

The Role of Sustainable Tourism in Integrating and Maintaining the Architectural Heritage in the Old Cores. Case Study: Architectural Heritage of the Ziban's Region Ksour

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Abstract

This paper is a contribution towards the introduction of tourism as an original motor in association with other factors, to protect the fragile desert ecosystem in Algeria in general and in Zibanin particular.

In the first part of the work, we will discuss the most important concepts of the Saharian ecotourism, and then we will discuss the characteristics and foundations of ecotourism.

Next, we will introduce the characteristics of Ziban region as well as the most important urban communities found in it, and we will debate through the analysis the elements which made the sustainable urbanization of this region.

Finally, we will present tourism as an instrument of reviving the local architecture of Ziban; it will be followed by theoretical and practical recommendations.

Key words: Ecotourism, Ziban, Oasis, Touristic path, Old urban cores.

INTRODUCTION

Environmental diversity is characterized by an important role in the construction of a range of oases that have a sensitive ecosystem, and this is due to the nature of the desert climate. This role highlights the diversity and construction of the built environment, ie architecture and urbanization.

Despite this importance, the tools of urbanization and urban intervention have always been of limited cost-effectiveness in preserving it which led the architectural, urban and cultural heritage fall into crises, and consequently many of the old palaces and urban cores degenerated and disappeared.

In order to achieve a certain level of development and integration in the national economy, a large number of countries decided to use the architectural and urban heritage as a starting tourism material, and therefore adopt sustainable development strategies that depend on the available resources locally and regionally. This is to work on developing the national economy from the inside out, offering the national economy an advantage within international markets.

Therefore, it is necessary to think about developing compatible approaches from tourism that serve available local resources and take into account the participation of local groups and social movements in the region. And in light of this, the World Tourism Organization encourages proposing programs for the sustainable tourism development of oasis ecosystems in order to preserve the urban heritage and reintegrate the palaces in the Modern construction system.

Correspondingly, the following problematic can be raised: How can sustainable tourism in the desert areas preserve and reintegrate the old nuclear palaces in the service of the national economy? We assume that the revival and preparation of tourist pathways in the Ziban region - which depends mainly on the distribution of ancient urban cores along the valleys and oases - allows us to develop a new strategy to preserve the urban heritage and create urban decentralization.

GENERAL CONCEPTS

Desert Tourism

Tourism in the desert areas is closely related to the dilemmas of these areas, such as the harsh climatic conditions (Very hot in summer or very cold in winter) and like the seasonal variation that is strongly present in these areas, as well as the conditions of accessing to them, which are not always easy. Therefore, the quality of tourism that can be performed remains very special and cannot satisfy everyone.

Forms of tourism that are well compatible and adapted to the needs of local populations and to the sensitivity and weakness of the concerned environments are as follows:

- Ecotourism,
- Solidarity or balanced tourism,
- Cultural tourism and agricultural tourism.

These forms are the closest by their behavior, but they differ in their presentations (Benyahia & Zein, 2003).

Eco-Tourism

The Quebec Declaration on Ecotourism states that: Ecotourism contains the principles of sustainable tourism regarding its impact on the local national economy of the communities and their surroundings; ecotourism also includes special principles that distinguish it from the general concept of sustainable tourism. (Québec declaration, 2003.)

It represents one of the rarest forms of tourism that, in the midst of some conditions, can help protect natural and cultural areas thanks to the cultural programs which create and finance it. They must also respect the principles of sustainable development in terms of maintaining: The environment, societies, cultures and the local economy (Benyahia & Zein, 2003).

Thus, sustainable ecotourism is a way of tourism that is based on the desire of exploring nature, respecting, protecting and valuing the natural and cultural balances and the local populations where it is performed. It is also called green tourism and ecological tourism, which aims primarily to protect nature and ecosystems, and also aims to approach environmental diversity with all what it carries from life, architecture, urbanism and culture.

This kind of arena should take it upon itself to educate and change the host and hosted communities, and it should help to take into account the natural and cultural heritage as a capital for local communities and motivate them to preserve and protect it. (World tourism organisation, 2002)

Characteristics and Components of Ecotourism

Ecotourism gathers all types of tourism that revolve around nature, which contain the most important triggers for the tourist. These motivators are represented in observing and appreciating nature and local cultures such as the way of life and areas of life including architecture and urbanization of these (Benyahia & Zein, 2003):

- It is generally organized by small local establishments for a limited group of tourists and managers. We can also find foreign agents at changing levels who organize, run and promote eco-tourism itineraries and always for groups with a limited number. This encourages the creation of sustainable development by creating jobs and integrating local communities in protecting their regions and their ignorance as a source of livelihood.
- It provides protection for the natural areas by providing economic advantages to the reception areas, and the organizations and administrations that protect these areas by continuously raising awareness among both residents and tourists about the importance of the natural and cultural heritage.
- Dividing the social and economic benefits and profits with the local people by obtaining their consent and participation in the management of this activity.

Thus, ecotourism will be accompanied by very limited negative consequences and repercussions on the natural and socio-cultural environment.

Principles of Ecotourism

It is considered as a major part of tourism in fragile areas such as oases and deserts. It includes the advantages that emerged clearly during the World Summit held in Quebec in 2002, which proves that ecotourism embraces the principles of sustainable tourism by including the following principles that distinguish it from sustainable tourism:

➤ **At the level of the natural surroundings**

It reduces the negative influences and the harmful culture to its future, and it actively contributes to the protection of the natural, cultural and architectural heritage. It performs well during solo travel and also during organized travel in fragile areas.

➤ **At the economic level**

- Encouraging the use of the developed superstructure in harmony with the environment in order to reduce the use of energy to preserve the local plants and animals and to be affected by the natural and cultural surroundings.
- It frames the importance of responsible business by jointly working with local authorities and people to meet local needs and providing discounts to aid the conservation process.
- Utilizing the revenues obtained from tourism to maintain and protect the management of natural areas.

➤ **At the social level**

- Ecotourism requires travel for small groups, which are a kind of pledges and agreements with local communities to contribute to the conservation and local development program.
- It increases the local economic and commercial benefits, especially for the populations who live in or near natural areas or reserves.

➤ **At the tourist level**

- Educating tourists about the importance of the conservation.
- It is suggested to visitors to interpret the natural, cultural and architectural heritage.
- Insist on the importance of the touristic and regional sectors for each known region or natural sector capable of becoming an eco-tourism destination with designing management plans for visitors.
- It stimulates the development of environmental and social studies, as well as long-term monitoring programs to assess and reduce effects.
- It believes that the development of tourism does not exceed the acceptable limits of social and oceanic changes as explained by the researchers involved with the local residents

Setting the Eco-Tourism Program in the Desert

The most important commercial tourism products in the deserts depend largely on visiting and contemplating the landscape and exploring historical, cultural and architectural locations. Tourism in the deserts is directed to those seeking authenticity. Since before the application of ecotourism, multi-stakes tourism appeared within the oases, related to the geography of several desert countries.

There are two types of tourism within the oases, which are divided into two types (World tourism organization, 2006), mainly related to the oasis and the desert, and they are tourist itineraries and tourism in the desert.:

- Pathed tourism is characterized by a short stay period for tourists in the oasis, who consider it as a masterpiece local area(Aboubacar, 2006).
- The tourist path being well organized, the tourist has no connection with the social and cultural heritage of the area, which reduces the negative impacts on the local communities of the area. The proposed itineraries generally contribute to the exploration of landscapes of cultural interest.

The Foundations of Ecotourism in the Desert

From the above, as a summary of the theoretical study, we can conclude that desert ecotourism is taken and achieved in the following cases:

- The presence of an ecosystem desert
- The presence of a local cultures specific to a community
- A community in a private building and construction

These different cases organize and come together through local and sustainable cultural and economic mechanisms, forming a deep relationship with the environment, to be able to create in the end an environmentally friendly miniature unit.

But what we notice about the human gatherings in the desert under the phenomenon of desertification and rural exodus, these communities are evacuated from their property.

Tourism is an active factor for the population in that area, for example, organized trips in the desert on 4x4 cars and in Morocco the gathering in the desert, as well as tourist trips on camels in Algeria

Preparing some houses to host tourists and this preparation reflects the cultural identity of the region (Bechar) field visits and in Algeria desert areas with a historical tourist dimension, as the Ziban region inspired many authors and writers such as ... etc. It was also characterized by a character and a suitable climate for the tourist movement especially during and after the colonial period.

METHODOLOGY AND MATERIAL

In order to better understand our subject, firstly we opted a theoretical approach through bibliographic research, which was later reinforced by a diversified use of documents.

Bibliographic Collect

It consists of documents collect: books, reviews, research work, proceedings of seminars or conferences, in addition to the Internet articles exploitation dealing with the keywords of our subject.

All literature review relating to our theme will allow us to acquire a more detailed, deeper and scientific idea focusing on: Desert tourism and the Ecotourism through their characteristics, components, principles and foundations.

Documents Exploitation

It is essential and imperative. We will try to collect as much data as possible, by bringing together the various departments: Transport Department, Forest Department, Population and Regional Planning Department.

Subsequently a comprehensive survey is carried out through the in situ observation of the Old urban cores of Ziban region, by taking photos along our visits, which allowed us through the analysis and extrapolation to define the elements making the sustainable urbanization of the Ziban region.

CASE STUDY

The original name of the bride of Ziban, which is now known as Biskra, is still disputed by historians, whether they are Arabs or foreigners. (AD PISCINAME) or "Pisinam", which is also Romanian and means mineral source in relation to the bath of the righteous. However, "Giselle" expresses the utmost reservation as to whether "Pisinam" took its name from Piscinam. According to Zuhair Al-Zahiri, the word Biskra symbolizes the sweetness of its dates (Deglet Nour), the fruit that abounds in the region.

Ziban Geographical Location

The Ziban region is located in the southeast of Algeria; under the slopes of the "Auresmountains", which represents the natural boundary between it and the north.

Because of its strategic location, The Ziban region is considered as a link between the North and the South and between the East and West. This site gave it the connotation of « the Gate of the desert», allowing its presence during the various ages as a meeting point during the pilgrimage season and as a place for commercial exchange (L'Africain, 1977).

The area constitutes a bridge of transition between a structured and equipped north and a deprived and forgotten south. Despite this, it remains one of the most beautiful and most fragile areas with its natural and panoramic landscapes and its simple desert structure.

According to the monograph of wilaya of Biskra of 2007, the topography of the region is divided into four groups:

- The mountain ranges and the high plateaus in the north,
- The great plateaus that extend to the southwest,
- The plains that extend to the east,
- The lowlands that lie in the southeast of Ziban

This geographical diversity has positively impacted on the ecological diversity, which gave the region a cultural heritage represented in the various types of ancient nuclei with different architecture and urbanization, as well as the natural heritage, which is represented in the conflicting landscapes between the mountainous areas to the oasis desert areas. (Figure 01)

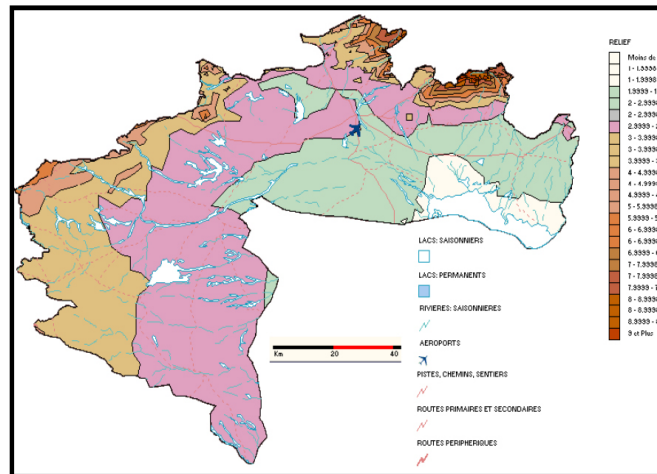


Figure 1. Biskrageographical map. **Source:** Authors, 2019. (Health mapper Program)

Ziban Urban Communities or the Small Sustainable Urban Units

The palm oases represent the urban distribution component of Ziban, as they contributed to the creation of small independent urban units economically and socially, especially a friend of nature and with an ecological character. Each group of ziban is headed by urban units which is larger in space and size, and each residential community lives on its own oasis and its own cultivation (Alkama, 2005). This is what makes Ziban the finest example of sustainable urban forms in oasis areas with a fragile ecosystem, by respecting its natural surroundings and by respecting the ecological beneficial exchanges with this environment (Bouzaher, 2008).

In the past, the Ziban region was divided into four (4) Zibans(NIOX, 1980)(Figure 02),which are:

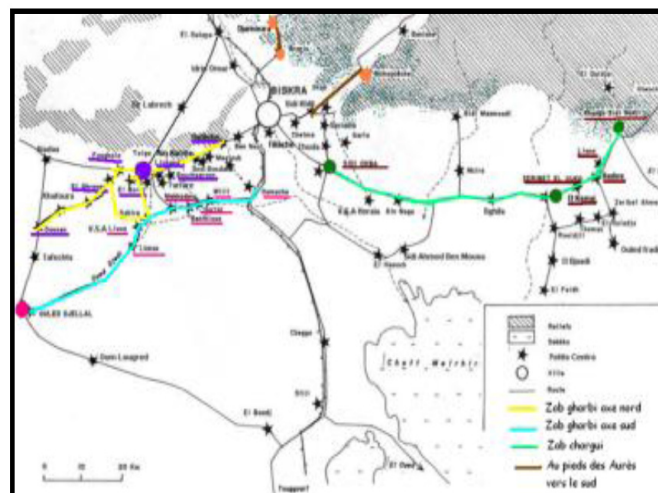


Figure 2. A map of Ziban distribution. **Source:** (Alkama, 2005)

- Biskra Zab,
 - The Eastern Zab,
 - The tribal Zab (also called the Western) (south)
 - The Dhahrawi Zab (also called the Western) (to the north).
- **The Eastern Zab:** extends under the foothills of the Aures Mountains and Shatt Malghigh to Biskra valley and is characterized by a more peasant nature than an oasis, headed by Zab Sidi Uqba, Zab Zariba al-Wadi, and Zab Khankha Sidi Naji, containing about 25 Zab.
- **The Tribal Zab (South):** contains a group of oases located on the hills of Wadi Djedi, where we find good watercourses under the sands of this Zab, which reflects its oasis character and contains more palm trees than the eastern Zab. It is headed by both Oueleddjelal and Sidi Khaled Zabs and contains about 11 Zabs.
- **The Dhahrawi Zab (the North):** is separated from the previous zab by sand dunes and a group of marshes from the tribal Zab. In turn, it contains a group of oases that are watered from the waters descending from the hill mountains. This Zab is headed by the Zab of Tolka and contains about 18 Zab.

As for the human settlements located in the southern slopes of the Aures mountain range, such as Djomorra, Guedila, Ben Suwaik and Al-Qantara. In addition to a small percentage of the palm tree, it is distinguished by fruitful trees such as citrus fruits.

By virtue of the location and difference in the geography of these Zaibans, the latter was also reflected in the architecture and construction of each Zab in terms of building patterns and gatherings, in addition to building materials and even the character of its inhabitant.

Palms, the Main Originator of the Ziban Areas and the Main Element of Sustainable Urbanization

El-Ziban is the plural of Zab, which means oasis in Berber. As for Ibn Khaldoun, he defines the oasis as “*a large homeland that includes several contiguous combined villages. The first one which is Zab al-Dawsin, then Zab Melili, then Zab Biskra, Zab Tahouda and Zab Badis. However, Zab Biskra is the most important among all these villages.*”. The area was occupied by the Romans, Valondali, and then the Bernese, and they left traces that still attest to the strategic importance of the city and its special urban character.

Because of the location of the ziban, trade got the lion's share in it, as it linked the Ziban with each other and between the rest of the desert and hill areas. This is due to the fertility of the lands in the region and its richness in water resources, as well as the large spread of orchards and palm oases. The latter represents the agricultural characteristic of social, economic and architectural life in the Zab. It is the oasis of the environment which plays all the necessary roles for the establishment of a residential community in the desert:

- It creates a necessary micro-climate for the development of an undercoat cultivation of up to three storeys of vegetation (palms, fruit trees and primitive agriculture).
- It prevents the desert sands from encroaching.
- It improves the returns on the population thanks to dates, leaves and stems.

The following histogram represents the distribution of palm trees in Ziban, where we notice that after Biskra, the bride of Ziban; it was rich with palm trees, so it contained the lowest percentage. (Figure 03).

According to its palms and its architecture, the Ziban is considered as a lesson in sustainable architecture by respecting their climatic and natural surroundings and by using the local material (the palm tree), which is a healthy ecological element (DUMONT, 2005)

At the ground plan, palm trees coats large areas, what makes it whether a cover or a ground roof, and sun breakers up to 30 meters high that refract the sun's rays and create a beautiful living atmosphere under the palm, which protects the floor and reduces heat gain, while transpiration and evaporation provide a soothing climate. In addition, the palm is considered as a basic building material for the area, from its trunk to its leaf (Photos 01, 02 and 03)

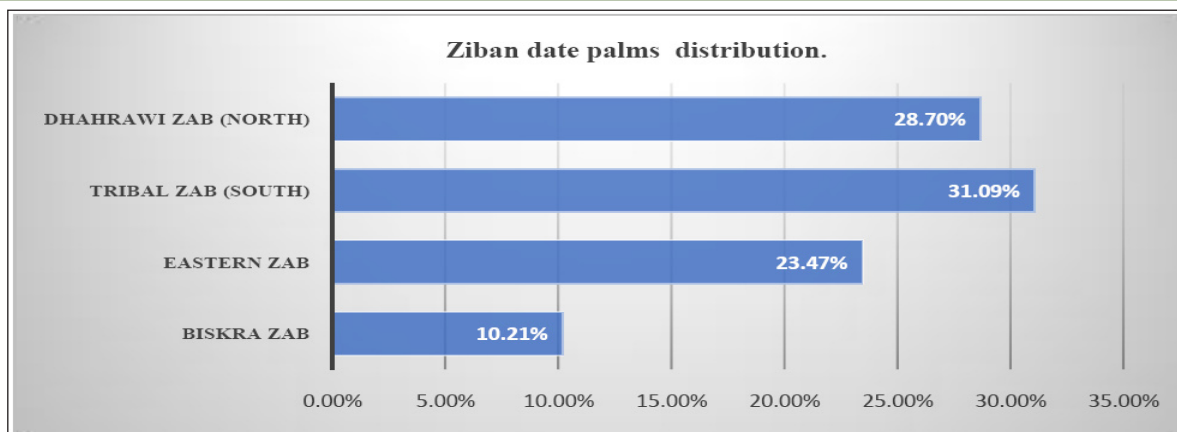


Figure 3. Percentage of date palm distribution in Ziban. **Source:** Authors. According to the state's monograph statistic in 2007.



Photo 1. Using palms as roof bearing elements in Martyr Si El Hawass house, converted into a museum. **Source:** (Bouzaher,2008).



Photo 2. Using palms as separating element in Martyr Si El Hawass house, converted into a museum. **Source:** (Bouzaher,2008).



Photo 3. Using palms as a beauty element in Martyr Si El Hawass house, converted into a museum. **Source:** (Bouzaher,2008).

The Current Situation of Ziban's Region

The administrative division of 1984 nicknamed Ziban as "state of Biskra".

Over the years, human activity has exploited, used and shaped the region, leaving behind the landmarks and references of its historical development; The zab, the old urban cores, the palaces, the dashrah with their different positions, utterances and organizations are the housing patterns employed by the inhabitants of this environment and regions.

They are "traditional dwellings" that respond to climatic requirements using ingenious housing patterns, intelligently displaying an eco-climatic architecture that reflects a functional social organization" (Organisation mondiale du tourisme, 2006)

The rustic space is the most sensitive area in what concerns the presence of the local Zibiyah architecture, where we observe phenomena of arbitrary, abandonment and transformation resulting from urban growth, rural exodus, abandonment of rural communities and their palms, and cultural and economic revolutions associated with globalization

Thus, El-Ziban architecture and palm trees are in great danger due to the interference of modern industrial materials that are harmful to the environment and strange to local buildings, and because of the filling of heterogeneous architectural types and environment to meet the demands for housing, and finally because of the fluctuations and deterioration of economic productivity in the rural environment, and then the abandonment of traditional techniques of construction and the fact of the matter that this reason is the result of that reason. Despite all these facts, Ziban managed to preserve some of its urban architectural identities, as well as to preserve its agricultural character. Therefore, the Ziban must be revived by putting an end to the following trilogy: the city, the ecosystem, and the heritage. (LIPIETZ, 1995).

The following Histogram represents the extent of the Ziban's richness in agricultural lands and the very little area used in agriculture as a result of the displacement of the Ziban population to work in the city. (Figure 04)

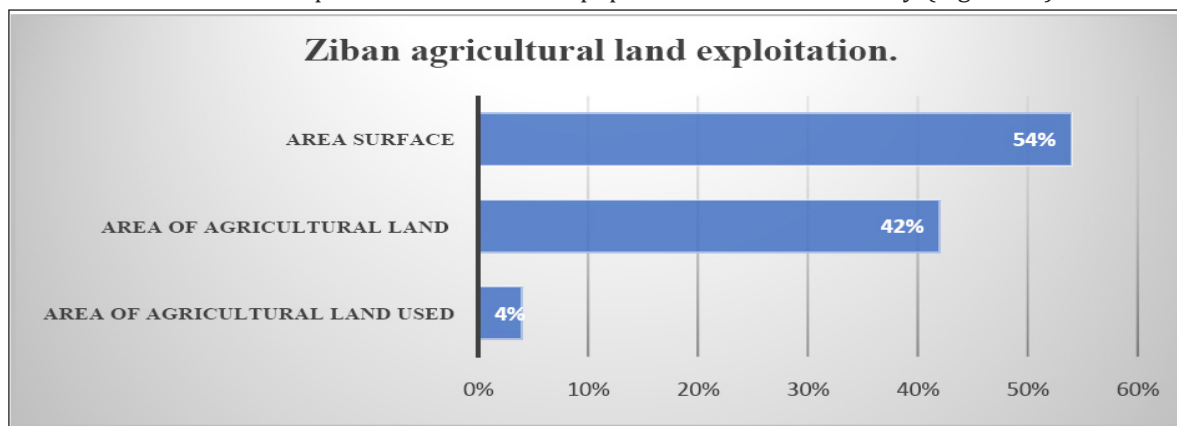


Figure 4. Percentage of Ziban agricultural land exploitation. **Source:** Authors. According to the state's monograph statistic in 2007.

Tourism as a Means of Protecting and Reviving the Ziban Local Architecture

Tourism activity and the resulting uses can be cleverly invested to educate, manage and support the revival of this architecture to avoid the disadvantages of environmental and socio-cultural transformations for local communities.

Some of the countries turned to the experiences of reviving local architecture, as Hassan Fathy did in Egypt (1977) and in New Mexico (Quillien, 2008), and several other cases in Morocco, Tunisia and Spain, where they transformed local rural buildings into a tourist attraction.

Rural tourism architecture can form its own architectural and urban characteristic and serve both tourist and local destinations. Integrating it into sustainable development programs that respect the environment and the surroundings is the key to identifying and determining the environmental and social absorption capacity in each region, the goal is to maintain a balance between the touristic and the local population, taking into account the fragility of its sources.

The tourism activity must be a positive and additional factor in the local economic activities without turning into a kind of stereotypical culture (Table 01).

Table 1. The most important archaeological monuments and their distribution on Ziban.

Municipal	Monument Name	History	Classification Date
Biskra	Hammamt remnants	Old Testaments	1900
	Gimla Ruins	Old Testaments	18-07-1952
Amlili	Djmila monuments	Roman Testaments	18-07-1952
Sidi Okba	The door of the Okba bn Nafi mosque	Middle Ages	1900
	Okba bn Nafi mosque	Middle Ages	1996
	Foum Ghorza dams	Roman era	1996
	The ancient city of Tahuda	Roman era	1996
Mchounech	Mchounech grooves	Natural effect	30-01-1928
Amezriaa	Sidi Masmoudi grooves	Natural effect	30-01-1928
	Akbash Village	Natural effect	30-01-1928
Khangat Sidi Nadji	Khangat Sidi Nadji grooves	Natural effect	30-01-1928
	Village	Natural effect	30-01-1928
El Quantra	SabeeMgataa Monument	Old Testaments	26-09-1933
	Roman bridge	Old Testaments	1900
	El Quantra grooves	Natural effect	23-01-1923
	Stone formations	Old Testaments	1900
Lotaya	Scrolls	Old Testaments	26-09-1937
	Amphitheater monuments	Old Testaments	1900
Sidi Khaled	Sidi Khaled mosque	Middle Ages	1999

Source: Culture Department, 2007.

RESULTS AND DISCUSSION

Tourist Paths as a Means of Connection in Ziban

The following map represents the geographical distribution of the area on which the road network is located. This document allows setting the initial lines of the tourist paths and provides in principle the most important scenic epochs of the landscape in Ziban (Figure 05)

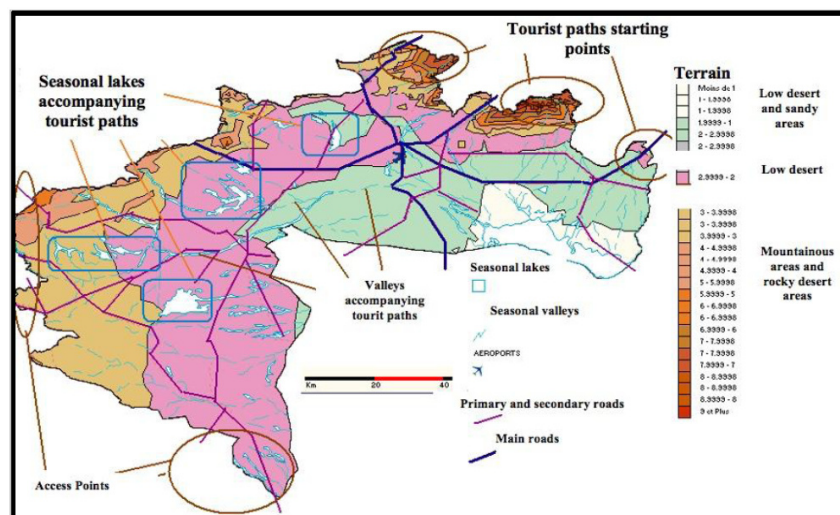


Figure 5. Map of Ziban tourist paths distribution. Source: Authors, 2019. (Health mapper Program)

These geographical data include a group of unparalleled human settlements (Ksour and Dashra), as in each human settlement there is a different architecture that depends on the same natural components of mountains, valleys, palm trees and forests, but in each region, it has its own organization which makes them points of inspiration for architects and researchers. The architecture of these gatherings is characterized by its vertical diagonal expansion subject to the mountain settlement lines.(Photos 04 and 05).



Photo 4. khanguet Sidi Naji groove,
Source: Authors, 2019.



Photo 5. Khanguet Sidi Naji.
Source: Authors, 2019.

While the southern side of the region is considered as an entrance and introduction to the desert with scenic epochs open to the sky and earth, unlike the scenic epochs in the north, which are framed by mountains. Architecture in the south of Ziban is sheltered by the palm oases and extends horizontally according to the floor.(Photo 06)



Photo 6. Dahrawi Zab Oases, Ouled Djelal **Source:** Authors,2019.

The building materials are different. In the south, clay is used as a building material, while in the north they use stone. However, the common element in the construction is palm trees. The modularity of the openings and the urban facades also differs, despite their agreement in the character of deaf facades.

It is also important to point out another group of landscapes presented, which are the peasant landscapes that appear especially in the Eastern Zab, which is followed by a scattered urban fabric, then the urban landscapes that insert the new urban expansions.

Water springs; water networks and seasonal lakes accompany and contribute to the structuring of the proposed tourist itineraries. And we must mention that there are two types of tourists some of them relax and feel psychologically complete in the open landscapes, and there are those who relax and feel psychologically complete in the framed and closed landscapes, and the Ziban satisfies both tastes.

CONCLUSION AND RECOMMENDATIONS

Within the framework of upgrading the ancient cores of urban, historical and environmental value in the Algerian desert in general and the Ziban region in particular. We suggest relying on the concept of functionalization that makes all the old centers and cores integrate with each other to achieve the concept of sustainable development through:

- Adopts the principle of a compatible urban approach that relies on reconciliation with the natural environment and respecting its elements that has formed an environmental balance since a long term.
- Introducing the concept of basic development, which depends mainly on activating the internal movement in the urban core, by creating traditional production units to value local crafts.
- Preparing palm forests in the form of tourist tours and introducing the concept of possession of the seasonal product for the tourist for whom old houses are provided inside the palm forests using traditional methods to discover the nature of local life and enable us to highlight the aesthetic value of it and highlight local skills.
- Encouraging cultural events and tourist outings directed at areas and facilities of religious, historical and environmental value.
- Relying on the principle of the integral reconstruction of the desert, and making the Ziban as an area that is compatible with the principle of a part of the whole without causing functional or structural imbalances in this urban system. Accordingly, the reconstruction process takes place in an organic structuring manner with the phased incorporation of new elements without compromising the ecological and functional balance that this city knows. Rather, we try, through this process, to highlight the concept of sustainable development that relies on local mobility.
- Preserving the concept of urban mobility that relies on tourism and agriculture as a guideline for local development.

REFERENCES

1. Aboubacar, I. (2006). La cultura del oasis. Colloque international oasis et tourisme durable, Elche (Espagne) 153-156. . In *Le tourisme saharien et la problématique de l'environnement*.
2. Alkama, D. (2005). Pour une nouvelles approche d'urbanisation dans les zones arides cas du bas Sahara . (Doctoral dissertation, Biskra, Université Mohamed Khider. Faculté des Sciences et des Sciences de l'Ingénieur).
3. Benyahia, N., & Zein, K. (2003,). Analyse des problèmes de l'industrie de l'huile d'olive et solutions récemment développées. Contribution spéciale de Sustainable Business Associates (Suisse) à SESEC II, 2-7.
4. Bouzaher, S. (2008). Les Circuits Touristiques Comme Instrument D'intégration et de Préservation du Patrimoine Bâti des Tissus Anciens. Le Cas du Patrimoine Ksourien de La Micro Région des Ziban. I. Conférence internationale sur la médina Tissu urbain à sauvegarder .
5. Bouzaher, S. (2008). Return to palm plantation of Ziban as Element of sustainable urban organization. . In INTERNATIONAL SEMINAR ON SUSTAINABLE BUILDING DESIGN "SBD08"at Community Technical Housing Services Association "COMTECHSA" 60 Duke Street Liverpool, U.K.
6. COURNOYER, C. (2004). Le paysage de l'oasis dans le sud du Maroc». . In : Workshop de la CUPEUM Marrakech.
7. CÔTE , M. (1979). Mutations rurales en Algérie, le cas des hautes plaines de l'Est. Alger : OPU.
8. Claudie , V., & Patrice , N. (s.d.). Paysage pluriel, pour une approche ethnologique des paysages. Ouvrage collectif, collection "Ethnologie de la France", Cahier n°: 09, Ed., de la Maison des Sciences de l'homme.
9. Déclaration de Québec, le 1er novembre 2003.
10. Direction des forêts, 2006.
11. Direction du transport, 2006.
12. Direction de la Population et de l'Aménagement du Territoire, 2006.

13. DUMONT, G.-F. (2005). Ville, population et environnement.
14. LATOUR, B. (1995). Moderniser ou écologiser. A la recherche de la septième cité. . Ecologie & politique: sciences, culture, société, 1995, no 13, p. 5-27.
15. L'Africain, L. (1977). Histoire des villes Africaines. . SNED, Alger.
16. LIPIETZ, A. (1995). Écologie politique régulationniste ou économie de l'environnement?.. Théorie de la Régulation: l'état des savoirs, 1995, p. 350-6.
17. Monographie de la Wilaya de Biskra, 2007. (s.d.).
18. NIOX, G. (1980). Géographie militaire. VI. Algérie et Tunisie., par le Cl Niox. 2e édition.. L. Baudoin.
19. OMT-PNUE. (2002). Document conceptuel, Année Internationale de l'Ecotourisme .
20. Organisation mondiale du tourisme. (2006). Développement durable du tourisme dans les déserts – Lignes directrices à l'intention des décideurs, OMT, Madrid.2006 ISBN-13 : 978-92-844-1192-4.
21. Quillien, J. (2008). « Stratégies et Perspectives » . A New Methodology. In Troisième Conférence à Biskra sur l'Architecture et la Durabilité (BASC 2008),(Algeria).
22. WACKERMANN, G. (2005). Ville et environnement. Ed. Ellipses pp.179-203.

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