

# LAND AND HOUSING DESIGN IN TUNISIA

## For a suitable and sustainable land development strategy

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### 1 Shelter Situation Analysis

The national housing strategy in Tunisia has focused on the concretisation of the slogan “Decent shelter for all” by:

- ✓ Reinforcing the existing housing stock by building new units by public and private developers and families too,
- ✓ Improving housing levels in ancient (medians) and informal quarters through the State intervention,
- ✓ Eradication and replacing of all rudimentary buildings by new and adequate units through the national programme of eradication of rudimentary dwellings.

#### 1.1 Basic General Data

##### History

The Tunisian past, as well as the present, are marked by the different historic periods shared by the two shores of the Mediterranean:

- ✓ The Phoenician, Arab and Turkish influences from the East,
- ✓ The roman and French civilizations from the north,

## Geography and Administration

Theme	Data
<b><u>Geography</u></b>	
Situation	North Africa
Area (km <sup>2</sup> )	1 636 610
Coastline (km)	1300
<b><u>Climate</u></b>	<ul style="list-style-type: none"> <li>Well-watered north with mediterranean influence ( an annual average reading of 18°C)</li> <li>Semi-arid south with Sahara influence (1/3 of the Tunisian territory)</li> </ul>
<b><u>Language</u></b>	Arabic
<b><u>Religion</u></b>	Islam

### Population, Demography and urbanization:

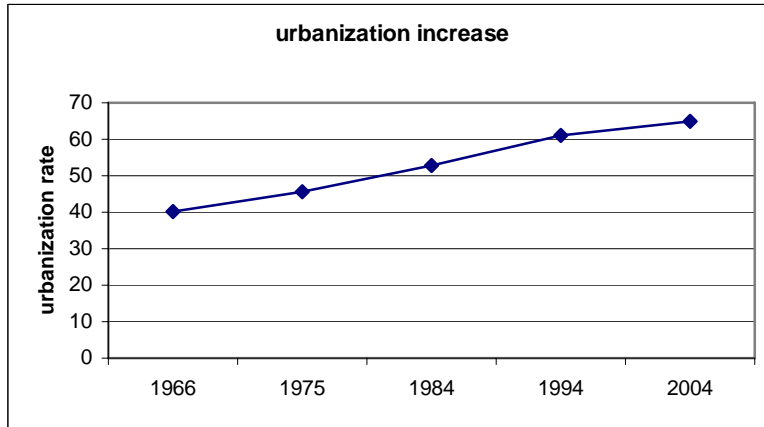
Most of the Tunisian towns are characterised by the juxtaposition of two urban units:

- ✓ The old town “the medina”, perceived as an important heritage for its harmonious layout and morphological and architectural specificities, and presents a number of problems such as degradation of buildings.
- ✓ The modern town constructed in the 19th C, characterised by its European style.

The Tunisian towns witnessed deep changes which affected the social, economic, morphological and urbanity aspects which involved an urban extension and an increase of land costs. Many suburban quarters are constituted on agricultural lands characterised by a lack of basic facilities and unregulated self-buit houses.

It is noticed that 66% of the population live in the urban areas (in 264 towns) and particularly in the north-East and Centre-East, with a population density average of 60 person /km<sup>2</sup> ranging from 4 person/ km<sup>2</sup> in the south to 400 person/km<sup>2</sup> in the densely populated north. Consequently, the population isn't equally distributed on the Tunisian territory.

	1966	1994	2004	Increase rate
<b>Total population</b>	4583200	8 785 700	9 910 872	1.21%
<b>Urban population</b>	40.1%	60%	65%	
<b>Population density (inh/km<sup>2</sup>)</b>	27.7	56.5	60 (4-400inh/km <sup>2</sup> )	



The phenomenon of urban growth is characterised by:

- ✓ the change of destination of migratory movements directed to smaller and medium-sized towns,
- ✓ the departure from larger towns to rural areas due to the increase in the number of development programmes there,

This urban phenomenon is viewed as positive; it shows a relative stability of the urban phenomenon and enhances the possibility of bringing various service facilities closer the citizens.

### Health

Health conditions have improved significantly in recent years. Epidemics have virtually disappeared and contagious diseases have been considerably reduced.

	1966	2004
<b>Life expectancy at birth</b>	51 years	73,2
<b>Mortality rate</b>	15 ‰	5.8 ‰
<b>Mortality rate at birth</b>	138 ‰	22 ‰

### Economy

The Tunisian economy is based on the agricultural production which engages about 22% of the labour force. In recent years, a gradual diversification of the Tunisian economy (services, industries) is noticed. Minerals (crude oil and phosphates) and tourism are the leading sources of foreign exchanges.

The economy is gradually shifting from a socialist economic policy to a market – based economy. The privatisation of state-owned enterprises began in 1987 and the banking and insurance sectors began to be privatized in 2002.

In the recent years, it is noticed:

- ✓ a growth in the architectural, industrial products and services,
- ✓ improvement of the sector of tourism,
- ✓ an increase in the foreign investment,
- ✓ An increase in the manufactories exportation.

	1966	2004
<b>PIB (MD)</b>	447	35068
<b>Economical growth</b>	2%	5.3%
<b>Economic production</b>		
Services	161	12777
Industrial production ( MD)	82	9785
Agricultural production (MD)	89	4428

## 1.2 Shelter Related Fact and Figures

Access to Shelter

### *Housing stock*

Housing in Tunisia is characterised by:

- ✓ An increase in the number of dwellings which exceeds the number of households.  
In fact, about 15% of the whole housing units are not occupied,
- ✓ a decrease in overcrowding dwelling due to the increase in the size of the dwelling ranging from 50 to 90m<sup>2</sup> for 40% of the hole of dwellings.
- ✓ A decrease in the number of rudimentary dwellings

	1966	1994	2004	Increase
<b>Nbre of dwellings (thsd)</b>	875	1 865 522	2 500 830	2.95%
<b>Nbre of households (thsd)</b>	-	1 704 185	2 185 839	2.52%
<b>Average size of the household</b>	-	5.16	4.53	
<b>Rudimentary dwellings</b>	44%	2.7%	0.8%	

During the 10<sup>th</sup> plan (2002-2006) about 255 410 units were built through the public and private sectors with an average of built about 60000 new housing units per year.

	<b>Tunisia</b>	<b>Africa and third word</b>	<b>Developed countries</b>
<b>Nbre of new units/ year / 1000 inh</b>	7	1.7	-

- ✓ 12 383 dwellings are built by the public actors (they will be presented in details later):
  - 8864 dwellings by the SNIT (Real-Estate National company)
  - 2494 dwellings by the SPROLS (Social housing promotion company)
  - 506 dwellings by the ARRU (Urban Rehabilitation and renovation agency)
  - 515 dwellings by building offices
  - 25 825 units are built and financed by the National Solidarity Fund 26-26
- ✓ 217 203 dwellings are built by private actors (developers and families)

There is no housing shortage in Tunisia. However there are difficulties to satisfy all the housing needs of low and medium- income groups, *in spite of the effort of the state in the field, because of the high cost of the land especially in the big towns and the problem of speculation.*

***Housing standard:***

The tunisian state has made an important effort in providing and reinforcing the right to adequate housing through various mechanisms including:

- ✓ the organisation of the Real Estate development sector and allocation of required investments,
- ✓ the encouragement of the social housing sector to satisfy the low-income citizens who represent 50 % of the housing demand. In this way, about 2000 social dwellings per year are financed by FOPROLOS for low and medium income citizens,
- ✓ the implementation of social programmes for low-income citizens such as the National Rudimentary Housing Eradication, the programme of relocation of Ukala’s occupants, the project of La Petite Sicile in Lagoulette, projects financed by the National Solidarity Fund 26-26 and other,

- ✓ the foundation of the equal right of married women to benefit from Housing loans by housing Bank and National Security Fund.

Thus it is noticed a qualitative and quantitative housing production including individual and collective with economic, social and high standing types of dwellings.

During the 10th plan the public and private builders built different types of buildings in order to offer a larger choice for different social categories and essentially for low-income peoples. The public sector offered about 4.790 economic dwellings, 7.180 social buildings and 412 high standing buildings. *An average of 15 m<sup>2</sup> floor area is offered by public and private sectors per person.*

### *Tenure of households*

The problem of illegal occupation of land is restricted to some old districts occupied without legal deeds of ownership. In this context, the State axed its projects on:

- ✓ the development of a strategy in order to generalise and speed up the process of land registration,
- ✓ the introduction of a number of structural reforms for organizations such as the Real Estate Court, the Real Estate ownership department, the mapping and surveying board in order to simplify the access of ownership to citizens,
- ✓ the review of the legislative texts in order to simplify procedures of land registration,
- ✓ creation of property management committees in order to organise the production of collective Real Estate.

All such efforts aimed to establish land ownership and assure their tenure.

Ownership and Rental

### ***Ownership and rental:***

The percentage of households owning their dwellings is about 77.4% in 2004. Thus 22.6% of the whole number of dwellings is rented. House price ranges from 385 to 925US\$/m<sup>2</sup> depending on the standing offered in the dwelling and its location. The house price is 6 times the household income.

<b>ownership</b>	<b>1994</b>	<b>1999</b>
<b>Median house price (US\$)</b>	31 500	37 850
<b>Median annual household income (US\$)</b>	6 967	7 226
<b>House price/ household income</b>	4.52	5.16

***Rental:***

<b>Rental</b>	<b>1994</b>	<b>1999</b>
<b>Median rent (US\$)</b>	1 150	1 800
<b>Median annual household income (US\$)</b>	6 967	7 226
<b>House rent/ household income</b>	0.17	0.25

***Land (formal/informal)***

The state founded a strong legal framework and made rules for the intervention of public and private actors in order to satisfy the national demands in land and to ensure equal access to it by:

- ✓ Improving of the production level of constructible land by public actors such as the Housing Land Agency (AFH) which produces about 150 ha per year,
- ✓ Producing plots with different sizes in order to allow a certain flexibility in the occupation modes and standing levels of dwellings,
- ✓ Adjusting the tariffs of constructible plots produced by public actors according to plot area in the development, situation, occupation mode and services offered in order to reduce the prices of social housing (which is about 18000 US\$ for an individual dwelling of 50m<sup>2</sup> and 26.000 US\$ for a collective dwelling of 75 m<sup>2</sup>,
- ✓ Selling state land to build social housing projects for a symbolic price,
- ✓ Encouraging vertical housing projects in order to reduce the land cost per dwelling, to limit the urban extension and to assure the sustainability of natural resources.

However, the lack of land, the speculation and the quick growth of the urban population have involved an increase in the land cost which become inaccessible to the low and medium income social categories.

In fact, the price of one m<sup>2</sup> of developed land for building is about 85% of the monthly median income, whereas the price of raw land is about 10% of the monthly median income.

Consequently, the recent years have shown an increase in the unplanned self-built quarters.

<b>Developed land</b>	<b>1994</b>	<b>1999</b>
Median land price (US\$/m <sup>2</sup> )	52	79
Median monthly household income (US\$)	580	602
1m <sup>2</sup> Land price/ monthly household income	0.09	0.13

<b>Agricultural land</b>	<b>1994</b>	<b>1999</b>
Median land price (US\$/m <sup>2</sup> )	7	9
Median monthly household income (US\$)	580	602
1m <sup>2</sup> Land price/ monthly household income	0.012	0.015

### ***Building materials***

The construction is based on the use of local materials and especially stone, reinforced concrete for supporting structure and brick, wood, concrete and glass.

The major architectural forms (vaults, domes, arcs, pergolas,...) are built using local building materials and techniques in order to preserve Tunisian architectural characteristics and to offer a thermal comfort during the year.

The government, aware of the importance of the Tunisian cultural and architectural heritage, has paid a particular attention to architectural characteristics in the presidential electoral program and has encouraged the use of local construction materials and techniques by prizing every year the best architectural project which succeed to be functional and preserves the architectural characteristics of its region.

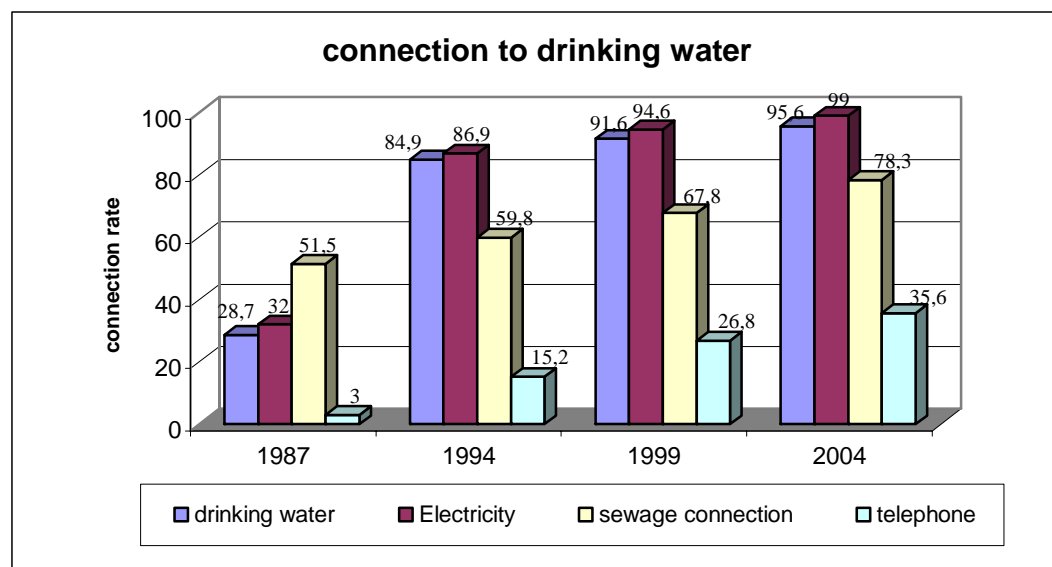
### **Access to and cost of Basic Services/Infrastructure**

The Tunisian state has paid a particular attention to improving life conditions and especially by providing and generalizing the access to basic facilities for all citizens.

It is noticed an improvement during recent years:



Basic services	1987	1994	2004
Electricity (%)	32	86.9	99
Drinking water (%)	28.7	84.9	95.6
Sewage (%)	51.5	59.8	78.3
Telephone connection (%)	3	15.2	35.6



### Access to and cost of Education

Since the independence, the government has paid an important attention to the education field and has encouraged the equal access to education for all citizens by providing it for free. The educational system was updated many times, the expenses of the state in the field of education and training increased from 363M\$ in 1986 to 1972 M US\$ in 2004. Consequently, it's noticed a qualitative improvement of the system and an increase in the number of students in primary, secondary and universities.

The rate of literacy of adults increased thanks to the program for reducing adult illiteracy (between 15 and 24 years old) launched by the state.

Education level	1966	2004
Primary school (%)	59	99
Secondary school (%)	17	75
University (%)	2.1	26.4
Rate of adult literacy	44.7	95

### **1.3 Housing and Urban Development Policy**

The Tunisian state has paid a particular attention to the housing sector.

The state policy was based on a policy of direct state intervention in order to compensate the shortage in the number of adequate housing and provide the required basic facilities and infrastructures. A number of specialized public institutions were created such as the Real-Estate National Company (SNIT), the Housing Land Agency (AFH), the National Home-saving Fund (CNEL), the Social Housing Promotion Company (SPROLS), the Urban Rehabilitation and Renovation agency (ARRU). These actors will be presented later.

In this policy, the state represented the principal motor of change in the field of housing and land planning. Since 1995, the policy shifted to a policy based on the citizen's self-help. The state supports the citizens for the acquisition of a dwelling and encourages families and developers to participate in the promotion of housing, both quantitatively and qualitatively.

However the financing and technical capacity of the municipalities was insufficient to control the urban growth and to maintain and improve the urban infrastructure and facilities.

Face to this problem, and in order to support the local authorities, the state founded several "urban development projects" in order to cover the population needs and to improve the capacity of the municipalities in the management and control of the urban projects. These projects were restricted in the first time to the big towns but they were generalized with the 4<sup>th</sup> urban development project in 1987 and then with the national program of rehabilitation of the popular quarters PNRQP including 223 quarters in 117 towns and the municipal development project in 257 municipalities.

#### **The legal framework**

Since the independence the legislation was designed and reviewed whenever necessary in order to adapt it to the economic and social changes and urban expansion.

*a.1- Land Development and housing:*

- ✓ The Acts of creation of three land agencies (1973- the Housing Land Agency AFH, the Industrial Land agency AFI and the Agricultural Land Agency AFA which granted these agencies the right to expropriate land for public utility as well as the pre-emptive right (priority) and the possibility to control intervention property areas (PIF) in order to do their development program, every agency in its sector,
- ✓ The Act (n°59-154 of 7-11-1959) concerning the foundation of many building cooperatives
- ✓ Publication of the Urban Planning Code on 1979 which creates the urban planning master plans, the detailed development plans, the Fund for Land Planning,,
- ✓ The creation of the urban rehabilitation and renovation agency ARRU in 1981,
- ✓ The Act N°90-17 of 26-02-1990 which enabled private developers to service and granted them fiscal privileges,
- ✓ Publication of the Land and Urban Planning Code in 1994 whose objective is to adapt the legislation to the requirement of the urban growth and to define norms, urban planning documents, actors in the land and housing design and land control tools ( land intervention area PIF, land reserve area PRF).

*a.2- Finance*

The legislation was modified in order to reduce the budget of the state and to improve the financing system by:

- ✓ The creation of the National Home-saving Fund (CNEL) in 1973 for the collection of families' home savings and granting mortgages as well as family allowances. It was replaced by the Housing Bank (BH) and the National Agency for the Protection of the environment (ANPE) in 1989. In the recent years, the BH offers 4 new home saving systems depending in the saving duration. The credits are given for buying new or old house, improvement of the the house, construction of a house, buying a land.

Saving duration	1,2, 3, 4 years
Maximum saving	23000 Us \$
Interest	3 - 3.5%
Payement period	15 years

- ✓ the creation of Housing Promotion Fund for Salaried People (FOPROLOS) in 1977, which was in charge of collecting contributions from private or public employers to assist salaried workers in buying or building a house. Since 2007 a new financing system was introduced:

	<b>FOPROLOS 1</b>	<b>FOPROLOS 2</b>	<b>FOPROLOS 3</b>
<b>Income (US\$)</b>	1-2 x lowest income (190-380)	2-3 x lowest income (380- 570 US\$)	3- 4.5 x lowest income (570- 855 US\$)
<b>Covered House area</b>	Individual: 50 m <sup>2</sup> Collective: 65 m <sup>2</sup>	Collective: 75 m <sup>2</sup>	80- 100 m <sup>2</sup>
<b>Financement (US\$)</b>	- Self finance: 10% of the housing cost (24000 \$) - credit: 110x lowest income (21000\$)	- Self finance: 10% of the housing cost (31500 \$) - credit: 165x lowest income (31350 \$)	15% of the housing cost (34000- 42300\$) -credit:210xlowest income (28800-36000\$)
<b>Payement duration</b>	25 years + 3 years	25 years + 3 years	20 years + 1 year
<b>Interest (%)</b>	3.5	5	6.75
<b>Monthly payement amount (US\$)</b>	105	168	221- 277

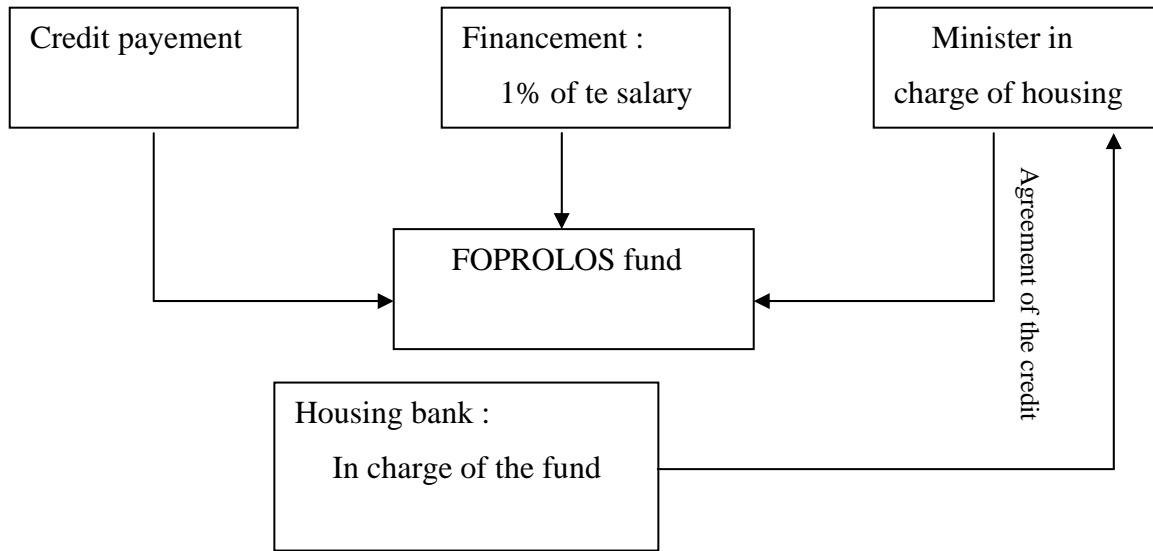


Diagram of the FOPROLOS financing system

- ✓ The creation of the National Solidarity Fund 26-26 in 1992 which was financed from the State Budget and donations from citizens and private firms for improving the situation of poor. Since 2006 the 26-26 fund is allowed to finance the rehabilitation of some quarters around the capital and the big towns,
- ✓ The creation of home-saving systems in many banks since 1997 (from 2002-2006 about 770 million US \$ were spent for home credits).

### 1.4 Actors in Shelter Delivery and their Roles

The housing field is characterised by the participation of different public and private actors.

Public actors:

- ✓ **The Real-Estate National Company (SNIT)** established in 1957 and the regional estate agencies in the north, the centre and the south. The objective is to offer the social and economic housing for low and medium income social categories. Until 2006, the SNIT built about 260000 housing units (60% social, 35% economic, 5% standing)
- ✓ **The Housing Land Agency (AFH):** which was created in 1973 and was responsible for the acquisition and servicing of land for building before transferring them to the citizens or developers. The objective is to control prices and counter speculation and to supply more social housing in order to combat the

unregulated self-built housing. The projects of AFH, limited to some of the larger towns were extended to many municipalities. New operations were introduced such as the site and services experiment launched since 1986 which take into consideration the limited resources of a part of citizens and provide them the loan for the construction of a habitable and extensible cell and a free plan. The AFH covers about 25% of the national needs of developed land for housing,

- ✓ **The Social Housing Promotion Company (SPROLS):** which was created in 1977 in order to build housing for rent. Then the SPROLS turned to the production of social housing. Until 2006, the SPROLS built about 20000 units for low-income social categories,
- ✓ **The Urban Rehabilitation and Renovation agency (ARRU)** which was created in 1981 and was in charge of renovating and rehabilitating old dwellings and unregulated self-built housing in urban areas,
- ✓ **Housing corporations** which are responsible of the acquisition and servicing of land and building houses before transferring them to adherents (military housing office, ministry of education housing office, ministry of Interior housing office,...).

Private actors:

Since 1995, the state has encouraged and organised the private sector (families and developers). It is noticed an increased in the number of developers from 150 developers in 1988 to 1380 developers now. Consequently, the number of private operation of housing projects increased, in the density of dwellings and in the area of plots.

Examples of actions for the Improvement of the housing stock

***ARRU programs for the rehabilitation of the low-income quarters***

Since its creation in 1981, ARRU has implemented programmes financed by the State or public institutions and municipalities:

- ✓ The third urban project which includes the rehabilitation of 9 unregulated housing quarters, the renovation of an old town (70000 inhabitants) and building of services (public health centres, schools,...)

- ✓ The fourth urban project which involved 25 urban quarters to the benefit of 100000 inhabitants and building of services (public health centres, schools,...)
- ✓ the National project for the rehabilitation of low-income quarters which included about 223 quarters distributed in 134 municipalities
- ✓ The rehabilitation and renovation of El Hafsia in the medina of Tunis which adopted an integrated approach to all types of intervention for rehabilitation, renovation, economic and social integration. The project succeeded at the international level by obtaining two international urban planning prizes (the Agha Khan prizes in 1983 for the first part and in 1995 for the second part),
- ✓ the “Ukala “ rehabilitation programme in the Medina of Tunis (overpopulated buildings in an advanced state of decay where single rooms are rented to families). The programme was launched by the Head of the State and consisted in the relocation of about 9600 inhabitants with a total cost of 21000 US\$,
- ✓ the preservation of the Medinas (old towns). Several preservation associations were established in the towns to preserve rehabilitate historic sites.
- ✓ The rehabilitation of La petite sicile in Tunis (3200 inhabitants) with a cost of 6700 US\$.

Until 2006, the total intervention of the state in the rehabilitation of the unintegrated quarters concerned 903 quarters (1 984 500 inhabitants) with a total cost of 275 231 000 US \$.

### ***Improvement of housing situation in rural districts***

Several programmes have been launched and supported by the State in order to improve the housing situation in rural areas and maintain citizens on their land.

- ✓ The rural housing programme (1973-1984) which consisted in the construction of 90000 dwellings by SNIT and the encouragement of self-building with reduced costs
- ✓ The national programme of eradication of rudimentary dwellings, which was launched in 1986 and included about 94000 units and included the self-construction of dwelling financed by the State with the technical support of the administration.

- ✓ The National Solidarity Fund created in 1992 and in charge to finance different operations commissioned by the President in favour of low-income social groups which are deprived of the basic facilities. A national plan for the promotion of the grey areas has been designed. About 1762 grey areas containing 240000 families (about 1.2 million people) were covered between 1993 and 2005. The total cost is 604 million US\$ (houses, roads, electricity, drinking water, working areas)
- ✓ The integrated rural villages programme launched in 1990 included the construction of villages with agricultural dwellings, necessary facilities and installation of basic infrastructure including roads, electricity and drinking water supply and economic programmes in order to provide job opportunities and to improve the life conditions of the inhabitants. So far the number of rudimentary dwellings was reduced from 16.3% to 0.8 % in 2004.
- ✓ New projects: Since 2007, the president launched a new program of rehabilitation and integration of the spontaneous quarters around the big towns during the period 2007-2009. The program includes 26 quarters with a total cost of 88100 million US \$. The objective is to improve the housing condition, creation and improvement of collective services and green areas, creation of working areas:
  - 2007: 10 quarters, 49000 inhabitants (9271 houses), 31000 million US \$ total cost,
  - 2008: 8 quarters, 57400 inhabitants (11200 houses), 29651 million US \$ total cost,
  - 2009: 8 quarters, 60000 inhabitants (12000 houses), 27308 million US \$ total cost.

## **1.6 Shelter Design**

### **Physical Planning and land use:**

Land Use Planning is defined by the Land and Urban Planning Code published in 1994 as "choices, orientations and procedures opted for at a national or regional level in order to organize land usage and insure coordination concerning the construction of infrastructure projects, planting public utilities and organizing urban agglomerations."

It is considered as the ideal framework to set orientations and priorities according to a long term vision. It takes into consideration economic, social and environmental



aspects in addition to national assets and characteristics, and is thought according to a rational demographic and economic distribution nationwide.

Since the independence, the Tunisian State has focused on the land use planning field in order to organise the urban space and to assure and to improve the internal function of the town with reinforcing its external relations and exchanges.

For these reasons, a legislative framework was founded in 1979 by the publication of the first Urban Planning code which is competed and updated by the publication of the new Land and Urban Planning code in 1994, whose objective is to adapt the legislation to the requirements of the urban growth and the new international policies in the field. The code defines norms and tools of the physical and urban planning.

Land Use Planning in Tunisia is the responsibility of the General Direction of Land Use Planning (Department of Public Works, Housing and Land Use Planning) which is responsible for land use planning studies covering master plans for urban agglomerations and sensitive regions as well as thematic studies related to choices, orientations and procedures nationally opted for. All urban agglomerations are covered by master plans, in addition to a national master plan and 19 regional master plans. Concerning thematic studies, (competitiveness, flood protection, multi-modal logistic platforms, land use planning tools and instrumentations ...) some have been already done, some are underway, and others are programmed for the near future. A land Use Planning Interdepartmental Committee has been created in order to define land use main options and secure coordination between all operators in the matter of main projects' planning. The committee is composed of several relevant departments (actually 17) and headed by the prime minister.

The Urban Town plan fixes the norms and servitudes of land use and determines:

- ✓ the different zones according to the principal use and defines the forbidden activities, and norms of construction in every zone,
- ✓ the road network
- ✓ the areas reserved for services
- ✓ the areas reserved to green areas, cultural and historic sites in order to preserve them from urbanisation.

Since 2004, the electoral presidential programme launched the update of the urban town planning of all the towns (264) taking into consideration the new policy of

densification of the buildings which should include 2 floors at least in order to reduce the urban extension on farming lands.

### Population Density

The adoption of the densification policy involved an increase in the population density:

- 29 dwellings /ha (about 140 inhabitants/ha) in the new operations of building, the popular quarters, and the ancient towns (medinas),
- 35 dwellings /ha (185 inhabitants/ha) in the big towns.
- However the average of the population density in the rest of the territory is about 15 dwellings /ha (75 inhabitants/ha)

### Shelter Quality

The shelter design takes into consideration many norms in order to assure its function and to guarantee the safety of the inhabitants as well as the comfort level.

In fact, the shelter offers an acceptable quality of the interior space by using good building materials as well as providing connection to electricity, drinking water, sanitation system, phone, central heating and air-conditioning.

However, the illegal self-built dwellings suffer from the lack of access to basic facilities and the lower building materials and space quality.

### Social Inclusion

The State has made many important efforts to assure the social inclusion in many sectors, especially in the housing field. In the recent years the new housing operations tried to design housing projects including both high standing and social dwellings in order to assure the cohabitation of different social categories in the same quarter. However, some difficulties are noticed for low-income people to access these projects because of the high cost of the dwelling compared to their income.

### Gender Issues

Since the independence, Tunisia succeeded to offer equality between men and women in all the fields. In fact, the woman has an access, as well as the man, to education, work, land and house property, credit access and job.

## Sustainable Development

The sustainable development is one of the new objectives of the urban planning and housing field. It consists on many actions such as:

- Preserving farming lands through the densification policy adopted in order to protect the agricultural production and to guarantee land reserves for future urban extension.
- Graduate increase in the use of sustainable energy and the application of the policy of energy economy in the building field by the design of ecological dwellings consisting in the use of thermal resistant materials that offer a thermal comfort without the use of energy.
- The protection of the environment (the average of green areas increased from 4.4m<sup>2</sup>/inhabitant in 1994 to 14m<sup>2</sup>/ inhabitant in 2006)

## 2 Organization

The Ministry of Equipment, Housing and Territorial Development is in charge of the design of the State Policy in the Housing and the land planning. Also it looks after the application of this policy by giving technical assistance to regional and local authorities and through public actors in the Housing and land planning under its guardianship:

- ✓ The SNIT agency in the housing field
- ✓ The ARRU agency in the rehabilitation and renovation field
- ✓ The SPLT and TAPARRURA companies in the development of the seaboard
- ✓ The SOMATRA Company in the field of roads, motorways, tunnels and bridges.

The ministry assures the guardianship of:

- Public and private real-estate developers,
- Architects,
- Technical guardianships of housing financing (Housing Bank- BH)

### 3 Shelter Problem

The state has made an important effort in improving the housing and land planning sectors offering decent shelters to all the citizens. The legislative framework defined many documents and tools for the development and the control of the urban extension.

However, the complexity and the long time needed for their elaboration and application restricted their efficiency and the state policy become in many cases enable to cover the real needs of the speed grow up of the urban population especially in the big towns.

#### **Limits of land control tools introduced by the CATU:**

As it was mentioned in the paragraph a.1, the CATU granted an importance to the land control tools (PIF, PRF). However, it is noticed that their elaboration was relatively complicated which restrict their application and especially concerning the PRF.

#### ***Land intervention area (PIF):***

- ✓ Long and complicated approval procedures,
- ✓ Restriction of the land control to the government, the municipalities and the land agencies and the exclusion of the SNIT and SPROLS
- ✓ The increase of the land speculation around the PIF involving the constitution of squatter quarters which have a negative impact on quality and profitableness of the development program planned in the PIF,
- ✓ The high cost and the difficulty to integrate the spontaneous dwellings in the PIF.

#### ***Land reserve area PRF:***

- ✓ The insufficient time for the land agencies to profit from the pre-emptive right to buy the land in the PRF (6 years) compared to the long term and future objectives of the PRF,
- ✓ The lack of coordination between the different land agencies in the planning and the use of the land reserves.

- ✓ The lack of the financing means of the public actors to buy and control the land for a future development. In fact The CATU removed the Intervention Fund for the Territory's development (FIAT)- which was created by the ancient urban planning code of 1979- and didn't replace it yet,
- ✓ The complicated procedure to create PRF,
- ✓ Restriction of the application of the PRF outside the territory covered by urban development plans which integrate spacious agricultural land. Consequently, the speculation and the unplanned quarters take place in this area. The Tunis district territory, for example, which is covered by an urban development plan, includes much agricultural land representing more than ¼ of the total area. Thus the legislation doesn't allow the constitution of PRF from this agricultural land despite the poor agricultural activity in the district which represents less than 1.3% of the total population.
- ✓ It is interesting to learn from the French and the Scandinavian experience in the constitution of land reserves, and especially the Swedish experience where the municipalities buy the land surrounding the areas covered by urban developed documents by obtaining loans from the state budget and assure their control in order to transmit them later to the developers.

Consequently the phenomenon of land speculation grows and involves an increase in the land cost (which represents between 15 to 20% of the dwelling cost) leading to the exclusion of the low-income social categories and the increase of the unplanned self-built quarters.

## 4 Proposals for Change and Improvement

The intervention in the improvement of the housing and land planning sector is complex because it includes many sectors where the most important are the land, the building and the finance.

### **Land:**

- ✓ Control of the urban extension and the proportion of the land cost reported to the global cost of the dwelling by the densification and vertical buildings. Since 2003, the Tunisian government has introduced some improvements in the Land and Urban Planning code in order to adapt the legislation to the new orientations and especially the increase of the density of dwellings by plot in order to reduce the urban extension, to protect the agricultural resources and especially to make the land cost profitable related to the number of dwellings (1 ground floor and 2 upper floors at least) that can be built in one plot of developed land,
  
- ✓ Constitution of land reserves by:
  - review and update the legislative framework in order to facilitate the application of land control tools and especially the constitution of land reserves (PRF) for future extension in the territory covered by urban development plans,
  - Reinforcing the human and financing means of the local authorities and give them gradually the possibility to create and to control the PRF by their means or in a cooperation between neighbour municipalities,
  - Finding a financing mean for the creation of the PRF and reactivation of the FIAT which can be financed by the profits achieved by selling developed lands, taxes and penalties and also by encouraging the participation of the private planning to buy plots of land in the future.

### **Housing**

- ✓ Review the cost of social dwellings which has not been revised since 1997 in order to encourage the production of social dwellings,
- ✓ The encouragement of the rental housing production.

### **Finance:**

- ✓ Review of the financing diagrams. In this orientation, a presidential decision was designed in order to finance housing for the medium income socio-professional category (about 647 US\$) consisting in the building of 500 units per year since 2007 (FOPROLOS 3)
- ✓ The extension of the intervention sectors of the 26-26 fund including the urban housing and the improvement of unlawful self-built quarters,

## **5 Action Plan**

Looking to my specialty as an architect and my work position in the town planning direction under a governmental organization (The Ministry of Equipment, Housing and Territorial Development) which is in charge of the design of state policy in urban planning and development, I orientate my proposals to the problematic of **how to control the urban extension and to offer the land to the low and medium income social categories with an accessible cost?**

In fact the control of the land cost is essential to control the housing cost and to reduce the unplanned urban extension. One of the most important solutions is to create land reserves. For that reason, my action plan will consist in

- ✓ Continue assisting the municipalities in updating their urban development plans (2004-2009) in order to generalize the new policy of densification,
- ✓ organising seminars in order to discuss the alternatives to simplify the procedures and time of the elaboration and approval of the urban development documents,
- ✓ Elaborate propositions to review the legislative framework related to the constitution of land reserves, and organising seminars to discuss the points that should be reviewed and improved.

My personal proposals for the review of the legislation are:

- Allow the possibility to create land reserves areas (PRF) in the territory covered by urban development plans,
- Review the time allowed for the land agencies to benefit from the priority right to buy the land,
- Allow the public housing actors to use the PIF,
- Finding financing means to constitute land reserves.



## Annex A: Examples of housing operation

### **A.1 -Improvement of living conditions in some deprived rural areas:**

The project was launched after the visit of the Head of the State on 1992 to a deprived rural area. The objective of this operation consists in:

- ✓ supplying basic facilities such as electricity, drinking water, housing, rural pistes, health care and education
- ✓ creating projects including agriculture, handicraft and other activities in order to fix inhabitants in these districts and improve their socio-economic situation.

a. Execution delay: 1 year

b. Situation before:

- ✓ location: Siliana
- ✓ population: 762 (149 families)
- ✓ number of rudimentary dwellings: 116 without electricity
- ✓ drinking water supply: from springs in the mountain at 1 km from the district
- ✓ no health centre
- ✓ access piste in bad condition (5 km long)
- ✓ total area: 2000ha where 200 ha are suitable for cultivation

c. Project:

- ✓ power supply: 149 homes with electricity- total cost: 300 000 US\$
- ✓ potable water supply: rehabilitation of springs and installation of canals for water supply, installation of a public fountain for 127 households – total cost: 60 000 US\$
- ✓ housing: 116 rudimentary dwelling were destructed and replaced (national rudimentary housing eradication programme) – total cost: 292 000 US\$
- ✓ health: construction of a health centre – total cost: 53 000 US\$

d. situation after project:

The objectives of this project are achieved:

- ✓ giving assistance to poor living in urban or rural districts by providing basic facilities
- ✓ fixing inhabitants of these regions in their land in order to reduce exodus to the larger towns through the creation and reinforcement of job opportunities.



road tarring

## A.2- Control of construction costs in the project of the village of Sidi Khelifa

### a. Objective:

Improving the living condition of citizens by supplying adequate housing, using local materials and building techniques.

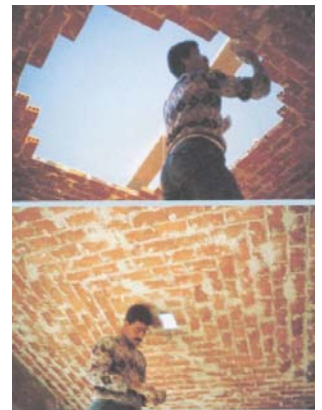
### b. Delay of execution: 2 years and 8 months since 1991

### c. Situation before:

- ✓ Location: Tunisian Sahel
- ✓ 150 scattered dwellings and some facilities
- ✓ Rural exodus due to the lack of employment
- ✓ Absence of basic facilities
- ✓ High cost of adequate housing compared to people's means

### d. Project:

Based on the integration of economic and social activities with improving housing and installing basic facilities. It is made with local materials and building techniques with the hand-working participation of the inhabitants.



Construction of a vault



A local low-cost roofing technique allowing

- ✓ 250m<sup>2</sup> plots were attributed to 10 inhabitants in order to build their own houses using local materials
- ✓ Collective facilities
- ✓ Basic facilities (surfacing a piste of 5.2 km length)
- ✓ planting 45 ha with fruit trees

e. Results:

- ✓ 30% reduction of building costs thanks to the use of local materials
- ✓ Reduction of the exodus
- ✓ First price in housing in the Arab Maghreb Union.



Construction of a bearing wall using local material –the limestone or stabilized soil bricks

### **A.3- Rehabilitation and renovation of El Hafsia**

a. Objective:

- ✓ Integration of the old residential quarter
- ✓ Organisation and reviving of the central urban space

b. Delay of execution: 13 years (1981-1993)

c. Project cost: 13.3 million US \$

- ✓ Property aspects: 1.5 million US \$
- ✓ Infrastructure: 1.3 million US \$
- ✓ Equipment: 1 million US \$
- ✓ Rehabilitation of 600 dwellings: 2.5 million US \$
- ✓ Renovation of 500 dwellings and 150 shops: 7 million US \$

d. Situation before:

- ✓ Originally a quarter of the Jewish community in Tunis before the French Protectorate in 1881
- ✓ After 1881 many Jewish families left their houses in El Hafsia and moved to the European quarter
- ✓ Occupation of the quarter by poor families with insufficient means for restoration and consequently degradation of the hole of the quarter
- ✓ In 1930, the French authorities declare the insalubrious residential areas, in danger of ruin proposed for destruction.



Situation before project

e. Project:

- ✓ Preservation of the urban and architectural style of the area
- ✓ Rehabilitation of 250 dwellings, renovation of 400 others and 150 shops
- ✓ Rehabilitation and integration of El Hafsia in the economic and urban aspects
- ✓ The project was successful at the international level thanks to its architectural style and was awarded the Islamic Architecture Agha Khan price in 1983 and 1995.

f. Situation after project :

- ✓ Social: rehousing households in new dwellings equipped with all basic facilities and improving their living conditions,
- ✓ Economic: rehabilitation of a large part of the Medina thanks to resources from the sale of available plots after demolition.



Situation after



General view showing architectural characteristics of the quarter

## A.4- Rehousing of dwellers of “Ukalas” in the Medina of Tunis

### a. Objective:

Rehabilitation of the Medina of Tunis and providing “Ukala” dwellers with better housing condition and the necessary facilities.

### b. Delay:

- ✓ phase 1: 1990-1992
- ✓ phase 2: 1992-1994
- ✓ phase 3: 1995-1997

### c. 4.3- Project cost: 30.4 million US\$ distributed as follows:

- ✓ Rehousing: 14.1 million US\$
- ✓ Rehabilitation: 16.3 million US\$

### d. Situation before:

- ✓ 15000 inhabitants live in “Ukalas ”, the majority are migrated from rural areas since 1960
- ✓ Insalubrious and old dwellings representing a danger to their occupants because of their degraded state
- ✓ Overcrowded, lack of basic facilities
- ✓ Environment encouraging delinquency for poor and limited cultural level families



Situation before project : Deterioration of the housing conditions

e. Project:

- ✓ Ukala that should be evacuated :266
  - Phase 1: 89 ukalas occupied by 492 households
  - Phase 2: 95 ukalas occupied by 415 households
  - Phase 3: 72 ukalas occupied by 404 households
- ✓ Ukala that can be rehabilitated : 642
  - 288 requiring complete rehabilitation (roofs, structures)
  - 54 requiring light rehabilitation

f. Situation after project :

- ✓ Social: rehousing households in new dwellings equipped with all basic facilities and improving their living conditions
- ✓ Economic: rehabilitation of a large part of the Medina thanks to resources from the sale of available plots after demolition.



Situation after prjoect : adequate housing conditions including dwellings and facilities

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