who wants a building permit for buildings covered by the decision of energy control, is required to add a technical formulation to his demand relating to the building, or the parts which are meant to be added to it, showing the building’s thermal efficiency.

**III.5- Situation after Completion:**

**Actions to be taken:**

Personnel of the Tunisian administration, concerned with applying these laws, was trained and qualified. The personnel of the Ministry of Equipment, Housing, and Land Use Management and its regional administrations, as well as the officers of municipalities in charge of granting authorizations of construction went through training. In addition, several training sessions were held for the benefit of private designers, architects, specialized
engineers, as well as supervision offices.

The thermal and energetic laboratories were placed in The Technical Center for Building Materials, Ceramic and Glass in order to teach the building materials makers how to improve the thermal characteristics of their products and how to measure those characteristics in the materials marketed locally.

Concerning the dwellings that have been excluded from the decree of June 1st, 2009, a technical guide was prepared which includes many practical hints that would help the citizen to build a dwelling where the minimum thermal comfort is available, from the design phase to the construction phase. This guide was at the disposal of each one who obtained a building permit to help in the building process.

➢ The new programs:

A mechanism to finance the thermal insulation was put to apply this process at the same level on the new and existing housing buildings’ floors «PROMO-ISOL». Thermal insulation represents an important field to economize energy in the existing and new residential. Studies have shown that the thermal insulation of the roof limits consumption of energy allocated to heating and air-conditioning in this type of buildings with an approximate percentage of 20%. It is also the easiest, fastest, cheapest mechanism in terms of implementation. Furthermore, this measure is quite easy and fast in terms of performance and more profitable compared to other possible measures to improve the energy efficiency of the shell housing. The mechanism is based on Public Private Partnership (PPP) through a state grant and subsidized loan granted by a local bank.

A solar water heaters funding mechanism in the housing sector, «PRO-SOL» has been set up since 2005. This mechanism is based on Public Private Partnership (PPP) through a grant from the State and a subsidized loan granted by a local bank, repayable through the invoice of electricity and gas.

Since 2010, the Tunisian Government has set up a mechanism for financing solar PV installations for electricity self-generation connected to low voltage network in the residential sector, «PROSOL-ELEC». This mechanism is based on the same approach to the PPP mechanism «PROSOL»: A state grant and a subsidized loan granted by a local bank, payable through the invoice of electricity and gas.

In parallel, the Tunisian government has prepared an energy classification of household appliances, especially those whose energy and material use, which are:

- Refrigerators with the share of electricity consumption accounts for nearly 40% of the total power consumption of the housing;
- Air conditioners, with the share of electricity consumption accounts for nearly 20% of the total power consumption of the housing;
- Other household appliances: lamps, washing machines, ironing machines, and others.

III.6- Assessment:

Since the promulgation of the regulatory framework, a study has begun to identify the inventory of buildings have got an authorization and accordance with minimum technical requirements for energy economy.

In spite of the decline in the number of authorized dwellings in general, a number of other dwellings, subjected to energy efficiency qualifications, kept the same pace. This confirms the involvement of land developers in this system. Therefore, an energy saving dwelling becomes a good marketing factor.

Evolution of the number of buildings conform with the minimum technical characteristics relating to the mastery of energy

However, this system still suffers from many imperfections, like:

- Not verifying the energy efficiency study application included in the license document due to lack of financial and human capacities in the municipalities.
- The weakness of the process of monitoring compliance of new buildings to regulatory requirements including, in the works implementation phase.
- Excluding individual dwellings from preparing an energy efficiency study although they represent about 85% of the housing stock.
- The high cost of insulating materials which affects the additional cost to apply the study.
List of members contributing to the elaboration of the national report of Habitat III

<table>
<thead>
<tr>
<th>Chairman of National Commission</th>
<th>Mohamed Salah Arfaoui</th>
<th>Minister of Equipment, Housing, and Land Use Management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vice-Chairman of National Commis-</td>
<td>Anis Guedira</td>
<td>Secretary of State of Housing</td>
</tr>
<tr>
<td>sion.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>National Commission Secretary</td>
<td>Néjib Snoussi</td>
<td>Director General</td>
</tr>
<tr>
<td></td>
<td>Kmar Benhamadi Chebbi</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td>Emna Bouhali</td>
<td>Head of service</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Department/Organism</th>
<th>Name and surname</th>
<th>Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Presidency of the Republic</td>
<td>Kobbi Farid</td>
<td>Head of economic affairs</td>
</tr>
<tr>
<td>Presidency of the Government</td>
<td>Anouar Zarrouk</td>
<td>director</td>
</tr>
<tr>
<td>People’s Congress</td>
<td>Dorra Yakoubi</td>
<td>Deputy</td>
</tr>
<tr>
<td>Ministry of Interior</td>
<td>Riadh Becheikh</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td>Ali Saadani</td>
<td>Assistant Director</td>
</tr>
<tr>
<td></td>
<td>Jalel Abdelkader</td>
<td>Assistant Director</td>
</tr>
<tr>
<td></td>
<td>Nabil Othmani</td>
<td>Assistant Director</td>
</tr>
<tr>
<td></td>
<td>Abdelfattah Gharbi</td>
<td>Assistant Director</td>
</tr>
<tr>
<td>Ministry of Justice</td>
<td>Najiba Ezzaier</td>
<td>Head of Unity</td>
</tr>
<tr>
<td>Ministry of Foreign Affairs</td>
<td>Yiadh Chaouachi</td>
<td>Judge</td>
</tr>
<tr>
<td></td>
<td>Elyes Lakhal</td>
<td>Head of section</td>
</tr>
<tr>
<td>Department/Organism</td>
<td>Name and surname</td>
<td>Quality</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
<td>---------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>Ministry of Transport</td>
<td>Abdelkader Kamali</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td>Adel Brahem</td>
<td>Director general</td>
</tr>
<tr>
<td></td>
<td>Moufida Romdhane</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td>Abdelaziz Mahfoudhi</td>
<td>Director</td>
</tr>
<tr>
<td>Ministry of Finances</td>
<td>Belgacem Ayed</td>
<td>Director general</td>
</tr>
<tr>
<td></td>
<td>Samia Loussaief</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td>Wassim Hamdana</td>
<td>Head of service</td>
</tr>
<tr>
<td></td>
<td>Amina Rezig</td>
<td>Head of service</td>
</tr>
<tr>
<td>Ministry of Development, Investment and International Cooperation</td>
<td>Mohamed Salah Selmi</td>
<td>Assistant Director</td>
</tr>
<tr>
<td></td>
<td>Hedí Chebili</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td>Khaouthar Tlich</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td>Maher Ben Salem</td>
<td>Assistant director</td>
</tr>
<tr>
<td></td>
<td>Chokri Mezghanni</td>
<td>Assistant director</td>
</tr>
<tr>
<td>Ministry of Agriculture, Water Resources and Fishing</td>
<td>Jalel Daassi</td>
<td>Assistant director</td>
</tr>
<tr>
<td></td>
<td>Najib Arfaoui</td>
<td>Minister cabinet</td>
</tr>
<tr>
<td></td>
<td>Mounir Bakkey</td>
<td>Director general</td>
</tr>
<tr>
<td></td>
<td>Fathi Ben Aissa</td>
<td>Director general</td>
</tr>
<tr>
<td></td>
<td>Raoudha Jebbari Elarbi</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td>Monia Bahrini khemiri</td>
<td>Director</td>
</tr>
<tr>
<td>Department/Organism</td>
<td>Name and surname</td>
<td>Quality</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Ministry of Equipment, Housing, and Land Use Management</td>
<td>Mongi Amiri</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td>Taoufik Beya</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td>Mustapha Issaoui</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td>Rym Zaabar</td>
<td>Assistant director</td>
</tr>
<tr>
<td></td>
<td>Mongi Arfaoui</td>
<td>Assistant director</td>
</tr>
<tr>
<td></td>
<td>Mohamed Ali Oulizi</td>
<td>Assistant director</td>
</tr>
<tr>
<td></td>
<td>Badreddine Mokchahe</td>
<td>Assistant director</td>
</tr>
<tr>
<td></td>
<td>Abderrazek Chiha</td>
<td>Assistant director</td>
</tr>
<tr>
<td></td>
<td>Ines Zbiba</td>
<td>Head of service</td>
</tr>
<tr>
<td></td>
<td>Dhouha Néji</td>
<td>Head of service</td>
</tr>
<tr>
<td></td>
<td>Mohamed Ayari</td>
<td>Head of service</td>
</tr>
<tr>
<td></td>
<td>Hakima Zerzeri</td>
<td>Head of service</td>
</tr>
<tr>
<td></td>
<td>Amina Jgham</td>
<td>Head of service</td>
</tr>
<tr>
<td></td>
<td>Jouda Nasri</td>
<td>Head of service</td>
</tr>
<tr>
<td></td>
<td>Dorsaf wahi</td>
<td>Head of service</td>
</tr>
<tr>
<td></td>
<td>Asma Bajia</td>
<td>Head of service</td>
</tr>
<tr>
<td></td>
<td>Salma Elloumi</td>
<td>Head of service</td>
</tr>
<tr>
<td></td>
<td>Mohamed Ayari</td>
<td>Head of service</td>
</tr>
<tr>
<td></td>
<td>Ibtissem Ben Said</td>
<td>Head of service</td>
</tr>
<tr>
<td></td>
<td>Najah Karbia</td>
<td>Chef de service</td>
</tr>
<tr>
<td>Department/Organism</td>
<td>Name and surname</td>
<td>Quality</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td>--------------------------------------</td>
<td>------------------</td>
</tr>
<tr>
<td>Ministry of Equipment, Housing, and Land Use Management</td>
<td>Selma Elgobji</td>
<td>Urban planner</td>
</tr>
<tr>
<td></td>
<td>Hanen Beldi</td>
<td>Urban planner</td>
</tr>
<tr>
<td></td>
<td>Majdi Frihi</td>
<td>Urban planner</td>
</tr>
<tr>
<td>Ministry of Women, Family and Children</td>
<td>Imen Zahouani El Houimel</td>
<td>Director general</td>
</tr>
<tr>
<td></td>
<td>Malika Béjaoui El Ourghi</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td>Imen Becheikh</td>
<td>Assistant director</td>
</tr>
<tr>
<td></td>
<td>Amel Ezzedini</td>
<td>Teacher</td>
</tr>
<tr>
<td>Ministry of Communication Technologies and Digital Economy</td>
<td>Asma Ben Guedria</td>
<td>Engineer</td>
</tr>
<tr>
<td>Ministry of Youth and Sports</td>
<td>Moheddine Arbaoui</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td>Riadh Boudhina</td>
<td>Head of service</td>
</tr>
<tr>
<td>Ministry of Culture</td>
<td>Olfa Elhadj Said</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td>Lamia Bannouni</td>
<td>Assistant director</td>
</tr>
<tr>
<td>Ministry of Health</td>
<td>Dorra Chérif</td>
<td>Minister cabinet</td>
</tr>
<tr>
<td></td>
<td>Ridha Gataa</td>
<td>President and CEO</td>
</tr>
<tr>
<td></td>
<td>Mohamed Errabhi</td>
<td>Director</td>
</tr>
<tr>
<td>Ministry of Social Affairs</td>
<td>Sonia El Housaini</td>
<td>Assistant director</td>
</tr>
<tr>
<td></td>
<td>Aicha Samaali</td>
<td>Head of service</td>
</tr>
<tr>
<td>Ministry of Education</td>
<td>Bouzid N’ciri</td>
<td>Director</td>
</tr>
<tr>
<td>Ministry of Professional Training and Employment</td>
<td>Sinen Safi</td>
<td>Assistant director</td>
</tr>
<tr>
<td>Department/Organism</td>
<td>Name and surname</td>
<td>Quality</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td>----------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Urban Agency of Great Tunis</td>
<td>Adel Aissa</td>
<td>Assistant director</td>
</tr>
<tr>
<td>Housing Real Estate Agency</td>
<td>Sihem Slim</td>
<td>Director</td>
</tr>
<tr>
<td>Rehabilitation and Urban Renovation Agency</td>
<td>Noemen Gara</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td>Hajer Karoui</td>
<td>Head of service</td>
</tr>
<tr>
<td>National Building Company of Tunisia</td>
<td>Habib Marwani</td>
<td>Director</td>
</tr>
<tr>
<td></td>
<td>Chabib Marzouki</td>
<td>Director</td>
</tr>
<tr>
<td>Promotion of Social Housing Company</td>
<td>Mohamed Salah M’hammedi</td>
<td>Assistant director</td>
</tr>
<tr>
<td>Statistic National Institute</td>
<td>Lotfi Hrizi</td>
<td>Director</td>
</tr>
<tr>
<td>National Agency for Environmental Protection</td>
<td>Mohamed Slimane</td>
<td>Senior technician</td>
</tr>
<tr>
<td>National Energy Control Agency</td>
<td>Zied Gannar</td>
<td>Head of service</td>
</tr>
<tr>
<td>National Agency for Solid Waste Management</td>
<td>Ridha Ibrahim</td>
<td>Director</td>
</tr>
<tr>
<td>National Sanitation Office</td>
<td>Adel Boughanmi</td>
<td>Director central</td>
</tr>
<tr>
<td>National Company for Water Exploitation and Distribution</td>
<td>Hatem Gassab</td>
<td>District chief</td>
</tr>
<tr>
<td>Tunisian Company of Electricity and Gas</td>
<td>Radhouane ben Youssef</td>
<td>District chief</td>
</tr>
<tr>
<td></td>
<td>Hichem Mrabet</td>
<td>District chief</td>
</tr>
<tr>
<td>Housing Bank</td>
<td>Lilia Sboui</td>
<td>Assistant director</td>
</tr>
<tr>
<td>National Institute of Meteorology</td>
<td>Fadhel Grami</td>
<td>Director</td>
</tr>
<tr>
<td>Tunisian League for the Defence of Human Rights</td>
<td>Riadh Gharbi</td>
<td>Treasurer</td>
</tr>
<tr>
<td>Faculty of Juridical Sciences</td>
<td>Mohamed Sayari</td>
<td>University Professor</td>
</tr>
<tr>
<td>Department/Organism</td>
<td>Name and surname</td>
<td>Quality</td>
</tr>
<tr>
<td>---------------------------------------------------------</td>
<td>----------------------</td>
<td>------------------------------</td>
</tr>
<tr>
<td>Higher Institute of Environmental Technologies and Urbanism</td>
<td>Ahmed Khlifi</td>
<td>University Professor</td>
</tr>
<tr>
<td>Order of Tunisian Architects</td>
<td>Jamel Omri</td>
<td>Architect</td>
</tr>
<tr>
<td></td>
<td>Taoufik Bouslama</td>
<td>Architect</td>
</tr>
<tr>
<td></td>
<td>Monia Ourfelli</td>
<td>Architect</td>
</tr>
<tr>
<td></td>
<td>Habib M’henni</td>
<td>Architect</td>
</tr>
<tr>
<td>Order of Tunisian Engineers</td>
<td>Fathi Yahyaoui</td>
<td>Engineer</td>
</tr>
<tr>
<td></td>
<td>Ibrahim Sghaier</td>
<td>Engineer</td>
</tr>
<tr>
<td>National Chamber of Real Estate Developers</td>
<td>Taha Belkhoudja</td>
<td>Property developer</td>
</tr>
<tr>
<td>Tunisian Association of Town Planners</td>
<td>Hatem Kahloun</td>
<td>ATU President</td>
</tr>
<tr>
<td></td>
<td>Olfa Ben Medien</td>
<td>Urban planner</td>
</tr>
<tr>
<td>National Federation of Tunisian Cities</td>
<td>Saber Houchati</td>
<td>Executive Director</td>
</tr>
<tr>
<td></td>
<td>Maher Ben Said</td>
<td>For International Cooperation</td>
</tr>
<tr>
<td>Group of experts</td>
<td>Mahmoud Gdoura</td>
<td>Expert, Group leader</td>
</tr>
<tr>
<td></td>
<td>Mohamed Adel Hentati</td>
<td>Expert</td>
</tr>
<tr>
<td></td>
<td>Marwa Ayadi</td>
<td>Translator</td>
</tr>
</tbody>
</table>
# Table of contents

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PREFACE</strong></td>
<td>3</td>
</tr>
<tr>
<td><strong>PRESENTATION OF THE REPUBLIC OF TUNISIA</strong></td>
<td>4</td>
</tr>
<tr>
<td><strong>INTRODUCTION</strong></td>
<td>5</td>
</tr>
<tr>
<td><strong>EXECUTIVE SUMMARY</strong></td>
<td>6</td>
</tr>
<tr>
<td><strong>1-Urban Demographic Issues</strong></td>
<td>10</td>
</tr>
<tr>
<td>1-1- Managing Rapid Urbanization</td>
<td>10</td>
</tr>
<tr>
<td>1-2- Managing rural-urban linkages</td>
<td>11</td>
</tr>
<tr>
<td>1-3- Addressing urban youth needs</td>
<td>12</td>
</tr>
<tr>
<td>1-4- Responding to the needs of the aged people</td>
<td>13</td>
</tr>
<tr>
<td>1-5- Integrating gender issues in urban development</td>
<td>13</td>
</tr>
<tr>
<td>1-6- Coping with internal migration</td>
<td>14</td>
</tr>
<tr>
<td>1-7- Lessons learnt in these areas</td>
<td>15</td>
</tr>
<tr>
<td>1-8- Future challenges and issues that could be addressed by a New Urban Agenda</td>
<td>15</td>
</tr>
<tr>
<td><strong>2-Land and the urban planning</strong></td>
<td>17</td>
</tr>
<tr>
<td>2-1- Ensuring sustainable urban planning and design</td>
<td>17</td>
</tr>
<tr>
<td>2-2- Improving urban land management, including addressing informal urban exodus</td>
<td>19</td>
</tr>
<tr>
<td>2-3- Enhancing urban and peri-urban food production</td>
<td>22</td>
</tr>
<tr>
<td>2-4- Addressing urban mobility challenges</td>
<td>23</td>
</tr>
<tr>
<td>2-5- Improving technical capacity to plan and manage cities</td>
<td>24</td>
</tr>
<tr>
<td>2-6- Challenges experienced and lessons learnt</td>
<td>25</td>
</tr>
<tr>
<td>2-7- Future challenges and issues in these areas that could be addressed</td>
<td>25</td>
</tr>
<tr>
<td><strong>3- Environment and urbanization</strong></td>
<td>27</td>
</tr>
<tr>
<td>3-1- Axes of the national work plan of Habitat II regarding urban environment and its execution</td>
<td>27</td>
</tr>
<tr>
<td>3-2- Protecting cities from air pollution</td>
<td>29</td>
</tr>
<tr>
<td>3-3- Addressing climate change</td>
<td>31</td>
</tr>
<tr>
<td>Section</td>
<td>Title</td>
</tr>
<tr>
<td>---------</td>
<td>-------</td>
</tr>
<tr>
<td>3-4</td>
<td>Disaster risk reduction</td>
</tr>
<tr>
<td>3-5</td>
<td>Reducing traffic congestion</td>
</tr>
<tr>
<td>3-6</td>
<td>Pathways of sustainable cities in Tunisia</td>
</tr>
<tr>
<td>3-7</td>
<td>Future challenges and issues in these areas that could be addressed by a new urban agenda</td>
</tr>
<tr>
<td>4</td>
<td>Urban governance and legislation</td>
</tr>
<tr>
<td>4-1</td>
<td>Improving urban legislation</td>
</tr>
<tr>
<td>4-2</td>
<td>Decentralization and strengthening of local authorities</td>
</tr>
<tr>
<td>4-3</td>
<td>Improving participation and human rights in urban development</td>
</tr>
<tr>
<td>4-4</td>
<td>Enhancing urban safety and security</td>
</tr>
<tr>
<td>4-5</td>
<td>Improving social inclusion and equity</td>
</tr>
<tr>
<td>4-6</td>
<td>Future pathways</td>
</tr>
<tr>
<td>5</td>
<td>Urban Economy</td>
</tr>
<tr>
<td>5-1</td>
<td>Improving municipal local finance</td>
</tr>
<tr>
<td>5-2</td>
<td>Strengthening and improving access to housing finance</td>
</tr>
<tr>
<td>5-3</td>
<td>Supporting local economic development</td>
</tr>
<tr>
<td>5-4</td>
<td>Creating decent jobs and livelihoods</td>
</tr>
<tr>
<td>5-5</td>
<td>Most important issues, challenges, and lessons learnt</td>
</tr>
<tr>
<td>6</td>
<td>Housing and basic services</td>
</tr>
<tr>
<td>6-1</td>
<td>Slum upgrading and prevention</td>
</tr>
<tr>
<td>6-2</td>
<td>Improving access to adequate housing</td>
</tr>
<tr>
<td>6-3</td>
<td>Ensuring sustainable access to safe drinking water</td>
</tr>
<tr>
<td>6-4</td>
<td>Ensuring sustainable access to basic sanitation and drainage</td>
</tr>
<tr>
<td>6-5</td>
<td>Improving access to clean domestic energy</td>
</tr>
<tr>
<td>6-6</td>
<td>Improving access to sustainable means of transport</td>
</tr>
<tr>
<td>7</td>
<td>Indicators</td>
</tr>
<tr>
<td></td>
<td>Conclusion</td>
</tr>
</tbody>
</table>
### Case Studies

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I- Popular neighborhoods promotion program in the big cities (2007-2009)</td>
<td>67</td>
</tr>
<tr>
<td>II- Project of cleansing and restoration of the northern Lake of Tunis</td>
<td>72</td>
</tr>
<tr>
<td>III- The project of thermal and energy standards in building in Tunisia</td>
<td>75</td>
</tr>
</tbody>
</table>
Tables list

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>The increasing number of youth-related institutions 1994 – 2014</td>
<td>12</td>
</tr>
<tr>
<td>Table 2</td>
<td>The increasing number of children-specialized institutions</td>
<td>14</td>
</tr>
<tr>
<td>Table 3</td>
<td>The distribution of transport modes in the cities of Tunis, Sfax and Sousse</td>
<td>24</td>
</tr>
<tr>
<td>Table 4</td>
<td>The achievements of the housing fund for employees since 1996</td>
<td>47</td>
</tr>
<tr>
<td>Table 5</td>
<td>Distribution of loans allocated to integrated urban development program</td>
<td>49</td>
</tr>
<tr>
<td>Table 6</td>
<td>Popular neighborhoods rehabilitation programs that have been implemented or</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>those under ementation</td>
<td></td>
</tr>
<tr>
<td>Table 7</td>
<td>Authorized housing production according to actors 1997- 2006 – 2014</td>
<td>56</td>
</tr>
<tr>
<td>Table 8</td>
<td>Statistical data about dwellings and households 1994 - 2004 - 2014</td>
<td>57</td>
</tr>
<tr>
<td>Table 9</td>
<td>The connection rates of dwellings to networks in urban areas during the</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>period of 1994 -2014</td>
<td></td>
</tr>
<tr>
<td>Table 10</td>
<td>Infrastructure of primary health care indicators and technical-medical</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>equipments in 2014</td>
<td></td>
</tr>
</tbody>
</table>

Graphs list

<table>
<thead>
<tr>
<th>Graph</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graph 1</td>
<td>Population increase (thousands) and the annual growth rate (%)</td>
<td>10</td>
</tr>
<tr>
<td>Graph 2</td>
<td>Reasons of internal exodus 2009- 2014</td>
<td>15</td>
</tr>
<tr>
<td>Graph 3</td>
<td>Distribution of migrants according to the levels</td>
<td>15</td>
</tr>
<tr>
<td>Graph 4</td>
<td>The achievements of the Real Estate Housing Agency by dwelling categories (1995 – 2014)</td>
<td>21</td>
</tr>
<tr>
<td>Graph 5</td>
<td>The maximum ozone averages in one hour (microgram/ m3) 2012</td>
<td>30</td>
</tr>
<tr>
<td>Graph 6</td>
<td>Evolution of energy density per economic sectors</td>
<td>31</td>
</tr>
<tr>
<td>Graph 7</td>
<td>The increase of the number of land transport vehicles for people</td>
<td>33</td>
</tr>
<tr>
<td>Graph 8</td>
<td>The change of the estimates of the public transport use in Great Tunis</td>
<td>33</td>
</tr>
<tr>
<td>Graph 9</td>
<td>The development of domestic resources to municipalities for the period 1994-2014</td>
<td>43</td>
</tr>
<tr>
<td>Graph 10</td>
<td>The development of municipal resources derived from State support 1994-2014</td>
<td>44</td>
</tr>
<tr>
<td>Graph 11</td>
<td>Evolution of State transfers to municipalities per capita from 2005 to 2011</td>
<td>44</td>
</tr>
<tr>
<td>Graph 12</td>
<td>Evolution of the Municipal investment scheme during the period 1987-2011</td>
<td>45</td>
</tr>
<tr>
<td>Graph 13</td>
<td>The development of credits programmed within to the Regional Development Program</td>
<td>49</td>
</tr>
<tr>
<td>Graph 14</td>
<td>Distribution of dwellings by type</td>
<td>57</td>
</tr>
<tr>
<td>Graph 15</td>
<td>Distribution of dwellings by rooms’ number</td>
<td>57</td>
</tr>
<tr>
<td>Graph 16</td>
<td>The development of solar panels set-up</td>
<td>61</td>
</tr>
<tr>
<td>Graph 17</td>
<td>Number of Households with solar energy</td>
<td>61</td>
</tr>
<tr>
<td>Graph 18</td>
<td>Photovoltaic power generation</td>
<td>61</td>
</tr>
<tr>
<td>Graph 19</td>
<td>Means of transport used in 2014</td>
<td>62</td>
</tr>
</tbody>
</table>
## Maps list

<table>
<thead>
<tr>
<th>Map Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Map 1</td>
<td>The location of the Tunisian Republic in the world and in the Mediterranean Sea</td>
<td>4</td>
</tr>
<tr>
<td>Map 2</td>
<td>The Republic of Tunisia</td>
<td>4</td>
</tr>
<tr>
<td>Map 3</td>
<td>The geographic distribution of population densities in 2014</td>
<td>10</td>
</tr>
<tr>
<td>Map 5</td>
<td>The urban sprawl and informal building in Tunis</td>
<td>19</td>
</tr>
<tr>
<td>Map 6</td>
<td>The urban sprawl and spread of informal building in Great Sousse</td>
<td>19</td>
</tr>
<tr>
<td>Map 7</td>
<td>The urban sprawl and spread of informal building in Great Sfax</td>
<td>19</td>
</tr>
<tr>
<td>Map 8</td>
<td>A detailed plan development of the Northern Lake of Tunis</td>
<td>20</td>
</tr>
<tr>
<td>Map 9</td>
<td>A detailed Plan of the tourist resort project “Lella Hadhria” in Jerba Island</td>
<td>22</td>
</tr>
<tr>
<td>Map 10</td>
<td>The distribution of controlled landfills and waste transformation stations</td>
<td>28</td>
</tr>
<tr>
<td>Map 11</td>
<td>Biggest sources of chemical pollution in Tunisia</td>
<td>29</td>
</tr>
<tr>
<td>Map 12</td>
<td>The national air monitoring stations’ network</td>
<td>30</td>
</tr>
<tr>
<td>Map 13</td>
<td>Rates of sewerage network connection in urban areas of the governorates 2014</td>
<td>59</td>
</tr>
</tbody>
</table>

## Pictures list

<table>
<thead>
<tr>
<th>Picture Number</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Picture 1</td>
<td>The project of the Housing Real Estate Agency in Zahra – Rades Suburb of Great Tunis</td>
<td>21</td>
</tr>
<tr>
<td>Picture 2</td>
<td>The project of the Housing Real Estate Agency in Zahra – Rades Suburb of Great Tunis</td>
<td>21</td>
</tr>
<tr>
<td>Picture 3</td>
<td>The danger of floods in the city of Bousselem – governorate of Jendouba</td>
<td>31</td>
</tr>
<tr>
<td>Picture 4</td>
<td>The fire danger in the northeast heights</td>
<td>32</td>
</tr>
<tr>
<td>Picture 5</td>
<td>A model of an integrated neighborhood in Tunis</td>
<td>52</td>
</tr>
<tr>
<td>Picture 6 and 7</td>
<td>Farhat Hached neighborhood – Municipality Mhammdia Fouchana - Tunis</td>
<td>53</td>
</tr>
<tr>
<td>Picture 8 and 9</td>
<td>Bokhzar neighborhood - Municipality of Sousse</td>
<td>53</td>
</tr>
<tr>
<td>Picture 10 and 11</td>
<td>Examples of new neighborhoods implemented by land developers</td>
<td>56</td>
</tr>
</tbody>
</table>
This report is ecoresponseble