### Planning sustainable urban development in Bechar city

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#### **Abstract**

In the old tradition, the production of Saharan cities, responded with ingenuity to the pressing needs of the communities. In order to do this, the men of the region have acted to the extreme of their knowledge with limited means, and have therefore undertaken establishments perfectly in keeping with their particular context represented by the ksour. But as a result of technical progress and social change, Saharan cities are constantly undergoing profound changes. The new productions engage in an anarchic urbanism requiring a thorough review and research.

Global climate problems are leading to a rapid change in urbanization, in particular in developing countries where an international engagement is undertaken in order to promote ecourbanism around the world. In recent years, the Algerian government inaugurates a series of measures that are preliminary steps towards a sustainable development of the country. Due to environmental issues some attempts seek to implement ecourbanism, yet the bureaucratic techno-structure in charge of urban management seems unable to integrate this environmental approach.

During the last decades, many debates arise on equipping cities with sustainable neighbourhood development in developed countries. As far as the Algerian context is concerned, there is an absence of a closeness democracy where residents' participation in the decision-making of their neighbourhood's changes is non-existent; and for that reason, no neighbourhood governance takes place. Therefore, this article focuses on the conditions, which prevent the emergence of ecourbanism in Algeria and the strategies used that lead to the failure of sustainable urban development. Moreover, the study would try to determine the situation of legal changes and governance constraints for the neighbourhood scale development, specifically in Bechar

**Keywords:** sustainable neighbourhood development, governance, participation, neighbourhoodurbanization

# GEOGRAPHICAL CONTEXT OF THE COMMUNE OF BECHAR

#### 1.1. GEOGRAPHICAL LOCATION

Béchar is located in the South-West of Algeria. Its geographical location near the western Border and the role of north / south hinge of the southern slope of the Saharan Atlas give it a strategic position as a commercial and military crossroads of the south-west. Its current status as capital of a Wilaya (department), makes it today the main agglomeration of the region encompassing the wilayas of Bechar, Adrar and Tindouf. Béchar is crossed by the national road n ° 6 considered as a main axis, connecting it to the big cities of the North and the South of the country.

### .2. PHYSICAL AND REGIONAL FRAMEWORK

The commune of Béchar fills a space of 5050 km2. It is crossed from the North-East to the South-West by Oued Béchar (river) - probably an old tributary of the Oued GUIR- Fed by the flowing waters of the Jebel Grouz, which drains, with its tributaries, a basin of 150kms. It is mainly bounded:

- On the north by the Djebel GROUZ,
- On the south / east by the Western Erg,
- On the west by the Hammada of the GUIR,
- In the east is Djebel MEZARIF and Hammadet Bet-Touadjine

As for the agglomeration of Béchar, it is limited by:

- On the north / west by two parallel ridges called respectively Barga El Gaada and

Barga sidi M'hamed Ben Bouzianeadopting the leadership of the Oued, To the south / east, at a distance of about 15 kms, by the Djebel Béchar

The site presents various physical elements which together form two main parts:

- The first part forms a triangle, formed by Djebel Antar and the lower part the most

flat and highest. The Oued (river) passes through the middle of this triangle, hence, forming two well distant fringes, one flattened and elevated towards the north and the west, the other more or less flat and elevated towards the east.

- The second part is composed of the same elements structuring the first, in which the relief is more or less rugged towards the south. Nevertheless, it forms a trapezium, which is as a small base limit of the first part and the great base of the Hamada of Guir towards the south.



Figure: situation of the agglomeration

The site thus presented has favored the implantation of the city since the conditions of life allow it: water, defense system, fertile land. The city, subsequently settled in the flattest part and obeyed the existing linear conformation: the Oued (river).

Evolution of the population at the new census 2008 / Evolution and dispersion of the population (77-2008):

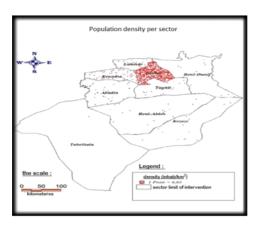
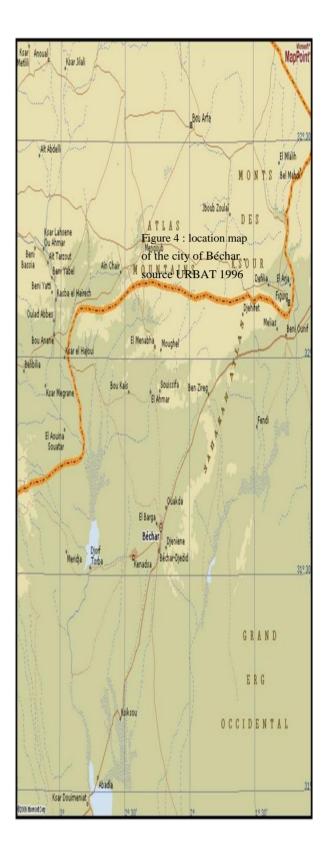


Figure 3: Geographic map of the evolution of habitat density, source URBAT Town of Béchar \*



# THE SPACE DEVELOPMENT OF THE CITY OF BECHAR

#### 2.1. INTRODUCTION

The urbanization of Béchar has passed, through its long history by different civilizations, The site has been inhabited since ancient times as evidenced by the presence ruins of the ancient ksour and the old Ksar which is still existing. It was characterized by the saharan civilization with its habitat and its oasis agriculture, by the nomadism occupied its nearest surroundings and the caravan trade of which it represented a place of stage.

#### 2.2. BECHAR PRES-COLONIAL:

# 1. Pre-Islamic period (before the 7th century)

During that period, no writing or vestige gives information on possible phoenician implantation in the are of Béchar and in the South of Algeria. After the ruin of commercial the hegemony , and the conquest of the Numidy Mauritanian kingdoms, Rome settled strongly in The new provinces. The mines that existed in Niger, Senegal, Guinea since the Iron Age, proves that a trading system occurred and was real in the west of Africa long before the trans-Saharan medieval trade. The TRANSSAHARIANS were existing that is why Mr. RAYMOND reconstructed their probable itinerary on a map. It clears two main roads: FAZAH KAWAR in the east of the Algerian south connecting CARTAGE to Mali passing through The region of TOUAREG. The

second FAZAH GAO in the west linking Morocco to GAO, Passing through Mauritania.

# 2. Muslim dynasties (7th century AD)

The Eastern Algeria was part of the Abbassides empire whereas, the west of Maghreb belonged to the kingdom of the Idrissides . Fez was its capital. In 1912, the Muslims of Spain brought about the dismemberment of the Almohad empire which replaced the local dynasties.

But in spite of the conquests (FOUTOUHATES), and the management of the great country (Arab Maghreb), no document or index has been found giving clear proof of the existence of the region of Bechar.

#### 3. Turkish Period (1505-1830)

The Spanish fleet attacked several coastal cities, such as Mers-El-Kébir (1505), Oran (1507), Algiers (1509), Tenes and Mostaganem (1511). In order to hold out against the Spanish attacks, the muslims of Algeria appealed to the Turkish corsairs whose leader Khair-Eddin extended his the over all coast. During the Deys' regime in Algeria, the Turks had small detachments . They occupied several Oasis. It was then during a period of drought that lasted 40 years that the Day of Tlemcen, Caliph Abdel Malek (1550), sent missionaries search for water across the to region. One of these missionaries brought him in a gourd some delicious and fresh water , discovered in the Sahara. The Dey told him "you are a BACHCHAR," meaning an

announcer . He gave the name of BECHAR to that particular area.

Since the discovery of that place, a series of urban facts have occurred: The settlement of "Ouled Noceir" in Béchar. Then and later, there was the settlement of Sidi M'hamed Ben-Bouziane, a holy man. He and his tribe had cultivated the palm grove and had bored wells as well. Then, during that time, the Trans-Saharan route that linked Tafilalet (eg Siiilmassa. Morocco) and the southern Algerian Gouraya, Touat to Sahel Africa was born while passing

through the Bechar's region. Bechar became an important trading point at the place called "Place des Chameaux".

Sidi M'hamed Ben-Bouziane deserted the region of Béchar and moved to Kenadsa (about 20km west of Bechar), where he founded a Zaouia, a sort of an islamic monastery or brotherhood Meanwhile. there was the construction of a Ksar south of the place called "Place des Chameaux" in the left fringe of the river and near the palm grove at the end of the fourteenth century. It is the actual Ksar (palace Of Bechar. The Ksar of Bechar, the oldest nucleus of Bechar, was built by the servants of the zaouia of Kenadsa. It is endowed with two cemeteries: one in the south near the Ksar's south door, thus, forming a barrier of

This Ksar (palace) is organized and structured with a mosque in the middle, the Houader's square, and

growth, the other in the north-west.

hierarchical paths overlooking houses . The communication with the outside world was made through three main gates, one in the west , the other in the north-east and the last in the south.

So we can say that before 1903, the site of Bechar was occupied by the old ksar which is still existing today. It was part of a series of ksur(palaces) that characterized the area. The Ksour, villages consisting of a concentrated accomodation. such as fortresses. presenting a typology and a technique of construction which had been used extensively along the northern Sahara strip and which the Muslim civilization had strongly contributed to spread. Close to the Ksar, there is the Camel Square, which has become the meeting place for commercial caravans where the Ksourians were making their trading exchanges with the nomads and other itinerants of the caravan routes.



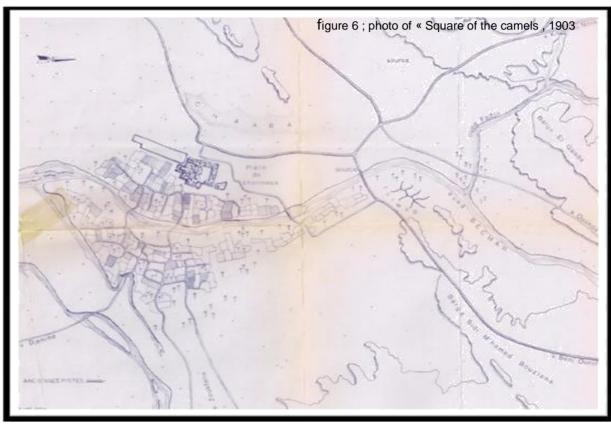


Figure 7: The city of Bechar before 1903, source URBAT.

#### 2.3. Colonial period

France, which had colonized Algeria since 1830, entered the south and to Béchar precisely and only in 1903. Why did the French push their conquest to the Sahara, and specially to Bechar? In history, the trans-Saharan railway awaits its historism following the meanderings of its evolution. The idea of the railway was launched by the French in 1960. It fueled all polemics until the last moment of the Algerian War of Independence. At the same time of course, to be feasible under a political will to any test.

The period 1903-1917: French penetration and construction of the railway:

In 1903, the French took possession of Bechar, site and strategic node from a military point of

view. They set up a fortified redoubt north of the Ksar. Two poles of the future growth of the city of Bechar are thus defined. On the one hand the Old Ksar with the aboriginal population and on the other the military barracks (the redoubt) in a strategic position of control, alongside the most important sources of water and communication.

In 1905, the railway connected Béchar to the north of Algeria . A few years later, in 1917, a new European quarter, "the village" was born close to the Ksar and extended from the Camels' square to the Redoubt.

The period 1917-1940: is the one of the growing role of the city with the exploitation of the coal mines and the construction of the trans-Sahara. The greatest urban expansion of the city took place between the two wars, when Béchar became a military base, and a node of communication towards the Saharan South.

For example, large companies such as the Trans-Sahara for the exploitation of the

riches of the Saoura and Touat regions, which made the trail that reached Gao in Niger and a good part of which will be used for the national road N  $^{\circ}$  6.

In this period, the French population is twice as large as the local population. The economic and administrative role of Béchar has an obvious impact on the organization of the territory in general, and on the urban development of the city in a particular way. However, the growth of the city is in harmony with the natural and social environment

However, afterwards, a major fact had come to shake this harmony and thus the urban structure of the city. Indeed, the French administration favored the local ownership of land, tribal and common property to facilitate the sale to French settlers.

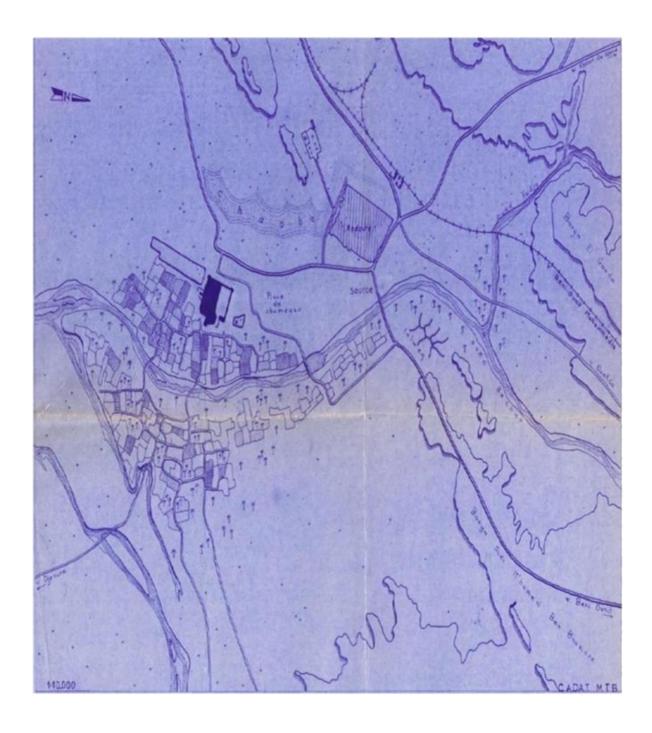


Figure 8 : The city of Béchar before 1940, source URBAT



Figure 11 : the town of Béchar before 1958, source URBA

added other migrants from the ksour of the valley of the Saoura.

The period 1940-1958: the new expansion (Béchar-Djédid and la Barga) with the extension of the railway line:

In 1940 the railway was extended to Abadla to serve the coal mines . in 1942 a new railway linked the city of Béchar to the port of Ghazaouat, through Morocco as part of the project "Mer-Niger" with ambition to bring the Mediterranean into the Niger by a railway.

Large-scale projects such as the new Bechar railway station and a power station south of Béchar with a neighborhood of 1,600 workers in Bidon II, 7 km from Béchar (currently Béchar-Djédid) were being built.

During the 1950s, the city asserts itself more as a military and administrative one . Thus, a large residential area is made to the west of the city near the mountain ridge "la Barga" of which it bears the same name.

This expansion is aggravated by the exodus of the inhabitants of the Ksour of the Saoura and the sedentarization of the nomads in the town of Bechar. The current structure of the latter with the main poles of our days is beginning to emerge:

- 1. In the center of the city the first European quarter outside the barracks along the axis of Lutaud's square (ex-place of the camels) until the redoubt, to which is grafted the new district the Barga.
- 2. Between these two sets, a depression "Chaabat towards the south, with a precarious accommodation sheltering the ksourians of the exodus,
- 3. In the north-west, around the railway station, a neighborhood housing Moroccans and Spaniards from the workforce of the construction of the railway,
- 4. And in the east, the Débdaba district, which welcomes nomads who settle down, including the Ouled-Djerir who settled on their former gardens, to which would be

post-independence period: strengthening the tertiary sector

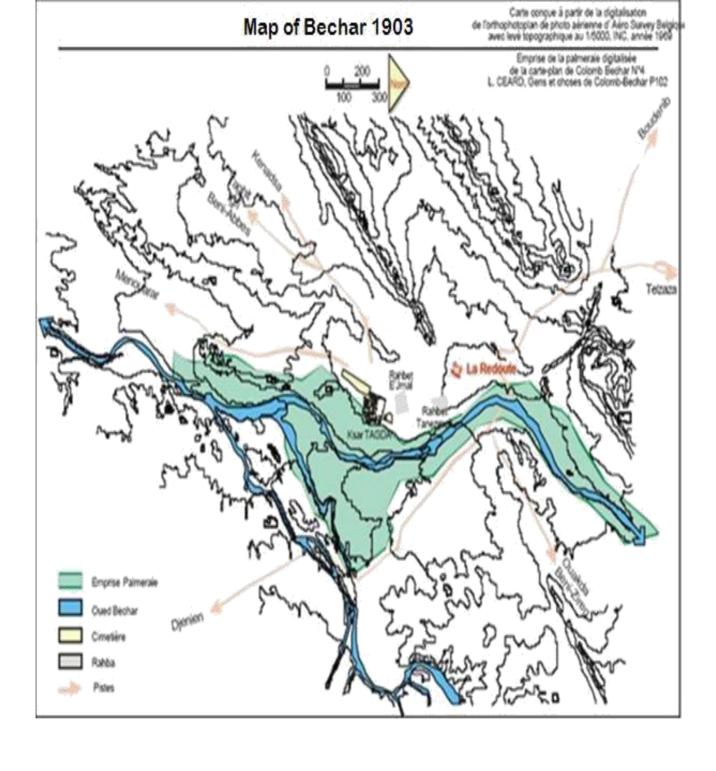
The city of Béchar is experiencing a rapid and uncontrolled expansion characterized mainly by the exaggerated zoning practice. There was the construction of new housing parks, 220 housing district in the Barga, 622 housing district, halfway between Béchar city and the Electric central district, as well as other neighborhoods such as SNTV, Debdaba (east side), in Béchar Djedid. Add to this the construction of bridges and the renovation of the city center which is unfinished.

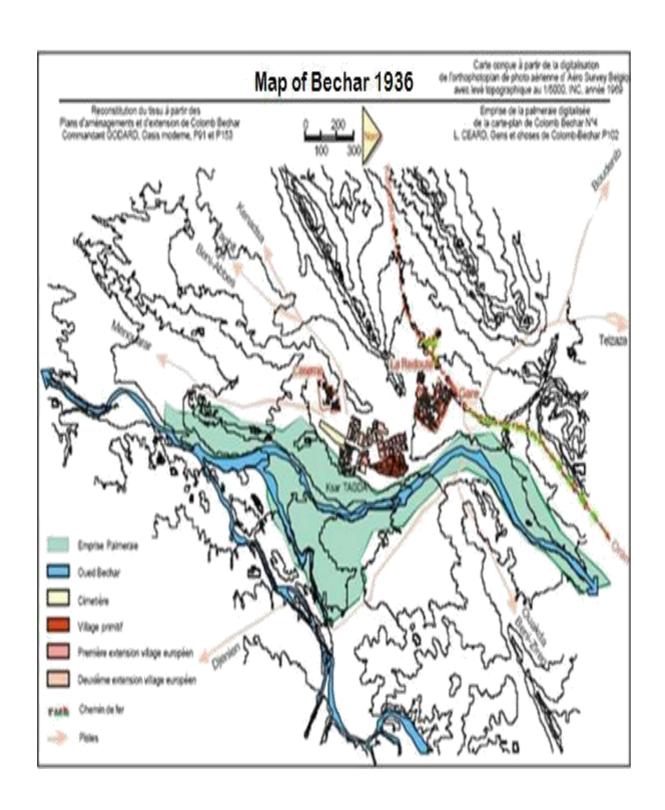
We take notice of the permanence of the places, the line of transsaharienne growth, the Ksar the route of the historical center.

The town of Béchar counts, despite the departure of the Europeans, almost 34000 inhabitants. The Closure of the coal mines has affected Kenadsa's economy, and the one of Bechar, however, thanks to the exploitation of natural gas, the State and through several plans has injected equipments, including, specially school and health, as well as basic infrastructure and networks. The town of Béchar has been formed and transformed along the history, following a clear and permanent structure composed mainly of the major nodes of articulation and routes of gradual connections

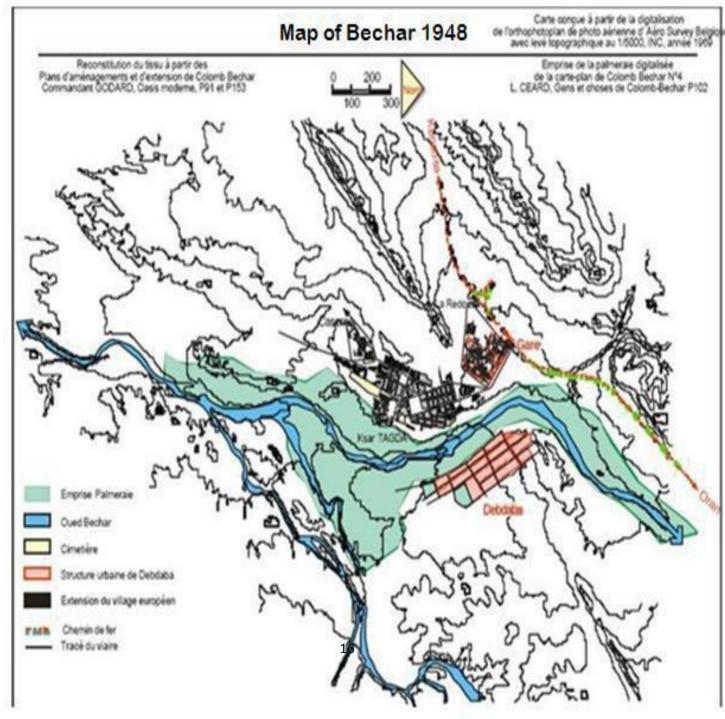


Figure 16





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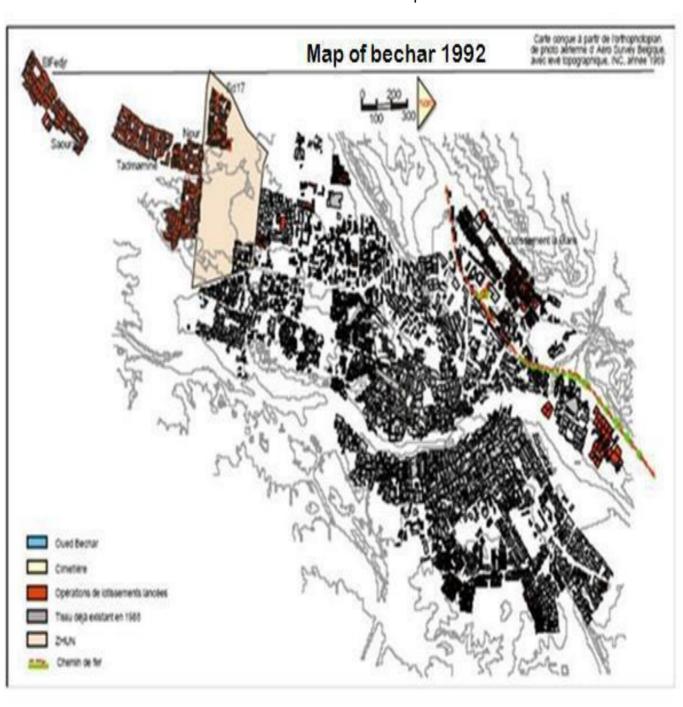
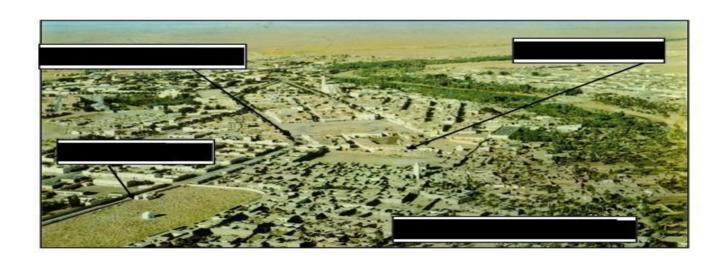
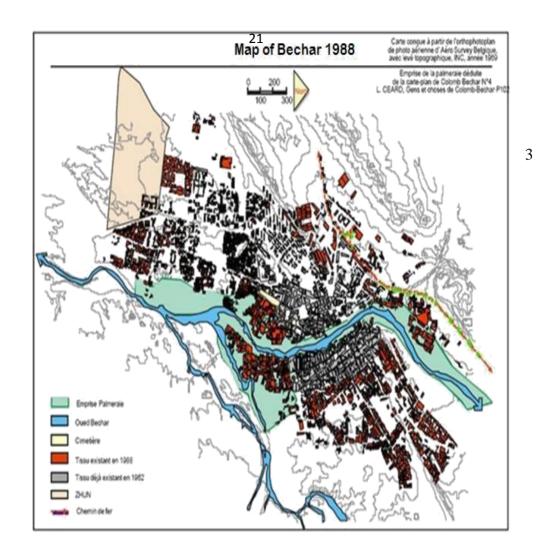




Figure 21:
Different
growth plans
of the city of
Bechar,
source:
Magisterium in
Urban
Planning, Ben
Mohammed
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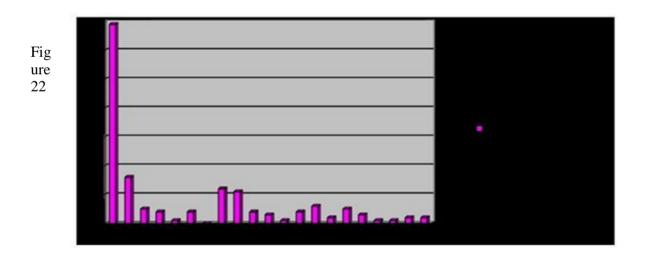


Figure 23: The distribution of the housing estates in Béchar 's department.

#### **CONCLUSION**

The phenomenon of urban sprawl is evident, like all Algerian cities, with an increasingly rapid urbanization but also anarchic. The town of Béchar is characterized by a linear growth along the two banks of the Oued (river), knowing that the western side of the city faces a natural barrier of size which is the mountain ridge of the Barga, and in its continuation and along the latter, an artificial urban barrier represented by the area occupied by "the 3rd military region".

This logic of growth, led to two conurbations, one in the north with the Ouakda's borough, and the other to the south with the Béchar Djedid Quarter. On the other hand, in addition to the growth and mutations experienced by these two urban entities, with that of the main popular district of Debdaba, other poles have emerged without any spatial planification, let a global vision of urban management, such as ZHUN( uraban lodging zone), the Blue Zone, and Supraarea facilities such as university or hospital, to the south or the pole of the road of Lahmar in the north, created outside the urban perimeter, more particularly with the new university cluster, a large social housing program, and other facilities as well.

Indeed, the city of Béchar is prey to a real "urban breakdown ", expression , borrowed once again to a study prepared by ANAT Algiers in 1996, entitled Control of the growth of Béchar's city ". This complete disorder in which the city evolves is in fact the result of arbitrary and spontaneous interventions since the post-independence period , in particular .

The sustainable development is a project which has been scheduled in all developed countries thanks to international negotiations about ecological risks for the protection of natural capital. The Algerian government shows a high interest in the

principles of sustainable development, implementing for example residents' participation (Boukarta 2011) aiming at the realisation of durability and enhancing the quality of cities and neighbourhoods. Yet, with the isolation of the elected representatives and the local authorities, mediocrity and failure of plans inevitable. To illustrate, Oran is one example of this failure. In this city, we find a disproportionate and an uncontrolled urbanization process which delays the institutional. technical and urban administrators from intervening, and that multiplication result in the of environmental damage within urban spaces (Madani 2002).

The crisis of 1980s and the total disengagement of the government to act and find solutions to decentralization, the population, in particular neighbourhood's residents, claim their right to be involved in the management of affairs of the city. Therefore, does the mode of normative and centralized management come to its end? Is it the era of neighbourhood governance that leans a multitude of actors and emphasizes the role of the mediators, the mobilization of the social agents and the research for a compromise between divergent interests? (Kharroufi 2000). neighbourhood Among the present committees in Oran, how many among these are really active? How many are they interested in the living environment, neighbourhood changes and the future?

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