



TECHNIUM
SOCIAL SCIENCES JOURNAL

Vol. 36, 2022

**A new decade
for social changes**

www.techniumscience.com

ISSN 2668-7798



9 772668 779000

Green spaces between theory and reality. Case study of the city of M'sila - Algeria

Seghiri Djamel¹, Khalfalleh, Boudjamea², Layeb Hafid³

¹²University Mohamed Boudiaf, Urban Technology Management Institute (GTU), M'sila, Algeria, ³University Constantine, Regional Development, Algeria

djamel.seghiri@univ-msila.dz, boudjema.khalfallah@univ-msila.dz

Abstract. The green areas are considered as an integral part of the planning of the urban environment as they are an integral part of the city and include several important functional, aesthetic and environmental dimensions. It is achieved through the adoption of a coordinated and systematic approach and planning and is also influenced by a range of planning, technical and managerial factors. The aim of this research is to study and clarify the most important current problems that afflict the green spaces in the city of M'sila at the level of their urban spaces on one hand and to highlight the reasons that led to this situation. Based on a methodology based on a descriptive analytical approach to produce recommendations that would achieve the objectives of this paper.

Keywords. green spaces, reality and theory, city of M'sila, Algeria

Introduction

The nations of the ancient world paid special attention to the vegetation cover, and made of it units of different dimensions and different arrangements, and they made use of various types of life sciences, engineering and art, and these units carried the concept of the garden.(Khalefallah, B., 2005).

This art has branched out in the modern era and there are many designs to increase the green area associated with the development of different human civilizations, which are linked in one way or another to the environment, customs and traditions.(Panduro, T. & Veie, K. 2013)

Where parks and green spaces are the lungs of the city in which they breathe, and the barrier that protects them from the factors that result in problems that hinder human life. and relieve heat.(Benhassine, N. 2010).

But we find that the cities of the Arab world at the forefront of the world suffer from a severe shortage of green spaces, including the Algerian cities, (Benhassine, N. 2010).which are witnessing rapid population growth and great urban expansion in recent years, accompanied by a severe shortage in terms of green spaces compared to developed countries, and the city of M'sila is among these medium-sized cities. In Algeria, which is witnessing an urbanization acceleration and its external spaces suffer from neglect and deterioration, although it is one of the semi-arid regions characterized by rather harsh climatic conditions compared to other cities that translate the presence of green spaces..

1- Materials and methods :

Our study, like many field studies, is based on the descriptive-analytic approach, which describes the phenomenon as it actually is and then analyzes it.

- **Techniques used in research:** The research techniques that we will use are imposed by the nature of the work, so we rely on the following:

Observation technique: This is because the method of observation is characterized by tangible aspects of living with the subject, watching it closely, and using images. Note advantages:

Direct scan technology:

- Allows to collect data from reality It helps to identify new information that the researcher has not thought of before.

Interview technique:

Interviews are conducted with some officials and heads of interests, and their function is to collect data on the subject.

Data analysis and graphs:

An inductive analytical study compared to the previous and modern directives that appeared clearly at the level of the city of M'sila and the extent to which they responded and dealt with green spaces during the time periods. And to identify the most important shortcomings and problems at the level of the city in general.

2 Presentation of the city of M'sila:

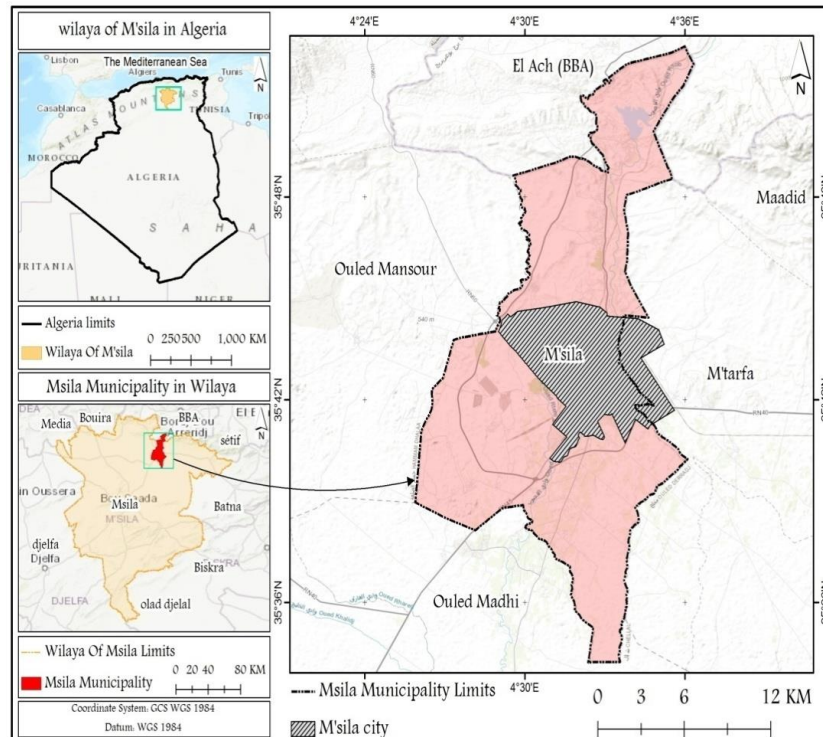
2.1 Defining the study environment:

The field of study includes the city of M'sila, which is characterized by a distinguished geographical and administrative location.

2.3 M'sila State:

The latter was established following the administrative division of 1974, pursuant to Ordinance 74/69 of 20/07/1974, after it belonged to the wilaya of Setif. It occupies an area of 18175 km², and it currently includes 15 districts and 47 municipalities. It is bordered, from the north: the states of Setif, Bordj Bou Arreridj, Bouira, from the east: the wilaya of Batna, from the southeast: Biskra, from the west: Medea, from the south: Djelfa State. (Master Plan for Development and Reconstruction 2010).

Map No. (01): the location of the municipality of M'sila in the state



Source : (DEHIMI & HADJAB, 2019)

2.4 M'sila City

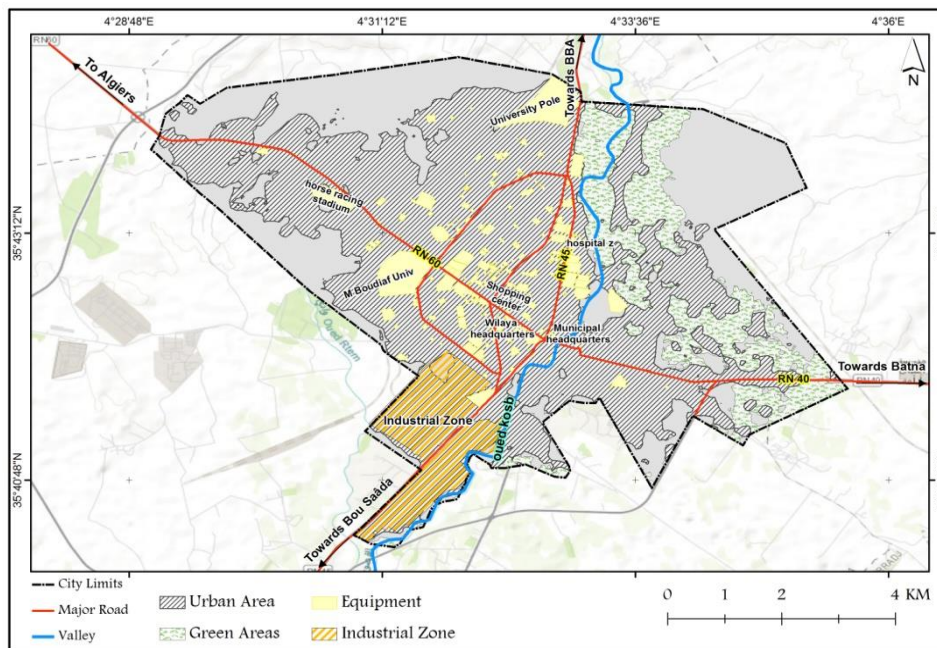
The city of M'sila is located in the center of El-Hadna, bordered to the north by Boukhmisa, to the east by Al-Matarfa, to the west by Awlad Mansour, and to the south by Awlad Madi. It occupies an area of 232 km², inhabited by 121 thousand people, according to (1998 statistics). It is located in the southeast of the capital and is 250 km away from it. It is 100 km away from the sea and 460 km above the sea level.

2.5 Geographical location

The municipality of M'sila is located on the northwest side of the Shatt El-Hadna basin, where it is bordered on the north by the El-Hadana mountain range, and on the south by Shatt El-Hadna, which is an intersection point for both National Road No. 40, National Road 45 and the waterway (Oued El-Kasab) is one of the most important reasons that It made the city of m'sila arise and develop through different stages of time.

The area of the study area is estimated at 233 km², occupied by about 147,945 people according to the 2005 census, ie an average of 635 people / km².

Map No. (02) : City of M'sila:



Source ; (M'sila Municipality 2019)

3- A historical overview of the green spaces in the city of M'sila:

Man's use of green spaces and the garden has increased, sometimes being linked to the house and at other times to the source and a third time to the aesthetic form of cities in modern times, and taking these jobs was not the result of one moment or one era, but came as a result of human development and accompanying it, which necessitates a look at the historical development For the green spaces of the city of M'sila.

Which included green spaces, parks, and dense wooded squares, especially before the sixties, when green spaces dominated the built spaces in that period, estimated at more than 100 AH, while the built spaces were estimated at about 50 AH, and they were mostly centered around the banks of Wadi Al-Qasab and the axis linking Bousaada and Burj Bou Arreridj, most of which were gardens and orchards belonging to and exploited by the centenarians at the time (the property of the centenarians), as shown in photo No. (04)

However, after 1960, these green spaces were subdued for the sake of buildings, as nothing remained of them except what was on the banks of the valley.

We can clarify the green areas according to the following periods:

The period before 1960: green spaces exceeded built spaces, due to:
1 -The colonizer's exploitation of the area as an agricultural area and its good maintenance by the Algerians is compulsory.

2- The lack of built-up areas and the abundance of water.

3- The technical view of green spaces on the part of the Europeans, especially from the aesthetic aspect.

- **1960 to 1970**, the built-up areas were inflated compared to the previous period, while the green spaces were left untouched due to:

1- The development of the urban movement during independence to find quick solutions for the groups affected by colonialism as well as from the 1965 earthquake.

- 2- Demographic growth.
 - 3- The green spaces remain untouched due to the presence of sufficient room for expansion (linear form).
 - 4- The political trends dictated by socialism (socialist villages, agricultural revolution).
- **1970 to 1983**: the decline of green spaces, which was offset by an increase in the built-up spaces in a large and unorganized manner due to:

1- Administrative division, where m'sila became a state in 1974, which necessitated the existence of several base and industrial structures, which resulted in a rural exodus (of the working class).

2- The population growth r[9]. Fig No. (3)

Through the aerial photographs taken, we find that there is a big difference between ate was dense, which necessitated a residential urban policy that meets the demands of the growing population.

These two factors led to a noticeable shrinkage of green spaces.

The period after 1983: It is noticeable that the excessive consumption of city spaces in favor of the built spaces and the lack of attention to green spaces on the part of the managers, where the proportion of spaces decreased significantly

the images in terms of the area of green spaces, as we mentioned earlier in the historical overview of the urban center due to the limited green spaces due to the chaos of urban development that brought about a large percentage in terms of these spaces, and some people invaded the gardens and usurped the spaces The greenery in order to expand the buildings as well as the random construction and the accompanying real estate speculation about the green spaces in the city.



Fig 4: Aerial View of the City of M'sila 1956

Source: (Directorate of Land Survey in M'sila.)

4- Discussion and Results:

4.1 Analysis of green spaces in the city of M'sila:

The city of M'sila is among these medium-sized cities in Algeria, which is witnessing an acceleration in urbanization and its external spaces suffer from neglect and deterioration,

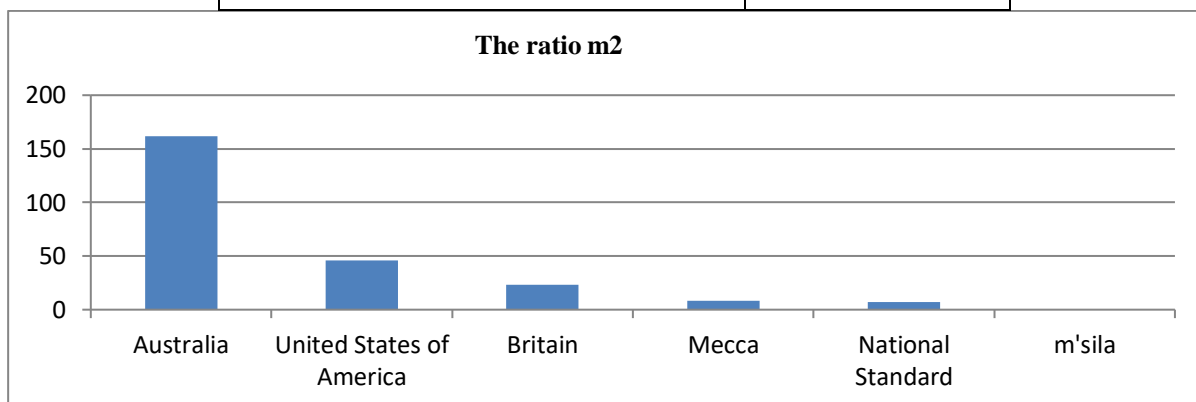
although it is one of the semi-arid regions characterized by somewhat harsh climatic conditions compared to other cities that translate the presence of green spaces adapted to the climatic and topographic nature.

Although there are some green spaces, they are chaotic, with the absence of scientific and practical foundations as well, and neglecting the interconnection between the urban space, by creating green spaces on the main axes of the city whose design does not fit with urban planning, green spaces and climatic factors and without the presence of the lowest conditions and standards For planning green spaces, we also find that one of the characteristics of green spaces is that they change with time and vary in shapes and designs or in nature. From its growth, and the multiplicity of these designs is increasing from an aesthetic, environmental and cultural point of view, and there is no doubt that among the factors that led to this situation.

And if we compare these numbers with “what is allocated per person in the cities of European countries such as Britain is 23 square meters per person, or in the United States of America 46 square meters per person, or in Australia 162 square meters per person. Which is the largest percentage recorded in the city of Sydney” (Saleh Ali Al-Shamrani, 1985), as well as the national standard estimated at 6.8 square meters. It was noted that the percentage allocated to green spaces in the city of M’sila is very weak, especially as it is in dire need of more green spaces for its presence in dry and semi-arid areas, see Figure No. (01)(Al-Shamrani,s.a . 1985).

Figure No. (1): Comparison of the percentage of green spaces in some countries and the city of M'sila

Country	The ratio m2
Australia	162
United States of America	46
Britain	23
Mecca	8
National Standard	6,8
M'sila	0,05



(Source: Author 2022)

From the above, we can say that the city of M'sila lacks green spaces and the important environmental role that these spaces play in purifying the atmosphere from plankton, providing shade and creating new local currents loaded with moisture that work to soften the atmosphere and create spaces. Convenience to the citizens, as well as giving a beautiful visual image of the city. look at the pictures 1.2.3.4.

Pictures 1,2,3,4: The reality of green spaces in the city of M'sila



Source: Author 2022)

4.2 Reasons for the deterioration of green spaces in residential communities:

The beholder sees the reality of the reality in which the green spaces live within the urban perimeter of the city before his eyes, in the poor condition of the green spaces. Throwing dirt, rubbish.....etc. All of this is due to many reasons, usually the result of a lack of awareness or appreciation for the value of these spaces. Among the reasons that led to the deterioration of green spaces within the city, we find the following:

-Technical and planning reasons:

The absence of codified planning to respond to all these areas with the expansion of urbanization and the increase in the city's population, so that the absence of planning made it difficult to address the situation later, especially since what is called today a *conflict that ends between speculation in real estate and economic liberalism and the state's retreat from direct intervention* to overcome these problems.

Lack of technical framing and material spending on green spaces.

Marginalization of the green space sector from basic equipment in the majority of residential projects

The lack of adaptation of some plants to the climate, as we record a high temperature in the summer (dryness) and a decrease in the amount of rain in the winter, and they cost high techniques for their maintenance.

Management reasons:

Relying on the old methods of managing these public places from the planning stage to completion and then not managing them and their will.

E- The costs of gardens (their completion and maintenance) are not compatible with the available and allocated material resources.

- Significant imbalances in urban functions within the city, especially the leisure function, due to the lack of urban spaces qualified for this purpose.

- Lack of financial resources allocated for the completion and maintenance of these parks.

- The problem of maintenance due to the damage to which the plantings are exposed for various reasons.

-Social reasons:

- The failure of some of the managers of these parks to perform their duty, especially in applying the laws stipulated in the management and maintenance of these spaces.

- Neglect and sabotage by the ignorant citizen of the importance of these spaces due to lack of awareness.

Some of the rangers assigned to these gardens did not do their duty.

- The absence of a fence in some gardens, which makes them vulnerable to damage and in the event of a fence deteriorating.

Conclusion

Despite the great role that green spaces play in human life, which has recently become an important component of the city, it has become indispensable for the reasons we mentioned above on the one hand, but from the reality of green spaces within the city of M Shala a bitter reality due to its poor conditions and deterioration. What types of green spaces do you live in? This reality in which green spaces live is no accident. Rather, it is the result of several reasons, including management, technical, social etc.

Therefore, all factors that contribute to its success and the performance of its various roles in the design and construction of green spaces must be taken into account, such as taking into account the peculiarities of the region in addition to social, climatic and technical characteristics and other aspects to ensure its success at all levels.

Recommendations :

In terms of planning:

Planning has a major role in defining the boundaries, spaces and shape of green spaces that are commensurate with the urban fabric in which it is located. Therefore, the green spaces must be studied in parallel with the buildings (the built-up area) in order to avoid the spontaneous spaces that are produced for us through the spaces left by buildings such as the neighborhood of housing.

- Taking into account the location, distribution and concentration of green spaces, because they are the only outlet for residential neighborhoods. From the above, we suggest some points that we consider important from the planning side, namely:

- Leave vacant spaces that can be used for green spaces.

Determining and setting future programs and plans to compensate for the noticeable shortage of green spaces, the so-called reserve spaces.

- Expediting the preparation of what is planned so that the areas allocated for green spaces for sale and purchase do not remain and distributed in the form of dirt fragmentation, and this is unfortunately what we see in many collective and individual neighborhoods alike.

Achievement: It is considered one of the most important and biggest problems faced by green spaces in the city of M'sila. The plans took into account the green spaces, but their presence is absent on the ground in most cases, so it is **preferable:**

Completes all preprogrammed spaces that remain empty. Improving what is available by replanting, improving the irrigation system and removing weeds that participate in beneficial plants (water, fertilizers, etc.)

-réhabilitation of degraded spaces an increase in the warranty period to ensure the viability of the plants (their suitability for the local environment) from one to two years, for example.

-Develop an independent budget for green spaces to cover the critical shortage.

Urban Environmental Awareness:

-Spreading awareness of the importance of green spaces for the citizen and maintaining a sense of responsibility around them

-Establishing strict laws that punish anyone who destroys green spaces, and sets incentive prizes for those who maintain or improve green spaces.

Mixing creative, sports and cultural activities with the natural environment, such as theatrical performances or painting exhibitions...etc. In some parks.

References:

- [1] Al-Shamrani, S.A. (1985). Uses of Public Gardens in the City of Makkah Al-Mukarramah, Social Sciences Research Series, Umm Al-Qura University, 20.
- [2] Laurent M. & Corinne B (1993). Urban Arboriculture, Ed Institute For Forest Development, Paris, 40.
- [3] Benhassine, N. (2010). "the practice of recreation in green spaces in constantine", doctoral thesis, 79.
- [4] Dehimi, S., & Hadjab, M. (2019). evaluating the quality of life in urban areas by using the delphi method. a case study of msila city/algeria. romanian journal of geography, 2(63), 193-202., 2(63), 193-202.
- [5] Fuller, R. A. and Gaston, K.J. (2009). The scaling of green space coverage in European cities [archive]. Biology Letters. doi:10.1098/rsbl.2009.0010.
- [6] Khalefallah, B. (2005). Urbanism and the city, Dar Al-Huda for Printing, Edition 01, Algeria, 33
- [7] Larcher J. & Luc And Dubois M. (1991)-Noelle, Development of urban green spaces and rural landscape, Lavoisier, Tec et Doc, Paris.
- [8] Lutzenhisher, m, & Netusil, n. (2001) "Effect of Open Spaces on a Home's Sale Price," Contemporary Economic Policy, vol. 19, pp. 291-298, 2001.
- [9] Mahmoud, r. (1995) Design and landscaping, fourth edition, Manshet al-Maaref, Alexandria 40.
- [10] -Merlin, P. & Choay F. (1996). Dictionary of town planning and development, 2nd editions, French University Press, France, 79
- [11] Msila, c. d. (2010). Plan directeur d'aménagement et urbanisme PDAU. Msila.
- [12] Official Journal of the Algerian Republic (2007) Law 07-06 of May, 13

- [13] The master plan for the rehabilitation and reconstruction of the city of M'sila 2010
- [14] Panduro, T. E., & Veie, K. L. (2013). Classification and valuation of urban green spaces— A hedonic house price valuation. *Landscape and Urban Planning*, 120(2013), 119–128. doi:10.1016/j.landurbplan.2013.08.009
- [15] Stiles ,R. (2013)Urban spaces – enhancing the attractiveness and quality of the urban environment,” WP3 Joint Strategy. University of Technology, Vienna, December 2006.
- [16] Shafak ,A .A,&Al-W.(1989), *Climate and Architecture of Hot Areas*, Third Edition, World of Books, Cairo, Egypt,. 12, 167
- Zaki. H,(1992) *Scientific Research, Contemporary Architectural Research*, first edition, Cairo, Egypt, 47.