Academic master's degree graduation memorandum:

Domain:

Architecture and urban planning

Field:

Architecture in coastal urban areas

Thesis:

Sustainable Tourism development and planning in coastal areas

Project:

The design of touristic hotel in the city of Tenes

Presented by: **Supervised by:**

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- Mr. Mohamed Ouchene

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Before the Jury:

Chairman: Architect Mustapha Derder

Examiner: Professor/Architect Guenoun Houcine

Supervisor: Architect Amina Abdelmoula

Academic year:

2018-2019

SPECIAL THANKS:

- First of all, we thank God the Almighty for giving us the faith, courage and patience to continue our journey.

- We would like to express our deep gratitude to our supervisor Mrs. Amina Abdelmoula for her continuous help and patience and consistent guidance for us to overcome all the hardship and obstacles we faced throughout this year, we owe you a lot

- We also would like to thank the honorable members of the jury for taking the time and effort examining and evaluating our modest work

- A special thank you to the administration of our department for facilitating all the procedures and preparation to make this day go smoothly

- And finally, a big thank you to the director of our Institute of Architecture Dr Ait Saadi Hocine for his gracious help and cooperation and his hard work, and to all the teachers who provided us with the necessary knowledge during our five years of study.

- We have the great pleasure to dedicate this work to the ones we love most in the world, our dear and loving parents to whom we owe everything, who supported and encouraged us even when we were going through dark and desperate times, also I'd like to thank our dear sisters and brothers, may the Lord bless and protect them,

- To all our friends and colleagues and loved ones, whether they're close or far, who would have loved so much to share with us this joy and to be associated with this moment of happiness

Islem & Mohammed

Work Plan :

1. Introductory part:

1.1. Introducing the Specialty:

Our specialty, entitled Architecture in coastal urban areas or as it's shortly referred to in our institute as A.Z.U.L, is interested in the site/project relation because a good project in this specialty is one which integrates judiciously into its environment. The particularities of a given site, no matter how insignificant they are, must be taken into account in our way of thinking, producing and organizing our public and private spaces.

1.2. Objectives of This Specialty :

- Identify the indicators that have marks the architectural and urban production in coastal urban areas, particularly in the case of small and medium-sized coastal cities, through their development in terms of organization and production of the built and non-built landscapes

- The identification and explanation of the problems that coastal cities in general - small, medium and large - are experiencing today, particularly in terms of architecture and urban planning.

- A better adaptation to the particularities of the coastal environment, in our way of producing and organizing its spaces,

- Planning and designing while taking the sustainable development approach in consideration, this for a better protection and development of the prospects of our coastal areas. and give it back its architectural and urban image and, as well as the pleasant life they once enjoyed. It is crucial today that our country expresses its willingness to develop tourism.

Planning of a seaport cliff - Tipaza Algeria - 2016 promo

Source: google image

Planning of an Urban Coastal Zone

Tipaza ,Ageria – 2014 Promo

Source: google image

1.3. Our motives for choosing this specialty:

In the last two years of the curriculum, we chose the Specialty of architecture in coastal urban areas (A.Z.U.L) for the following reasons:

- Our collective interest in coastal cities and areas and that fact that we are inhabitants of a medium sized shoreline town

- It allows us to deepen our knowledge of the coastal city and its features

- It gave us the opportunity to figure out the potentialities of coastal cities and their tourist resources and the means to develop it as best as possible.

2. part 01: General Theme: The Coastal City

2.1. Introduction :

With 1622 km of coastline, the Algerian coast has been since antiquity the most sought-after area, its climate and geography, including the opening onto the Mediterranean basin, attracting by the amazing beauty of their landscapes and by a generally mild climate, the coastal areas remain a favorite destination for tourists. all this has favored its corollary to urbanization, 75% of the population or more than 30 million inhabitants, represent two thirds of the total population, are concentrated in the north, in high proportion in large cities, on barely 4% of national territory, this is the case of large coastal cities (Algiers, Oran, Annaba, Skikda, Mostaganem, Bejaia).

However, natural factors alone are not enough without the establishment of favorable infrastructure, which can lead to changes to improve living standards.

But all this enthusiasm for coastal regions further weakens them, through the deterioration of the ecosystem and natural resources, marine pollution, hence the need to protect these coastal areas so that they can continue to perform the functions entrusted to them and to integrate them into the collective imagination of the city's inhabitant

Skikda – Algeria

Source: google image

Annaba – Algeria

Source: google image

Definition of the coastline / shoreline:

The coast, also known as the coastline or seashore or shoreline, is the area where land meets the sea or ocean, or a line that forms the boundary between the land and the ocean or a lake.[1]

The term coastal zone is a region where interaction of the sea and land processes occurs.

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[1] http://www.coastalwiki.org/wiki/Shoreline
https://dictionary.cambridge.org/fr/dictionnaire/anglais/shoreline

San Francisco West coast- USA

Source: google image

New Wealand East coast

Source: google image

2.3. Definition of the coastal city:

[2]Coastal cities are among the places where human pressures are most concentrated and where current and potential land use conflicts are most critical.

The population and economic activities, transport and tourism are concentrated on a "coastal zone" with a variable geometry, particularly depending on the terrain. These are areas with "economic density", which is often much higher than the national average.

As an area of contact between land and sea, rich in specific ecosystems, many of which are in danger, the coastline is often subject to particularly restrictive management to protect it.

In poorly urbanized areas, coastlines are often very rich ecosystems, also playing a role as biological corollaries.

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[2] http://www.coastalwiki.org/wiki/Coastal_Cities

2.4. Particularities of the coastal city on the Urban and Architectural Plan:[3]
2.4.1. Urban planning particularities:

Coastal urban planning is developing as an extension of existing urban areas or as new developments. It is distinguished by the dominance of individual housing.

It should be noted that the majority of cities were created on the coast For economic reasons such as real estate activities, and other leisure activities (tourism), these projects are generally on a grid plane and in a linear way in parallel to the seashore in order to have an unobstructed view of the sea or perpendicular to the sea in cases of cliff edge based cities, or in a morphologically challenging and rough sites, or in all directions, This kind of evolution is done in a random way because of the obstacles that block evolution and lead to the emergence of several development poles. These obstacles are mostly natural (mountains, agricultural land, rivers).

Satellite urban development

New York – USA

Source: Google image

sea-parallel urban development

Miami- Fl- USA

Source: Google image

perpendicular urban development

Manarola, Liguria-Italy

Source: Google image

perpendicular urban development

San Torini- Greece

Source: Google image

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[3] E-book ''Instructional kit for professors to prepare for pedagogical activities and transdisciplinary projects on the Coastal Zone., page 03

2.4.2. Architectural particularities:
2.4.2.1. On the Natural and environmental level:
2.4.2.1.1. Climate:

The climate is the act of all atmospheric phenomena such as precipitation, temperature, wind, atmospheric pressure and humidity etc.

the sunlight: Natural light is one of the basic "materials" of any architectural design. As a freely available element, it is taken into account as a priority in contemporary architecture programs.

Architecturally, the sunlight is best used via:

-the Integration of solar architectural elements

-the development of terraces

-the use of light colors

-large bay windows
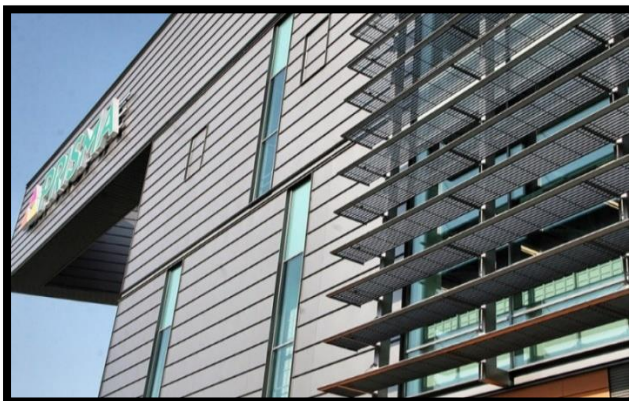
Usage of sunshade panels in Prisma, ITIS shopping centre, Helsinki-finlande

Source: google image

Usage of light colors

Grande motte hotel – France

Source: google image

Usage of solar panels

Reinsenfeld- Germany

Source: google image

Usage of large bay windows

RSG Bay Square - Dubai

Source: google image

We can protect the building from overheating due to the sun by some architectural forms such as:

- an awning / roofs / the loggia / the veranda
- Sunshades: a building element that provides shade in summer and allows sunlight to enter the building in winter.
- Low-E glass: It guarantees reinforced thermal insulation for double glazing.
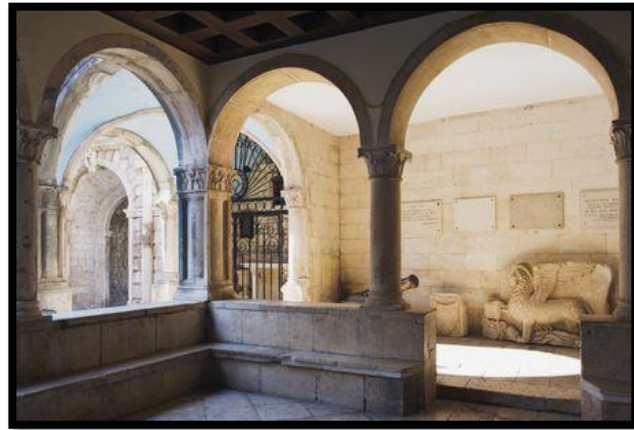
A loggia

Source: google image

An awning

Source: google image
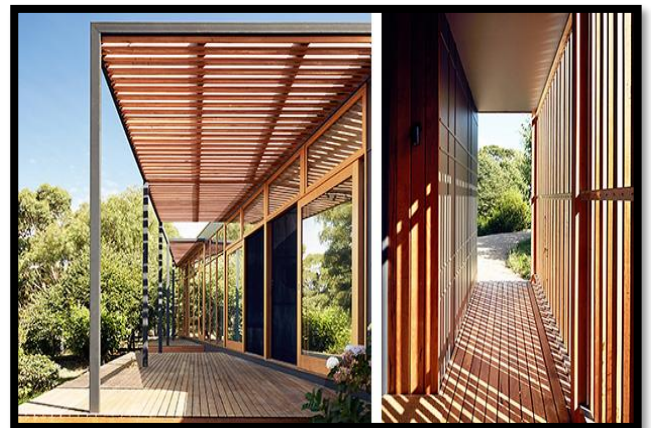
A Pergola

Source: google image

also
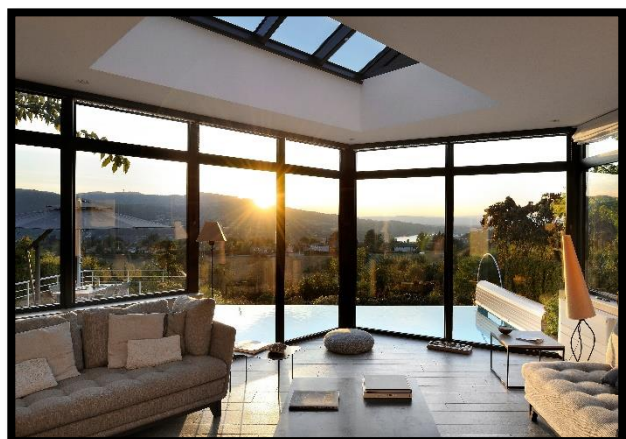
A veranda

Source: google image

Sunshading solar panels

Source: google image

It could be used best by:

- The construction of wind farms, wind towers through wind turbines each with a diameter of about 30 meters, produce more than 1000 MW/h per year for the power supply of the towers.
- Equine's urban Darrius-type wind turbine with a horizontal axis, which has the particularity of not being oriented in relation to the wind, thus reducing the complexity of the machine and its wear and tear. It can produce up to 9000kW/h per year.
- Seaside constructions must be provided with wind protection, these protections take various forms such as aerodynamic building conceptions which reduces the friction surfaces between the building and the wind thus allowing the wind to flow smoothly and reduce the weight and resistance loads on the structure , hence the need to provide openings to let the wind through and also the use of special materials such as interlocking tiles, wood, slates
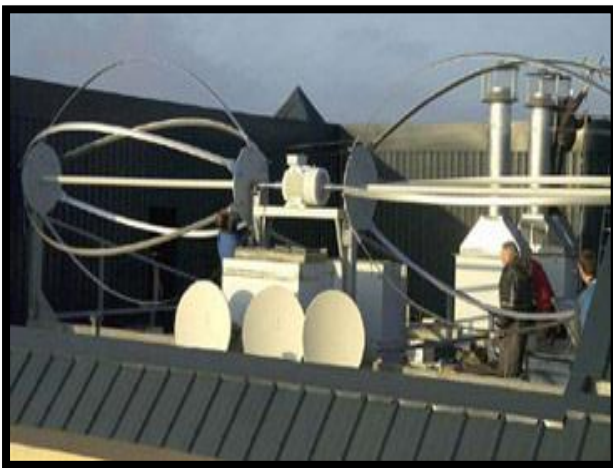
Equihen's urban Darrieus-type wind turbine

Source: google image

Tower Wind turbines - Bahrain

Source: google image

Usage of Interlocking tiles for wind protection

Source: google image

Sydney's Operah aerodynamic shape

Source: google image

Rain and humidity:

- Humidity is permanently present in the atmosphere, sunlight warms the earth's surface and causes water from the oceans to evaporate, which is why the humidity level is high in coastal areas. This causes the deterioration of building materials, the decrease in the mechanical strength of masonry, corrosion of metals, and the deterioration of structural wood, Risk of freezing and splitting of waterlogged porous materials
- Proper countermeasures must be taken to protect the building:
- Waterproof the foundations from the outside with two layers of liquid tar before backfilling the walls.
- seal the microcracks and thus create a waterproof barrier by injecting epoxy into them.
- install a waterproofing membrane and check that the foundation drain is working properly.
- surface treatment: anti-humidity paint, water repellent, etc.
- in-depth treatment: drying of walls, resin injection, etc.

Rain Usage: Rainwater harvesting system: [4]

- Recovery:
  Rainwater falling on the roof is channeled to the downspouts of the gutters that are connected to the tank. Depending on the situation, a sheet separator should be placed on the descent to perform a first filtering
  .
- Filtering:
  The water that arrives in the tank passes through a stainless-steel filter that separates the water from the other elements. Clean water flows into the anti-removal device to be stored in the tank, while contaminants are evacuated to the outlet (ditch or rainwater system)

- Distribution
  The water is pumped via the float strainer, which allows it to be pumped about 10 cm below the water line. By the rainwater manager installed in a room of the house Who distributes rainwater to all the water points. When the tank is empty, the rainwater manager automatically switches to the city water network, in complete transparency and without user intervention.

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[4] https://www.sciencedirect.com/science/article/pii/S0921344919300345

metaphors:

To invoke the sea, architects have tried to adopt their constructions at coastal sites in different forms.

We always try to make a visual continuity from a dynamic and fluid form inspired by the natural environment and the sea.[5]

The Opera of Sydney

Sea waves metaphor

Source: google image

The arab's tower Hotel

Vessel's sails metaphor

Source: google image

Palm Jumeirah Island

Oasis metaphor

Source: google image

havenhuis Rotterdam

Sea cruiser metaphor

Source: google image

[5] *Fez-Barringten, Barie (2012). Architecture: The Making of Metaphors. Newcastle upon Tyne: Cambridge Scholars Publishing.*

Colors:

An exterior cladding painted in light colors such as white and blue to reduce the amount of solar energy absorbed by the exterior walls

santorini -- Greece

Source: google image

Algiers - Algeria

Source: google image

The windows:

Sometimes having to perform contradictory functions, the performance to be achieved varies during the day and from one climatic season to another:

- Let the light penetrate inside the building
- Ventilate the inner spaces.
- Dissipate the heat.
- Characterize the facade.
- Allow the view to the outside and sometimes to the inside.

Privae house - Australia

Source: google image
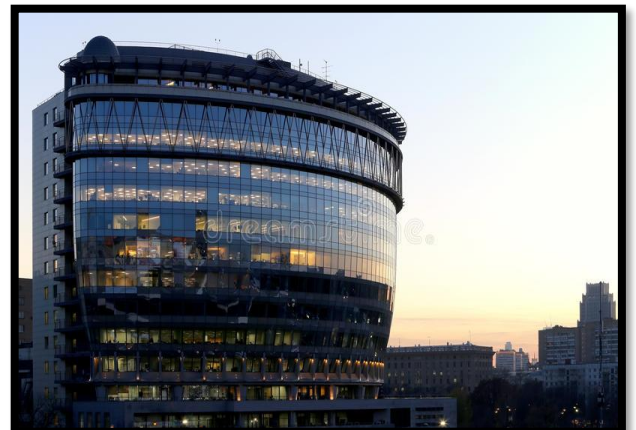
Office building, Moscow - Russia

Source: google image

2.4.2.1.3.   Natural hazards:

Erosion:

Soil erosion is a form of degradation as well as compaction, reduction of organic matter rates, deterioration of soil structure, insufficient subsurface drainage, salinization and soil acidification. All these forms of degradation, serious in themselves, accelerate soil erosion.
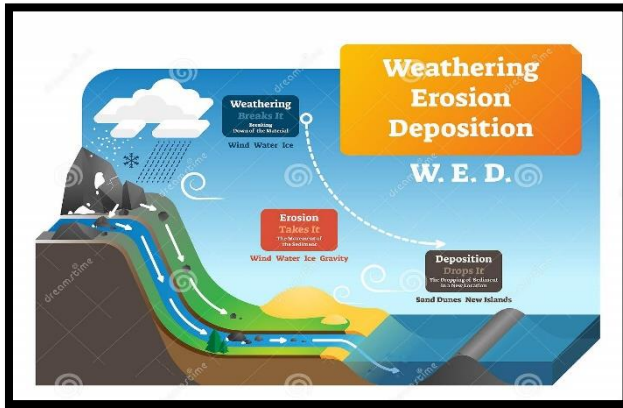
Erosion phenomena schematic

Source: dreamstime,com

Erosion effects

Source: googe image

The corrosion: Due to the humidity and salty air of the coastline, corrosion is a specific and remarkable natural phenomenon for coastal city constructions, corrosion occurs due to certain actions

external on a surface, this is the alteration of materials by chemical reactions

Corrosion Countermeasures: To prevent corrosion, a protective layer such as Nitriding or Nitrocarburizing is applied to the surface of the material that comes in constant contact with the atmosphere. Another way to protect metal housings from corrosion is by using anti-corrosive paint or powder coat on the metallic surface. The function of this coating is to act as a barrier that inhibits contact between chemical compounds or corrosive materials with the metal housing.

Concrete corrosion

Source: google image

The main activities related to the proximity of the sea in coastal cities are: port activities, fishing, agriculture and seaside tourism.

fishing harbour, Tenes - Algeria

Source: google image

Leisure Port, yacht harbour - France

Source: google image

industrial shipping port san pedro California- USA

Source: google image

Commercial Port, Tokyo - Japan

Source: google image

It is an essential resource for coastal regions It is important to note that fishing:

- is a part of the country's economy Growth generator of the country.
- is an element of unemployment reduction as an income resource for the inhabitants near the coast.

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[6] Le littoral entre nature et politique, L'Harmattan, 1997, 233 p. by Maryvonne Bodiguel, (modded with care by the author)

- Helps the coastal infrastructure facilities maintain income and expand the development of restaurants, fish shops and terraces near the port.

Agriculture: Agricultural activity produces particular landscapes, it is a structuring element in the organization of spaces.

Agricultural lands are obstacles to the development of coastal cities because of their economic importance.

Agricultural lands in bocage vendéen – France

Source: google image

Concrete invasion on argricultural lands matidja Algeria

Source: google image

2.4.2.3. On the social level:

[7]A large part of the world's population lives near the coast, in order to benefit from marine resources and to participate in international trade. As a result, the presence of the sea stimulates the economy, which explains the urban development of the coasts and the attraction it exerts on the population as the concentration of populations increases.

-Particular characteristics of coastal dwellers: -It is the way a person or a group lives. Coastal residents are open-minded, relaxed, carefree and adventurous people who like to live outdoors (the climate is the source), and in the presence of seasonal activities. The behavior of coastal residents is distinctive in terms of their remarkable sociability and distinct hospitality with tourists, as tourism is the main source of income. This includes that they are mostly helpful, pleasant and passionate about the sea.

Its impact on architecture:

The link between this type of behaviors and architectural layout is immediate and manifests itself in the importance given to outdoor spaces (terraces, balconies, bays)

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[7] Le littoral entre nature et politique, L'Harmattan, 1997, 233 p. by Maryvonne Bodiguel, (modded with care by the author)

2.4.3. The Algeria coastal city:

The Algerian coast is 1622 kilometers of coastline bordering the Mediterranean Sea. Gathering all the major cities on its territory, and abounding in magnificent natural sites. Most of the major cities of the territory are certainly a delight for hikers, swimmers, fishing and water sports enthusiasts. The tourist activity in this part of Algeria does not prevent the preservation of marine fauna and flora. A true place of relaxation, the Algerian coastline is also a place rich in history, with several archaeological sites from the ancient or Ottoman era dotted along the seaside.

Major coastal metropoles in Algeria

Source: google image

2.4.3.1. The features of the Algerian coastal city:

Algerian coastal cities have experienced the same problematics on a natural, economic and social level. After independence, Algeria underwent two development policies which have been applied on the urban and architectural level. The state preferred to focus on the large cities of Algiers, Oran and Annaba and some medium-sized cities such as Bejaia to the detriment of small cities that have remained relatively neglected or stagnant.

This has created an urban imbalance; large cities have experienced a high degree of urbanization (they are over-urbanized) while small cities are under-urbanized.

-The urban planning instruments (PDAU and POS) have the same contents, they do not take into consideration the particularities of coastal cities, so we intervene in the same way as for the internal cities on the architectural level.

2.4.3.2. Regulations and Standards:

The coastal law:

[8]The coastal law sets out a global policy for development, protection and enhancement. The implementation of this general interest policy requires the coordination of the actions of the State and local authorities, or their associations. The purpose of these laws is:

- -Preserve the cultural and natural heritage of the coastal zone.
- -Encourage the establishment of economic activities.
- -Encourage research and discovery of coastal resources.
- -Implement laws that prohibit trespassing on natural or heritage areas.

Some of the important coastal law articles:

- **Act n° 02-02 dated 22/11/1422 correspondent to 05/2/2002 regarding the protection and enhancement of the coastline.**

The purpose of this Act is to lay down special measures for the protection and enhancement of the coastline

- **Act n° 03-02 dated 16/12/1423 correspondent to 17/02/2003 defining the general rules for the use and exploitation of beaches for tourism**

The objectives of this Act are:

- the protection and enhancement of beaches in order to provide summer vacationers with the benefits of swimming, relaxation and all the related services,
- the establishment of conditions for a harmonious and balanced development of beaches that meet the needs of summer tourists in terms of hygiene, health, safety and environmental protection,
- the improvement of summer holiday services for holidaymakers, - the establishment of an integrated leisure system compatible with seaside activities.
- **Act n° 03-03 dated 16/12/1423 correspondent to 17/02/2003 relating to expansion areas and tourist sites.**

The objectives of this Act are:

- The rational and harmonious use of tourist areas and resources with a view to ensuring the sustainable development of tourism.

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[8] The Algerian coastal law (updated on 29 12 /02/ 2002)

- The integration of expansion areas and tourist sites as well as infrastructures for the development of tourist activities into the national land-use planning scheme
- The protection of the natural foundations of tourism
- The preservation of cultural heritage and tourist resources through the use and exploitation, for tourism purposes, of cultural, historical, cultural and artistic assets
- The design of a building that is harmoniously designed and adapted to the growth of tourism activities and the safeguarding of its specific qualities.

Article N°07: Intervention and operation on urban structures:

The various interventions and operations on urban structures are defined by renovation, restructuring, intensification and rehabilitation actions, as defined below:

- Renovation:

It is a physical operation, and constitutes all the measures to restore an old and degraded area by destroying dilapidated buildings and rebuilding on the same site without major changes in the character of the social and traditional area and in the architectural quality of the environment.

The objective of these operations is to obtain fabrics with minimum hygiene standards or to implement the new design of the city

- Restructuring:

It constitutes all the provisions and actions adopted with the aim of transforming an urban space, to give it an arrangement different from existing urban functions or by introducing new functions. These actions are reflected in the reorganization of roads, various networks and the built environment by introducing a new urban project whose objective is to improve the aesthetic and functional aspects of the built environment.

It may involve the partial destruction of blocks and a modification of the characteristics of the area by the transfer of activities of all kinds and by the decommissioning of buildings for another use.

- Intensification:

It is an operation that consists of a land revaluation whose intervention on the existing structure results in the destruction of some obsolete buildings and the reconstruction on the same site.

- Rehabilitation:

It is the operation which consists in the modification of a building or a group of buildings or equipment in order to give them the essential commodities.

- Restoration:

Includes all measures aimed at improving the value of operational blocks located in safeguarded areas, i.e. to modernize buildings located within a perimeter defined by the public authorities. the objective of restoring and enhancing buildings and old districts and bringing housing up to standard of habitability.

2.4.3.3. The Urban Institutions and instruments related to coastal cities:

Bring to knowledge (PAC –> le Porter A Connaissance):

The purpose of the PAC is to delimit the coastal area.

The proposal to delimit the coastal area was made on the basis of physical criteria, thus at the level of the cliff areas a depth of 800 metres was chosen and at the level of the relatively flat areas a depth of 3 km was chosen.

Forest areas (degraded forests and scrublands) in their entirety, coastal plains, agricultural lands, wetlands and historic sites have been integrated.

Land use plan (POS):

It is an instrumental part of the orientations and prescriptions of the Master Plan for Development and Urban Planning (PDAU). It defines the rights of land use and construction to the plot.

It specifies:

-Urban form and building and land use rights

-The nature and importance of the construction

-The rules relating to the external design of buildings

-Public spaces, public facilities, roads and various networks

- The Easements

-Historic areas, sites and monuments to be protected (coastline, agricultural land, etc.)

Master Plan for Development and Urban Planning (PDAU):

the Master Plan for Development and Urban Planning sets out the fundamental orientations for the development of the territories concerned

it determines the general purpose of the land, the nature and layout of major infrastructure facilities.

the Master Plan for Development and Urban Planning must be compatible with the guidelines of Act 02-02 of 05-02-2002 on the protection and enhancement of the coastline and set the terms of reference of the land-use plan.

In Algeria, the land-use plan is an instrument of urban management and planning whose purpose is a detailed regulation, resulting from a protection policy (in particular by prohibiting construction).

In accordance with the provisions of the Master Plan for Development and Urban Planning, the land-use plan sets out in detail the entitlements for land use and construction for the sector concerned.

The land-use plan as a detailed regulatory urban planning instrument should normally allow to better understand the criteria for site specificity.

3. part 02: Specific Theme:

''Sustainable tourism development and planning in coastal areas''

3.1. Definition of Tourism:[9]

Tourism is the act of travelling, or travelling for pleasure, to a place other than that in which one usually lives, which may involve the consumption of an overnight stay with a hotel and possibly the reservation of a transport ticket.

According to the World Tourism Organization's recommendations on definitions, it also means moving and spending at least one night in a place that is not part of one's usual environment and whose purpose for the visit is other than to carry out a paid activity in the country visited. If the person travelling spends less than twenty-four hours in the place, he or she is defined as an excursionist.

According to UNIVERSALIS, tourism is the expression of human and social mobility based on a budget allowance that can be used for free time spent outside the main residence. It involves at least one overnight stay, i.e. one night away from home, although some definitions suggest that at least four or five nights away from home are required.

According to the UNWTO (World Tourism Organization), tourism is an activity of people travelling to places outside their usual environment and staying in those places for less than one year consecutively for leisure, business or other purposes.

Algeria has established the following definition of tourism as part of its tourism policy: any service for the marketing of travel or the use of tourist infrastructure provided for consideration, with or without accommodation.

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[9] https://www.britannica.com/topic/tourism

3.2. Types of Tourism:

Leisure tourism: linked to leisure and relaxation and sport

Source; google image

Cultural tourism: Linked to religious (pilgrimage) and cultural activities

Source : google image

Health tourism: Related to medical care, relaxation and recreation.

Source: google image

Climatic tourism - Greenland

Source: google image

countryside tourism- France

Source: google image

Business tourism: Related to professional activities

Source : google image

urban tourism- Italy

Source: google image

seaside tourism – Miami

Source; google image

3.3. Tourism classifications:[10]

3.3.1. Mass tourism:

Mass tourism can be called the phenomena of massive concentration of tourists in a given place.

We talk about mass tourism because they stay in masse in a very specific place.

This type of tourism appeared, thanks to the widespread adoption of paid holidays in many industrialized countries, in the 1960s, enabling the masses of the people to support the economic tourism sector.

Mass tourism often has negative impacts on people and the environment. Waste is produced in mass; a lot of energy and water is needed. Water, a scarce commodity in hot countries, is particularly wasted in large hotel complexes, to the detriment of local populations (running water, irrigation) etc.

Honolulu,Hawaii – USA

Source; google image
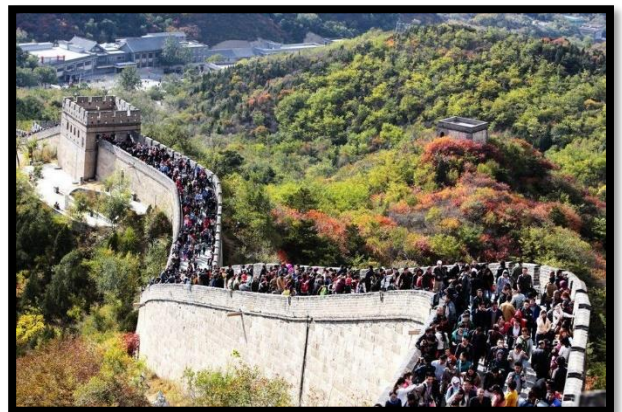
The great wall - China

Source; google image

3.3.2. Durable tourism:

Durable tourism, a concept adopted by the World Tourism Organization, aims, like sustainable development, to be an economic, social and ecological tool. More precisely, it is a question of taking into account ecosystems and local populations, by developing their economy, etc.....

Major obstacles prevent durable and sustainable tourism from developing such as:

- preserving natural and cultural resources;
- limiting negative impacts at tourist destinations, including the use of natural resources and waste production;
- promoting the wellbeing of the local community;
- reducing the seasonality of demand;
- limiting the environmental impact of tourism-related transport;

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[10] http://sdt.unwto.org/fr/node/35792

- making tourism accessible to all;
- improving the quality of tourism jobs.

The 2007 Commission Communication Agenda for a sustainable and competitive European tourism recommended the use of the following principles to address these challenges:

- taking a holistic, integrated approach
- planning for the long term
- adopting an appropriate pace of development
- involving all stakeholders
- using the best available knowledge
- minimizing and managing risk
- reflecting impacts in costs
- setting and respecting limits
- practicing continuous monitoring.

3.4. Tourism in the World:[11]

According to the WTO (World Tourism Organization), tourism has seen an increase in arrivals and revenues in recent years, exceeding the general economic growth rate of 1.3%. The world tourist space is structured around three distinct basins, in order of importance:

1. The Euro-Mediterranean basin, centered on the Mediterranean Sea, the countries of the Mediterranean Basin remain the main world tourist destination with 34% of international tourist arrivals, but the domination of the Mediterranean area is now highly competitive with other regions

2. The East Asia-Pacific Basin, around the shores of the China Sea

3. The North America-Caribbean basin, organized around the "American Sea

3.5. Tourism in the Mediterranean:

The Mediterranean is the world's leading tourist area and certainly the oldest tourist area in the world, receiving about 200 million international and national visitors each year, representing a quarter of the world's hotel capacity, 30% of world tourist revenues and flows and 40% of international arrivals, a development that dates back to the North Shore (the English promenade on the French Riviera since the 19th century). The South Shore has become a mass destination since the Second World War.

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[11] http://sdt.unwto.org/fr/node/35792

3.6. Tourism in Algeria:

Algeria is the largest country in Africa and the 10th largest country in the world in terms of total area, located in North Africa, this country, rich in history, a varied geography, and a temperate climate, has tourist potential that contributes to make Algeria one of the world's most attractive tourist destinations with countless attractions. one of the main tourist attractions in Algeria is the Sahara, the second largest desert in the world. Some sand dunes can reach 180 meters in height, Algeria also has other attractions in abundant numbers and in terms of tourism and in terms of its size, it has been a great asset to Algeria, it also has other treasures, 1622 km of coastline, the Algerian territory is composed of four groups; the Tel coastal chains, a series of plateaus and plains, a southern mountainous strip and the Sahara region with its mountainous masses, all types of tourism can be practiced in Algeria: Business tourism, beach tourism, rural tourism, sports tourism, cultural tourism, archaeology,... Etc.

3.7. Algeria's tourism policy:

Algeria is the last-known tourist destination in the Maghreb, yet it is the first region with high tourist potential compared to other Maghreb countries. the government has decided to give tourism a perspective that reflects its potential and assets. the aim now is to support and supervise the rise of national tourism and integrate it into the world tourism trade networks by emerging Algeria as the reference tourist destination at the international level.

However, the establishment of a tourist destination requires the definition of an organized and sustainable approach to provide the tourist activity with the necessary legibility and visibility to consecrate an alternative tourist economy to the tardy and non-renewable resources that are hydrocarbons, because tourism is no longer a choice, it is essential.

3.8. Evolution of tourism in Algeria:[12]

<u>During the colonial era:</u>

the tourist sector was not spared, in order to shield Algeria from any trade flows that could have offended the interests of colonization.

<u>In 1962:</u>

The infrastructure was limited to a few hotel units mainly located in the large northern cities with high European density, the hotel capacity reached barely 5 to 6000 beds.

<u>From 1962 to 1967:</u>

the sector did not undergo any evolution (was satisfied with the actual situation), a large part of the infrastructure was diverted to housing (villas, sheds, chalets...)

<u>1963:</u> Foundation of the Ministry of Tourism.

<u>1966:</u> Elaboration of the tourism charter.

<u>1967:</u> The tourism policy was integrated into national development plans; this policy was based on:

- The development of major tourism infrastructure targeted at a foreign market that creates jobs and regional balance. Three types of installations:
- Large seaside resorts (Moretti, sidi Fredj, Zeralda, Tipaza, Andalusia, Tichy)
- Saharan to promote circuit tourism.
- Climatic and thermal, these facilities respond to traditional and social tourism.
- the establishment of permanent vocational training structures.

<u>In 1976:</u> Algeria became a member of the WTO World Tourism Organization

<u>In 1986:</u> The Ministry of Tourism and Culture embarked on a major operation to raise the tourism sector to the rank of an industry.

<u>In 1989</u>: Disbandment of the Ministry of Tourism, then appearance and successive dissolutions

<u>In 1990:</u> The tragedy of the early 1990s delayed the development of infrastructure and discouraged many tourists from staying there.

<u>Horizon 2025:</u> A project developed during the National and International Conferences on Tourism was launched providing for a new approach to the reception and management of tourism in Algeria. This project is called Horizon 2025; However, the trend is reversing with the return of foreigners, mainly an affinity tourism from France. For example, there was a 20% increase between 2000 and 2005.

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[12] http://www.matet.dz
https://web.archive.org/web/20090830181343/http://www.matet.dz/index.php?Itemid=117&id=16&option=com_content&task=view

3.9. Algeria's touristic assets:

- A rich natural, cultural and historical heritage
- Algeria is rich in a quality coastline, with exceptional sites to be enhanced

National park Gouraya.

Source: google image

- Algeria has urban sites where business tourism is gradually developing, which must be organized, monitored and enhanced,
- Algeria has a rich potential of more than 200 thermal springs.
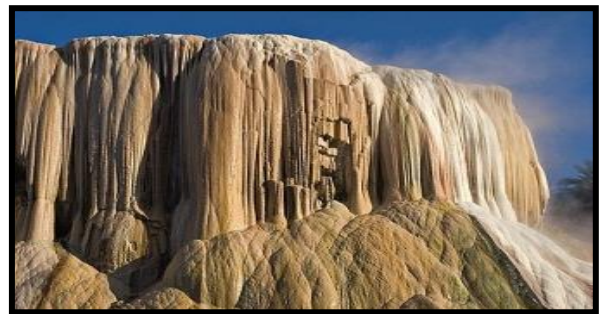
hotsprings- Debagh GUELMA.

Source: google image

- Algeria has an archaeological and historical heritage.

Roman era remenants – Tipaza

Source: google image

- Algeria is fortunate to have a unique heritage of exceptional value: The South Saharan

- A growing material and intellectual infrastructure:

- Public facilities: The E-W Highway, Tramways.

- The major hydraulic worksites: The major hydraulic worksites in the North East region.

- Major hydraulic worksites in the North Centre region Mobilization of water resources in the NW region.

- Seawater desalination plants.

- Major energy projects: The HADJRET power plant megaproject (INNOUS HAMMA power plant - Algiers).

- Major land use planning and sustainable development projects, The Metropolization of the four major cities: Algiers, Oran, Constantine, Annaba

- The launch of the technological and scientific pentapolis: the five New Cities of Sidi Abdallah, Bouinan, Boughezoul, Menaa, Hassi Messaoud.

- The launch of National Parks and protected areas.

- The development of the Tassili and Ahaggar Parks.

Ghardaya

Source: google image

Tassili

Source: google image

3.10.   Tourism's advantages and disadvantages:
3.10.1. Its Advantages:

On the social level:

- Cultural exchanges
- Presence of leisure and relaxation facilities to meet people's needs.
- It allows the discovery of the country's civilizations on a global scale
- preservation of cultural heritage
- Tourism makes it possible to preserve certain traditions that would otherwise have disappeared completely.
- The purchase of handicrafts by tourists encourages craftsmen to keep in their trades
- Address the depopulation of rural areas.

On the economic level:

- Generates employment.
- Globalization of exchange and openness.
- Participates in the country's income (GDP)
- Creation of infrastructures, transport and communications.... Etc.
- Economic growth and currency redistribution.

On the environmental level:

- the enhancement of natural and historical resources.
- Tourism can even lead to environmental protection because, in order to attract tourists, investors make sure to preserve the beauty of their listed sites.

3.10.12.   Its disadvantages:

- Impact of tourism on the environment:
- The excessive consumption of natural resources.
- Beach erosion and deforestation.
- Multiple pollution.
- The endangering of natural biodiversity.

3.11. What's restraining the evolution of tourism in Algeria:[13]

- A lack of legibility of Algerian tourism products.

- Very poor and inadequate accommodation and hotel facilities of poor quality.

- reception capacities remain very low in terms of hotel and catering facilities.

- Hotel architecture and catering suffer from a lack of quality but above all from a lack of local and/or regional originality.

- Both in the construction of hotel structures and in the catering sector, universal and European types are favored over local and national styles and dishes,

- in addition, obsolete and relatively expensive accommodation facilities for the local population in need of major upgrading.

- A lack of mastery of new market prospecting techniques by the travel agents.

- A lack of Qualification and performance of personnel.

- the absence of tourist tours.

- The scarcity of tourist guides is another handicap; in most cases they are more likely to be escorts than trained professional guides.

- In the majority of cases, the staff speak only one language, Arabic, or even two languages with French. The English language is not very well mastered by the execution staff and by managers and officials in the various business segments of the sector. This constitutes an indisputable obstacle to the diversification of foreign tourist sources.

- Poor quality of the product and services of Algerian tourism. services that are expensive for the local population and of lower quality than international competition with No leading services.

- Low access of information and communication technologies to tourism, there is a clear lack of use of new communication technologies in tourism.

- Technological inadequacy severely hinders the prospecting of new markets and the absence of a communication plan remains a problem. Insufficient websites dealing with the coastal zone.

- A low-quality mode of transport and accessibility.

- Lack of flyers, brochures and the few existing products do not meet the required standards (design, images, colors, poorly targeted content...).

- Banks and financial services unsuitable for modern tourism.

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[13] https://www.tourism-review.com/travel-tourism-magazine-algeria-tourism-industry-fighting-challenges-article2590

- Insufficient food and health security.

- Insufficient hygiene, maintenance and general cleanliness (of public and private spaces).

- Governance, organization and culture not adapted to modern tourism.

- A big deficit in marketing the image of Destination Algeria.

3.12.   Tourist activities to be reinstated:

The various legacies of the business line encourage us to develop other promising and promising niches to create and/or reactivate:

- Tourist hunting.
- Fishing and scuba diving.
- Caving, climbing, skiing, paragliding and hang gliding.
- Speleology
- Rally raids, expeditions

The different Tourist activities and potentialities to be reinstated

Restored in the Algeria soil

Source: google image

3.13. Sustainable tourism:

3.13.1. Definition: [14]

Expressed simply, sustainable tourism can be defined as:

"Tourism that takes full account of its current and future economic, social and environmental impacts, addressing the needs of visitors, the industry, the environment and host communities "

Sustainable tourism development guidelines and management practices are applicable to all forms of tourism in all types of destinations, including mass tourism and the various niche tourism segments. Sustainability principles refer to the environmental, economic, and socio-cultural aspects of tourism development, and a suitable balance must be established between these three dimensions to guarantee its long-term sustainability.

Thus, sustainable tourism should:

- Make optimal use of environmental resources that constitute a key element in tourism development, maintaining essential ecological processes and helping to conserve natural heritage and biodiversity.
- Respect the socio-cultural authenticity of host communities, conserve their built and living cultural heritage and traditional values, and contribute to inter-cultural understanding and tolerance.
- Ensure viable, long-term economic operations, providing socio-economic benefits to all stakeholders that are fairly distributed, including stable employment and income-earning opportunities and social services to host communities, and contributing to poverty alleviation.
- Sustainable tourism development requires the informed participation of all relevant stakeholders, as well as strong political leadership to ensure wide participation and consensus building. Achieving sustainable tourism is a continuous process and it requires constant monitoring of impacts, introducing the necessary preventive and/or corrective measures whenever necessary.
- Sustainable tourism should also maintain a high level of tourist satisfaction and ensure a meaningful experience to the tourists, raising their awareness about sustainability issues and promoting sustainable tourism practices amongst them.

3.14. Impact of tourism in coastal areas: Need of sustainable tourism strategy:

Coastal areas are transitional areas between the land and sea characterized by a very high biodiversity and they include some of the richest and most fragile ecosystems on earth, like mangroves and coral reefs. At the same time, coasts are under very high population pressure due to rapid urbanization processes. More than half of today's world population live in coastal areas (within 60 km from the sea) and this number is on the rise.

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[14] https://www.gdrc.org/uem/eco-tour/sustour-define.html

which are most visited by tourists and in many coastal areas tourism presents the most important economic activity. In the Mediterranean region for example, tourism is the first economic activity for islands like Cyprus, Malta, the Balearic Islands and Sicily.

Forecast studies carried out by WTO estimate that international tourist arrivals to the Mediterranean coast will amount to 270 million in 2010 and to 346 million in 2020.

3.14.1.1. Main sources of impact:

- Residence in the coastal zone.
- Fisheries and aquaculture.
- Shipping.
- Tourism.
- Land-use practices (Agriculture, Industrial development).

3.14.1.2. Resulting problems:

- Loss of marine resources due to destruction of coral reefs, overfishing
- Pollution of marine and freshwater resources
- Soil degradation and loss of land resources (e.g. desertification and salinification due to excessive water use, overuse of fertilizers, erosion)
- Air pollution
- Loss of cultural resources, social disruption
- Loss of public access
- Natural hazards and sea level rise
- Climate change

Plastic wastes polluting the beaches thus threatening

The local ecosystem

Source: google image

Koh Phi Phi- Thailand before and after 'development'

showing how tourism can destroy the beauty

that brought the tourists to places in the first place,

Source: google image

In many areas, massive new tourist developments have been built - including airports, marinas, resorts, and golf courses. Overdevelopment for tourism has the same problems as other coastal developments, but often has a greater impact as the tourist developments are located at or near fragile marine ecosystems, For example:

- mangroves forests and seagrass meadows have been removed to create open beaches
- tourist developments such as piers and other structures have been built directly on top of coral reefs
- nesting sites for endangered marine turtles have been destroyed and disturbed by large numbers of tourists on the beaches

The damage doesn't end with the construction of tourist infrastructure, some tourist resorts empty their sewage and other wastes directly into water surrounding coral reefs and other sensitive marine habitats. Recreational activities also have a huge impact. For example, careless boating, diving, snorkeling, and fishing have substantially damaged coral reefs in many parts of the world, through people touching reefs, stirring up sediment, and dropping anchors. Marine animals such as whale sharks, seals, dugongs, dolphins, whales, and birds are also disturbed by increased numbers of boats, and by people approaching too closely.

Tourism can also add to the consumption of seafood in an area, putting pressure on local fish populations and sometimes contributing to overfishing. Collection of corals, shells, and other marine souvenirs - either by individual tourists, or local people who then sell the souvenirs to tourists - also has a detrimental effect on the local environment.

Tourism can create great pressure on local resources such as energy, food, land and water that may already be in short supply. According to the Third Assessment of Europe's environment (EEA, 2003), the direct local impacts of tourism on people and the environment at destinations are strongly affected by concentration in space and time (seasonality), They result from:

- The intensive use of water and land by tourism and leisure facilities.
- The delivery and use of energy.
- Changes in the landscape coming from the construction of infrastructure, buildings and facilities.
- Air pollution and waste.
- The compaction and sealing of soils (damage and destruction of vegetation).
- The disturbance of fauna and local people (for example, by noise).

3.15. Benefits of Sustainable coastal tourism:[15]

- Economic benefit:
  The main positive economic impacts of sustainable coastal tourism are:

  - contributions to government revenues.
  - foreign exchange earnings
  - generation of employment and business opportunities. Further information on economic contributions of tourism can be found on the website of the world travel and tourism council.

  - Govern Contribution to government revenues: revenues from the tourism sector can be categorized as direct and indirect contributions. Direct contributions are generated by income taxes from tourism and employment due to tourism, tourism businesses and by direct charges on tourists such as ecotax. Indirect contributions derive from taxes and duties on goods and services supplied to tourists, for example, taxes on tickets (or entry passes to any protected areas), souvenirs, alcohol, restaurants, hotels, service of tour operators.

  - Foreign exchange earnings:

    Tourism expenditures, the export and import of related goods and services generate income to the host economy. Tourism is a main source of foreign exchange earnings for at least 38 % of all countries.

  - Employment generation:
    The rapid expansion of international tourism has led to significant employment creation. Tourism can generate jobs directly through hotels, restaurants, taxis, souvenir sales and indirectly through the supply of goods and services needed by tourism-related businesses; for e.g. conducted tour operators. Tourism represents around 7 % of the world's employees Stimulation of infrastructure investment Tourism can influence the local government to improve the infrastructure by creating better water and sewage systems, roads, electricity, telephone and public transport networks. All this can improve the standard of living for residents as well as facilitate tourism.

  - Contribution to local economies:
    Tourism can be a significant or even an essential part of the local economy. As environment is a basic component of the tourism industry's assets, tourism revenues are often used to measure the economic value of protected areas. Part of the tourism income comes from informal employment, such as street vendors and informal guides. The positive side of informal or unreported employment is that the money is returned to the local economy and has a great multiplier effect

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[15] http://www.coastalwiki.org/wiki/Impact_of_tourism_in_coastal_areas:_Need_of_su
stainable_tourism_strategy#Tourist_infrastructure

as it is spent over and over again. The world travel and tourism council estimate that tourism generates an indirect contribution equal to 100 % of direct tourism expenditures.

- Direct financial contributions to nature protection:
  Tourism can contribute directly to the conservation of sensitive areas and habitats. Revenue from park-entrance fees and similar sources can be allocated specifically to pay for the protection and management of environmentally sensitive areas. Some governments collect money in more far-reaching and indirect ways that are not linked to specific parks or conservation areas. User fees, income taxes, taxes on sales or rental of recreation equipment and license fees for activities such as hunting and fishing can provide governments with the funds needed to manage natural resources.

- Competitive advantage:
  More and more tour operators take an active approach towards sustainability. Not only because consumers expect them to do so but also because they are aware that intact destinations are essential for the long-term survival of the tourism industry. More and more tour operators prefer to work with suppliers who act in a sustainable manner, e.g. saving water and energy, respecting the local culture and supporting the wellbeing of local communities. In 2000 the international Tour Operators initiative for sustainable Tourism was founded with the support of UNEP.

3.16.   Environmental Management and Planning benefits:

- Sound and efficient environmental management of tourism facilities and especially hotels (e.g. Water and energy saving measures, waste minimization, use of environmentally friendly material) can decrease the environmental impact of tourism. Planning helps to make choices between the conflicting interests of industry and tourism, in order to find ways to make them compatible. By planning sustainable tourism development strategy at an early stage, prevents damages and expensive mistakes, thereby avoiding the gradual deterioration of the quality of environmental goods and services significant to tourism.

- Socio-cultural benefits:

  Tourism as a force for peace
  Travelling brings people into contact with each other. As sustainable tourism has an educational element it can foster understanding between people and cultures and provide cultural exchange between guests and hosts. This increases the

chances for people to develop mutual sympathy, tolerance and understanding and to reduce prejudices and promote the sense of global brotherhood.

- <u>Strengthening communities:</u>
  sustainable Coastal Tourism can add to the vitality of communities in many ways. For e.g. events and festivals of the local communities where they have been the primary participants and spectators. Often these are refreshed, reincarnated and developed in response to tourists' interests.
  The jobs created by tourism can act as a very important motivation to reduce emigration from rural areas. Local people can also increase their influence on tourism development, as well as improve their jobs and earnings prospects through tourism-related professional training and development of business and organizational skills.

- <u>Revitalization of culture and traditions:</u>
  Sustainable Tourism can also improve the preservation and transmission of cultural and historical traditions. Contributing to the conservation and sustainable management of natural resources can bring usually the chance to protect local heritage or to revitalize native cultures, for instance by regenerating traditional arts and crafts.

- <u>Encouragement of social involvement and pride:</u>
  In some situations, tourism also helps to raise local awareness concerning the financial value of natural and cultural sites. It can stimulate a feeling of pride in local and national heritage and interest in its conservation. More broadly, the involvement of local communities in sustainable tourism development and operation seems to be an important condition for the sustainable use and conservation of the biodiversity.

- <u>Benefits for the tourists of Sustainable Tourism:</u>
  The benefits of sustainable tourism for visitors are plenty: they can enjoy unspoiled nature and landscapes, environmental quality of goods or services (clean air and water), a healthy community with low crime rate, thriving and authentic local culture and traditions.

3.17.   Low-impact tourism as a solution:[16]

What is low-impact tourism?

Low-impact tourism is about sustainable travel and leisure activities that directly benefit local communities and that are respectful of wildlife, local people and their cultures – including travel that minimizes our negative impact on the environment and the places we visit.

OK, let's get one thing out of the way first. You'll see lots of advertising around 'eco' or 'sustainable' tourism. So, sustainable tourism has two components:

1. How you get there

2. What you do once you're there

Almost all information on eco-tourism focuses on the second point and ignores the first. A lot of 'eco' holidays or tourism is on a different continent from where they're advertised, with absolutely no mention of the need to fly to get there. A holiday that involves a flight can in no way be described as 'eco'. So, to be clear, flying to Costa Rica to visit the cloud forest or to Africa to go on safari are definitely not examples of low-impact tourism. If that's what you need to do, then do it, but don't call it sustainable, because it isn't.

Tourism represents an important source of income for many countries, particularly those where traditional industries are in decline. It can open up opportunities to members of the community traditionally excluded from the more lucrative occupations. For example, Nepal boasts the only all-female trekking company, while a women-owned coop in Tanzania ensures money from tourists gets spent in the community (rather than being drunk by the men!).

Small-scale tourism of this kind, where travellers stay and eat in local businesses or directly employ local people, ensures money stays in the local community rather than disappearing into the pocket of some multinational tour operator.

Tourism can also be beneficial for wildlife and the environment. Money from sensitively-managed wildlife or nature tourism incentivises and pays for the creation and upkeep of protected natural areas. For example, gorilla trekking in countries like Rwanda has played an important part in ensuring protection of the animals and their habitat. Similarly, a number of developing countries have successfully retrained former poachers as rangers, protecting the animals they once hunted. It's hard to convince people struggling to feed their families of the need to conserve wildlife or natural spaces without giving them a reason to do so, but if animals become more valuable to the local community alive than dead, then there's a greater incentive to protect them.

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[16] https://www.lowimpact.org/lowimpact-topic/low-impact-tourism/
Making Tourism More Sustainable - A Guide for Policy Makers, UNEP and UNWTO, 2005, p.11-12

3.18.   Conclusion:

Since Algeria's independence from France, the economy has been based essentially on its natural resources, hydrocarbons. But that's not its only advantage! Moreover, many people wonder why a country so rich in history, culture and landscapes has so many difficulties to take off economically... What is certain is that Algeria, like many countries ignored by the Western world, is a treasure to be discovered.

This secret, long kept, may finally come to light thanks to the new orientation.

If tourism is now considered by Algerian leaders as the privileged lever to trigger economic recovery, this projection must be defined and will consist of:

- Satisfy internal tourist demand for relaxation and leisure.
- Improve Algeria's tourist image abroad.
- Promote the country's tourism potential.
- Enhance the country's cultural heritage.
- Choose a diversified tourism.

The current tourism policy is based on the principles and rules of sustainable development, with a view to achieving the rational exploitation of tourism resources.

Algeria must succeed in attracting tourists by building on its image. However, given the high competitiveness, the country must ensure that it maintains its awareness of the need to improve its position and image as a tourist destination, the Ministry of Tourism and Handicrafts is working to revive and promote the tourism sector in order to allow the contribution to local development and support economic growth and the enhancement of the attractiveness of the destination over its competitors to ensure the sector's sustainability. The areas to which the government must pay the most attention are diversity and innovation, advertising, promotion and marketing, the regulatory framework and the refinancing of the industry.

Algeria should improve the diversity and quality of its tourism services (follow recent trends in the context of technological progress, such as electronic bookings and the emergence of new types of accommodation such as boutique hotels), stimulate demand and increase competitiveness, establish a better dissemination of the existing information. For that purpose, a better coordination of the existing governmental agencies that deal with coastal management is necessary, and finally improve the environmental education is essential for a sustainable development of the coast.

4. Analysis part:

4.1. Presentation of the city of Tenes:

4.1.1. Geo Location:

Tenes is a coastal city located in northwestern Algeria halfway between the state of Algiers and Oran the two major metropolis of Algeria, from Algiers to about 215 km to the East and of Oran about 230 km to the west and 52 km from the State center of Chlef. It covers 100.00 Km², with a population of 44,876 inhabitants.
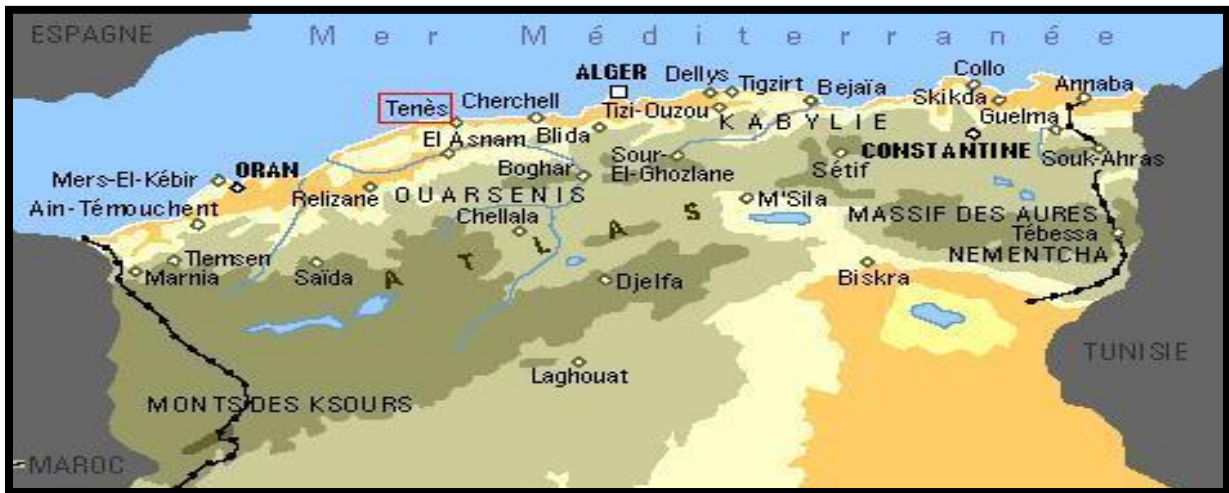
Geographic map of North Algeria

Source: google image

The province of Tenes is bounded on the north by the mediterranean sea, from the east by the province of Ben Haoua, from the south by the province of Zeboudja and from the west by the provinces of Abu El Hassan and El marsa.

The city of tenes is surrounded by the Mediterranean Sea from the north, The city of oued goussin from the east, Sidi Akkacha from the south and Sidi Abderrahmen from the west.

Adminstrative map of the state of Chlef

Source: google image

Geographic map indicating the geo location of tenes
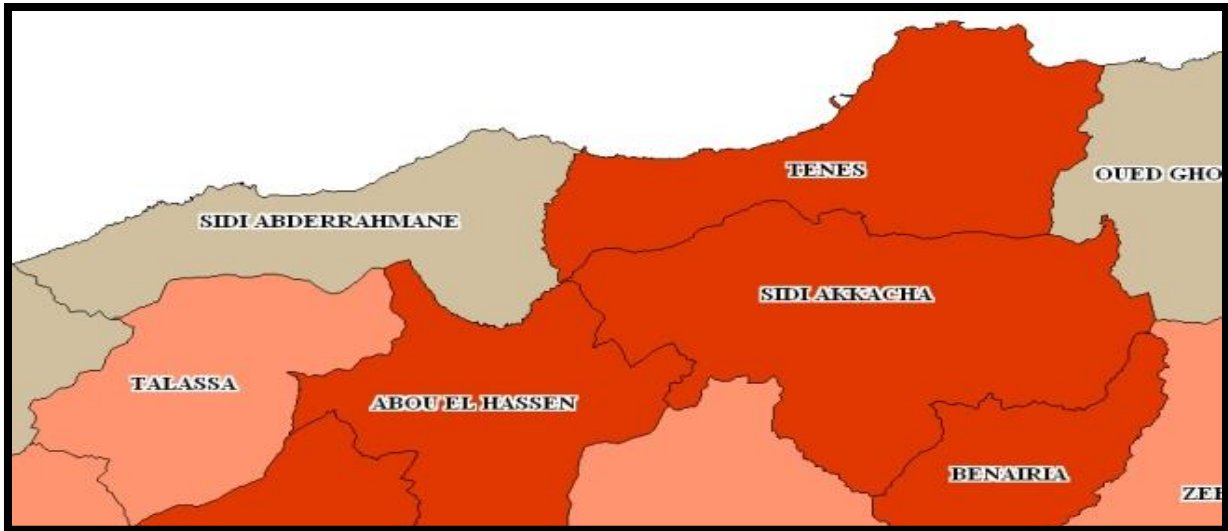
Source: google image

4.1.2. Natural environment of the city:

#### 4.1.2.1. Morphology and hydrographic networks:

the morphological shape of the city of tenes is composed of two major parts:

-flat and homogeneous part which include most of the territory of the city, and a sloped part which consist of the mountains that surround it from the south and south east and south west, penetrated by 3 major valleys which are in order from right to left valley of Allala, Valley of Boumzeoued and the valley of Chaarir, and the valley of boufessoussa which is secondary one located in the far east of the city.

Morphology and hydrographic netword of tenes
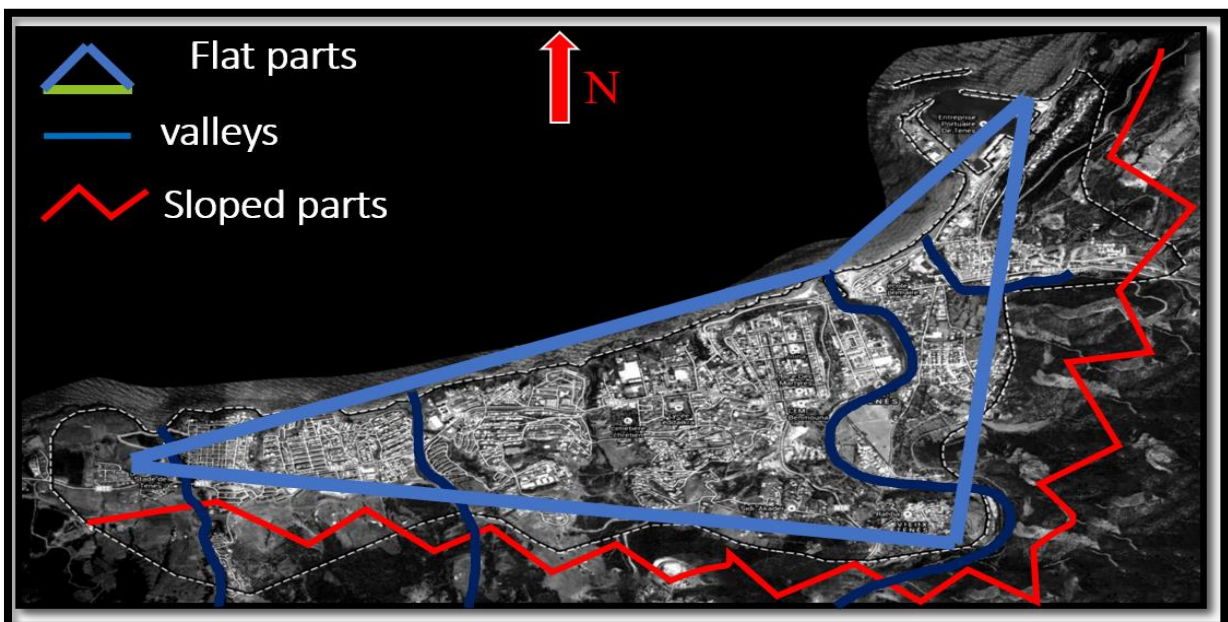
4.1.2.2.   The Wind:

The city of Tenes is mostly dominated by the cold northern and south-western winds in autumn and winter, and by Eastern and South-eastern winds in summer time, and occasionally it's hit by the seasonal hot southern winds.


Dominatng winds of tenes

https://www.previmeteo.com/dz/2477148-meteo-tenes.html
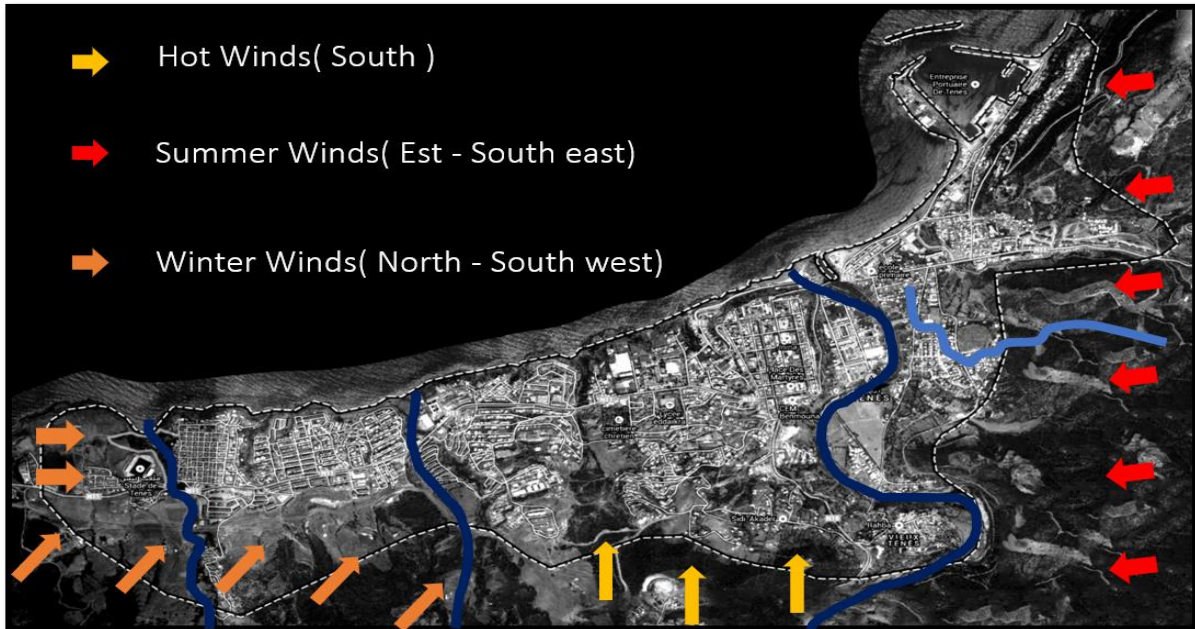
4.1.2.3.   Temperature and Rain gauge:

Since the city of tenes is situated in the Mediterranean basin, it's has the same feature of the Mediterranean climate, so the average temperature in tenes during the summer is between 28°c and 30°c and it falls down to 14°c to 17°c during the winter.

And the rain fall gauge is considerably above the average on the winter (95mm -> 100mm)

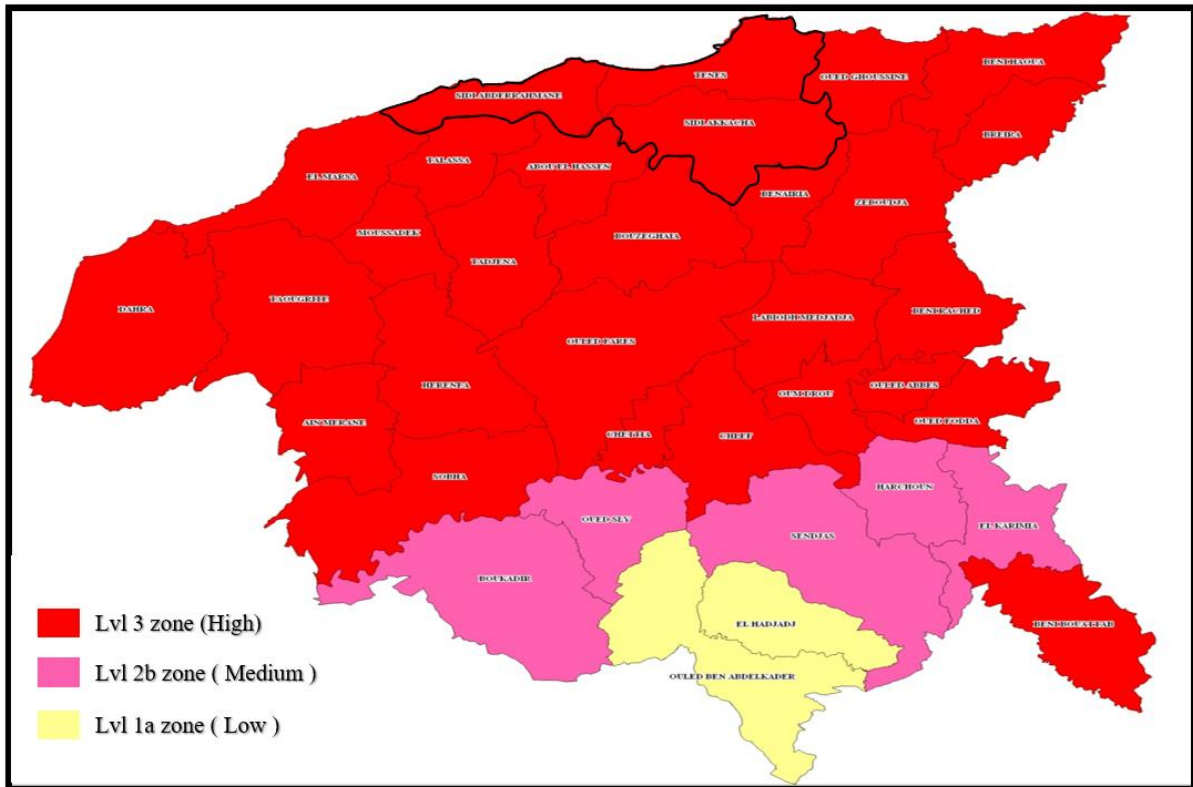and it has a very low precipitation level during the summer (0 -> 5mm).
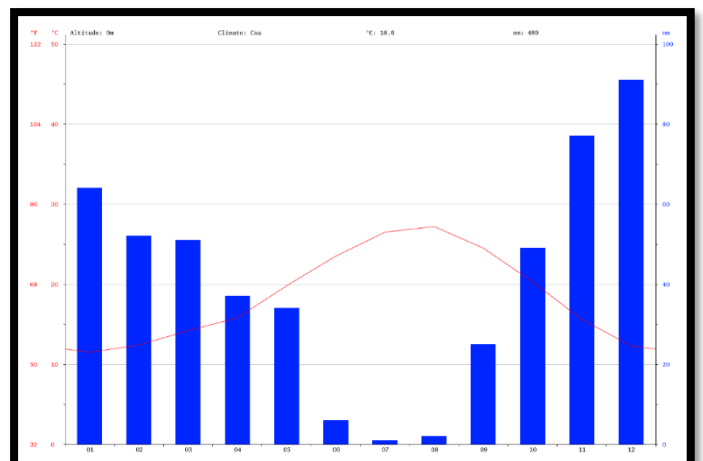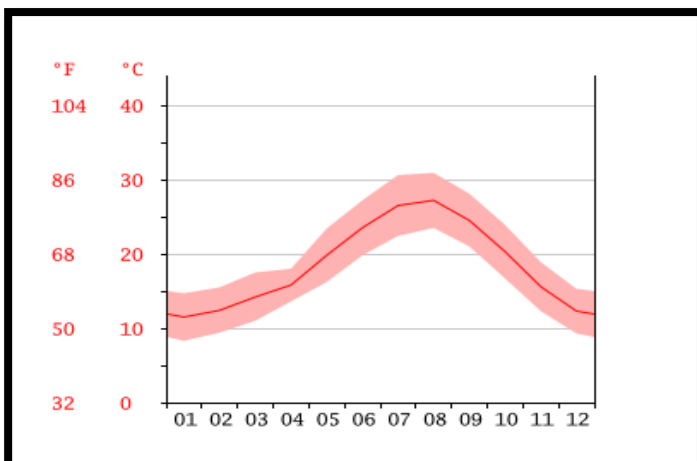
Temperature and rain level in Tenes (2006)

Source: climate-data.org

4.1.2.4. Seismic mapping:

Tenes is located within the level 3 seismic zone known of its high seismic magnitude. So following the ASR's law and recommended regulations is mandatory for all kind of construction sites.

Seismic map of the state of Chlef (2006)

Source: Algeria's Seismic rapport 99/ V.2003

4.1.3. Historic overview:[17]

4.1.3.1. The Prehistory:

The City of Tenes went through 3 major occupation during this period of time:

- Phoenician domination: from 8th BC

- Berber domination: until the 3rd century BC

- Punic (Carthaginian) domination: from 3rd century to 30 BC

the foundation of the city of Tenes dates back to the Phoenician period, the occupation of the latter is the result of a series of trading posts, which the Phoenicians established along the route from Carthage to Spain, one day's journey by sea. There is no evidence that there was a city built at that time but only the presence of Phoenician tombs by the sea about 600m east of the city.

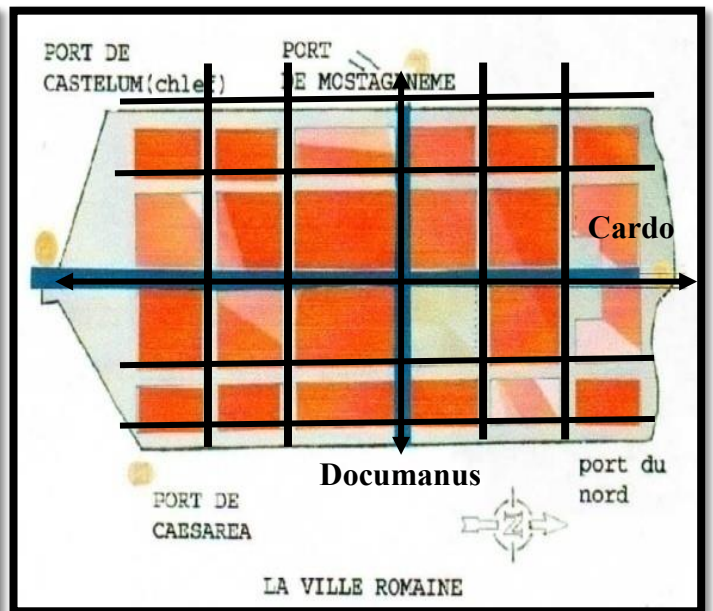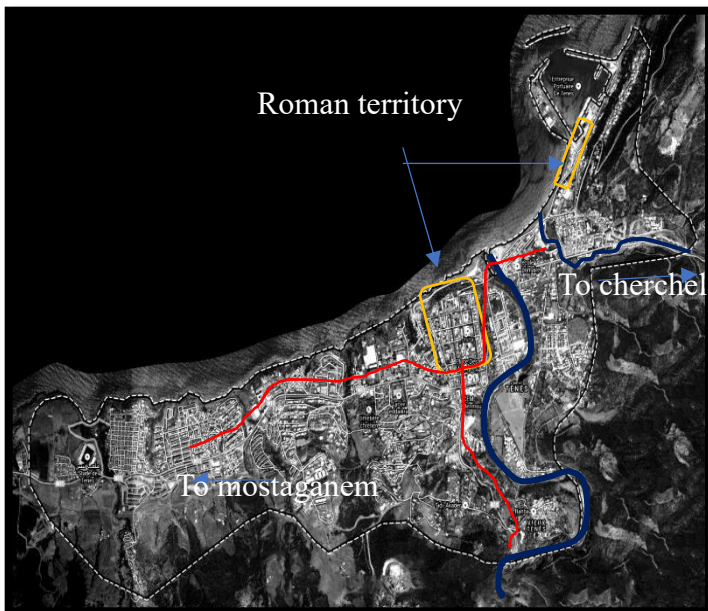[17] Kardoc.unblog.fr/2007/11/28/histoire-de-la-bille-de-tenes (modded with care by the author)

1.1.1.1.

The poenician territory in the shores of Tenes

Source :Kardoc.unblog.fr/2007/11/28/histoire-de-la-bille-de-tenes

Tenès, l'ancienne Cartennas, fut fondée par les Phéniciens, et conserve de nombreux restes de son ancienne origine : tels ces tombeaux taillés dans le roc, où furent ensevelis des chefs, sans doute illust...

The poenician tombs of an unknown three Phoenicians leaders.

Source :Kardoc.unblog.fr/2007/11/28/histoire-de-la-bille-de-tenes

In 30 BC, the Romans conquered the city and gave it the definitive name of CARTENNAS. For the Romans, the choice of site was recommended by their requirements to facilitate spreading over the largest possible areas. The presence of the Cardo and Decumanus communication routes linking CARTÉNAS (Ténès) to CASTILLUM (Chlef), and CÉSAREA (Cherchell) and TANGITANUM (Mostaganem), respectively, and ensuring links with ICOSIUM (ALGER), at their intersection, they built a large post fortified by the occupation of the first palace west of the Allala valley and the construction of the Roman port CARTÉNAS was a military city with a grid layout well protected by the escarpment of the south and east side, surrounded by an enclosure wall (an intramural city); pierced by four doors that were the starting points of the communication routes:the northern gate, the southern gate of Castelum (Chlef) ,the eastern gate of Caeserea (Cherchell) and the western gate of Mostaganem.

The roman territories in Tenes

Source :Kardoc.unblog.fr/2007/11/28/histoire-de-la-bille-de-tenes

The roman fortified city core plan and axes

Source :Kardoc.unblog.fr/2007/11/28/histoire-de-la-bille-de-tenes
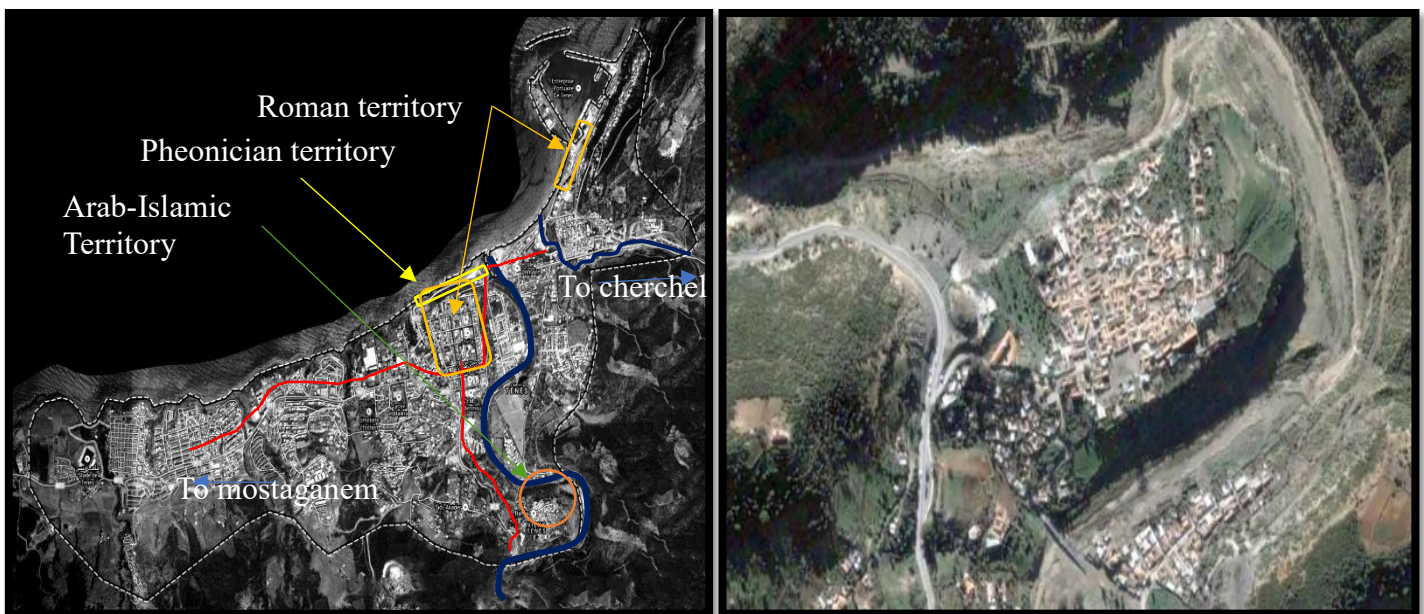
4.1.3.3.   The middle ages:

The medieval era in Tenes was divided into 3 major timelines:

- 675-1505: Arab occupation
- 1505-1516: the Spanish occupation (non-Muslim)
- 1516-1841: Turkish occupation

The region was conquered between 675 and 682 by the military commander Abu El Mouhajir Dinar, it has been governed by different states: Rostomides, Idrissides, Merinids, Almoravids, Almohads, and Zianides.

In 875, it was occupied by sailors from Andalusia following the earthquake that totally destroyed the Roman centre.They built their city (New Tenes) currently (Old Tenes) on the rock 2 km from the sea.

The ocupation of the second plateau. The two routes structuring the city are only an extension of a network of hills and valleys, including the axis linking Rahba Square and the Sidi Maiza Mosque linking Rahba Square to the MarketThe construction of a strong defensive enclosure pierced by numerous gates that represented both strong controls: Bab El Bhar Bab El Kabla (Bordj El Ghola) Bab El Khoukha Bab Ibn Nacih.

The muslim arabs territory in Tenes during the middle age

Source :Kardoc.unblog.fr/2007/11/28/histoire-de-la-bille-de-tenes

4.1.3.4.   The colonization period:

In order to strengthen control between Mostaganem and Miliana, Chlef was occupied and the easiest way to supply the garrisons of Chlef was through the port of Tenes, the French occupation of Tenes began in 1843, we were able to identify 3 situations:

Between 1843-1880:

The creation of the Navy district. -The conservation of the northern gate and the creation of other urban gates (of ORLÉONSVILLE, MOSTAGANEM and CHERCHELL).

The creation of two major axes on the ancient Roman routes (Cardo, Decumanus) connecting the urban gates:

- the first north _ south crosses the city towards the Orleaville Gate, connecting it to Chlef.
- the second is east _ west connecting it to (Mostaganem and Cherchell) through the new gates.

Between 1880-1954:

- the reconstruction of the port (1867).
- The inauguration of the railway (1927) and the station which contributed to the change in the vocation of the port (from military to commercial), the establishment of the daïra and the church in 1920.
- The city at that time witnessed an extension of the west coast

Between 1954-1962: This period is known by:

- the destruction of a large part of the city due to the earthquake in 1954 and the outbreak of the war of liberation which caused the contribution of the rural population the creation of a resettlement city on the left side of the Allala rive During the period, old Ténès became a satellite city and the intervention of the French in the medina was limited to the rehabilitation of the SIDI MAIZA mosque and the construction of two military schools.
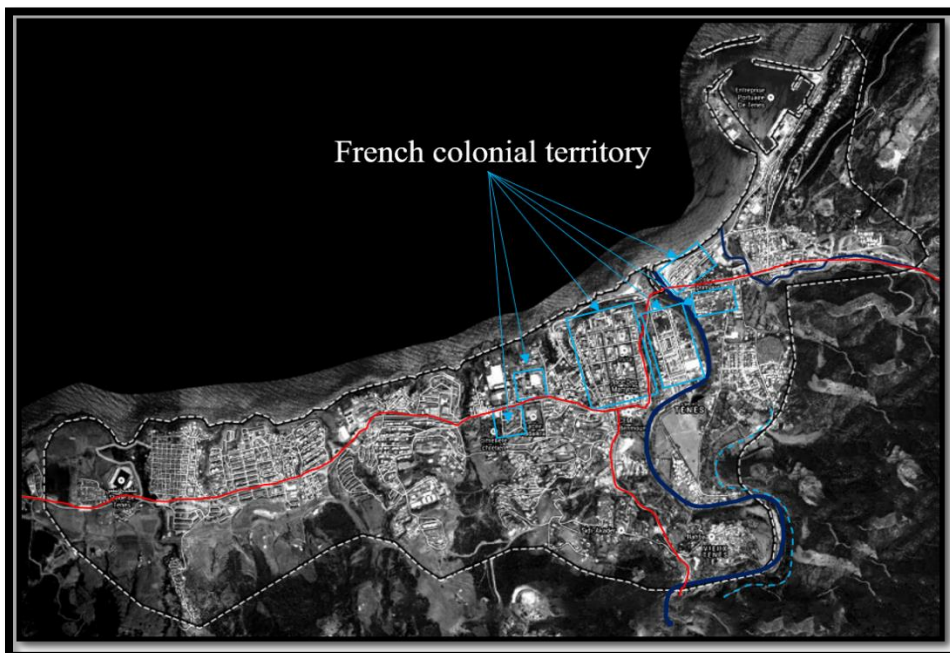
The French invasion territory in Tenes

Source :Kardoc.unblog.fr/2007/11/28/histoire-de-la-bille-de-tenes
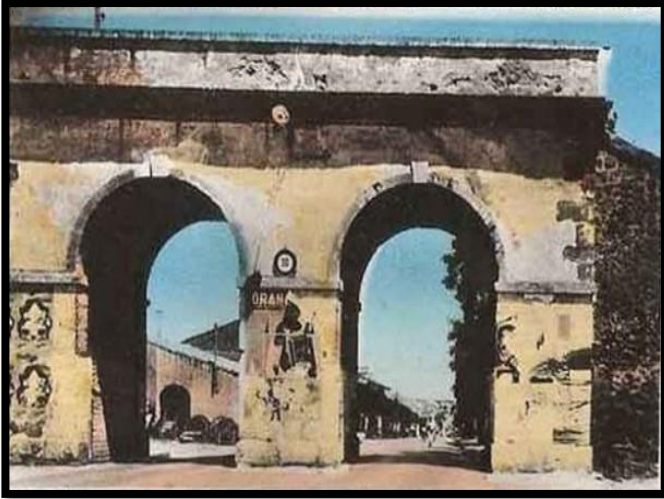
Orleansville entrance porchs (colonial core)

Source :Kardoc.unblog.fr/2007/11/28/histoire-de-la-bille-de-tenes

France entrance (colonial core)

Source :Kardoc.unblog.fr/2007/11/28/histoire-de-la-bille-de-tenes

Mostaganem entrance (colonial core)

Source :Kardoc.unblog.fr/2007/11/28/histoire-de-la-bille-de-tenes

Marina entrance (colonial core)

Source :Kardoc.unblog.fr/2007/11/28/histoire-de-la-bille-de-tenes

4.1.3.5.   Post-Independence:

After independence, the urbanization of the city evolved towards a west-ward direction.

The construction of the cellar city as a continuation of the Carton city to the east of the RN11 from 1962 to 1966.

the destruction of slums

the co-habitation of families through the creation of the self-constructed cities of Chaarir and Reguoun.

the establishment of a housing area (ZHUN) to the east of the city.

In 1985 a major restructuring project for the functional division of the city by sector.

the removal of the southern part of the city core's enclosure, which resulted in the destruction of the two urban gates: ORLÉONSVILLE and MOSTAGANEM

The postcolonial extension was done in an inadequate and inconsistent way with the existing Structures, hence the appearance of the construction devoid of all social and collective live

rising population growth rate: Housing need

implementation of the 1970/1973 four-year plan

birth of the master urban plan: P.U.D.: 1972
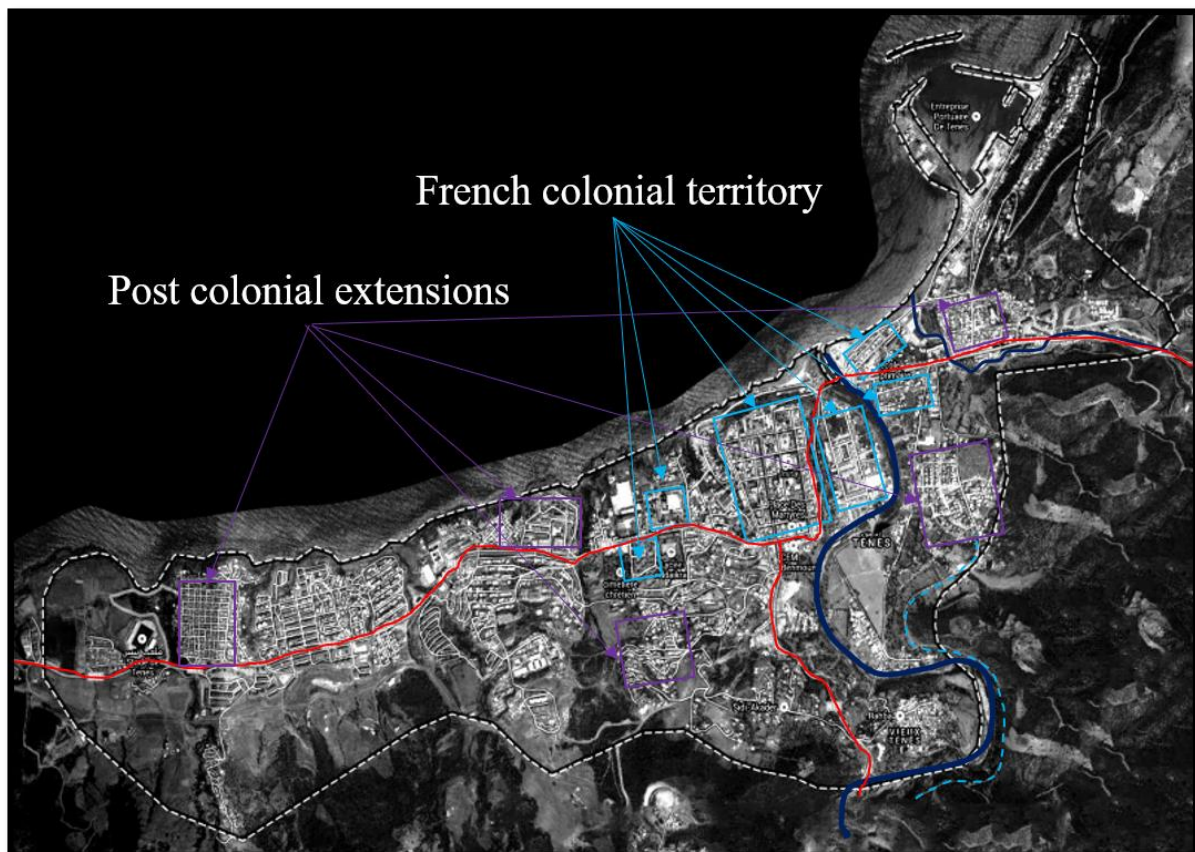
Post colonial extensions

Source :Kardoc.unblog.fr/2007/11/28/histoire-de-la-bille-de-tenes

4.1.4. Accessibility :
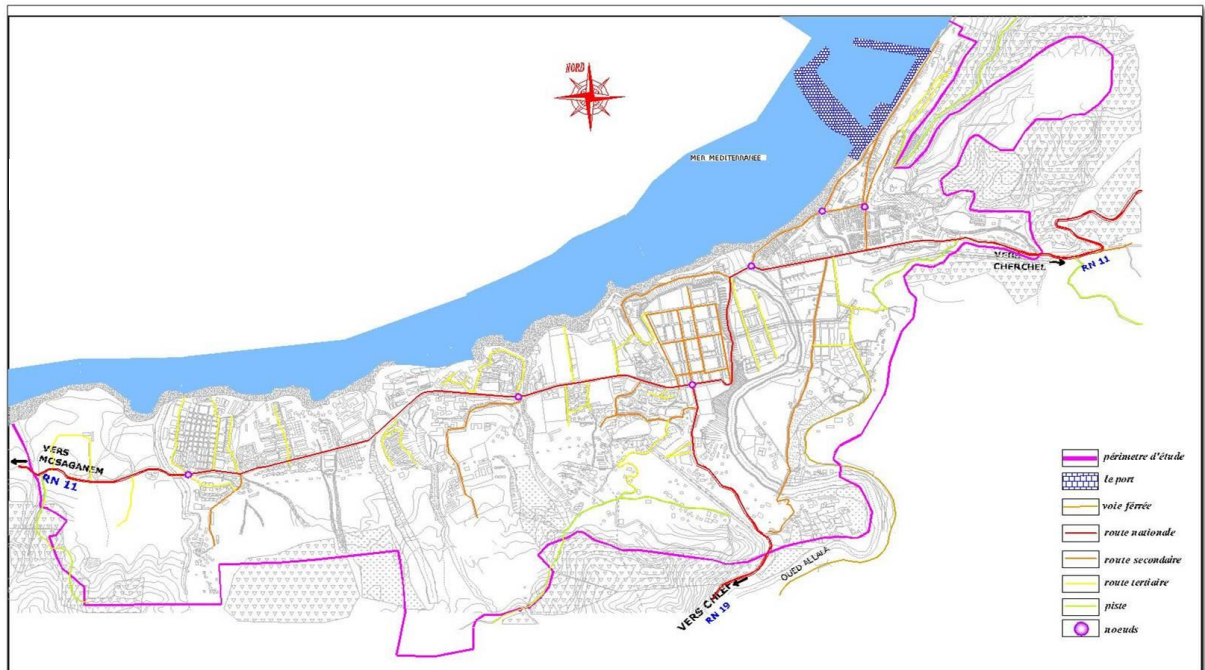
National – communal – local Road system in the city of tenes

4.1.5. The Urban districts:
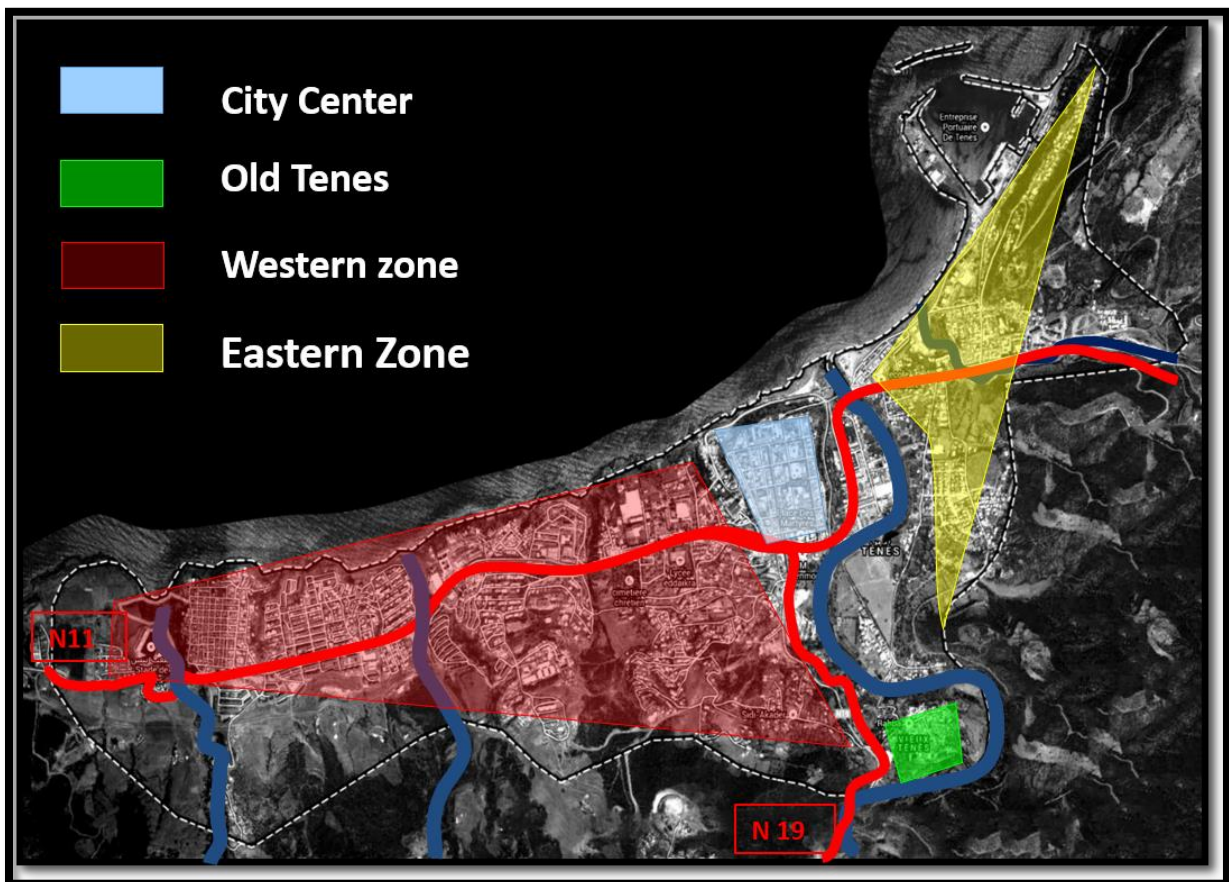
The different urban entities of the city of tenes

4.1.6. The Potentialities map:

Potentialities map of Tenes

4.1.7. The Obstacles map:

Potentialities map of Tenes

4.1.8. The summary map:

The summary map of Tenes
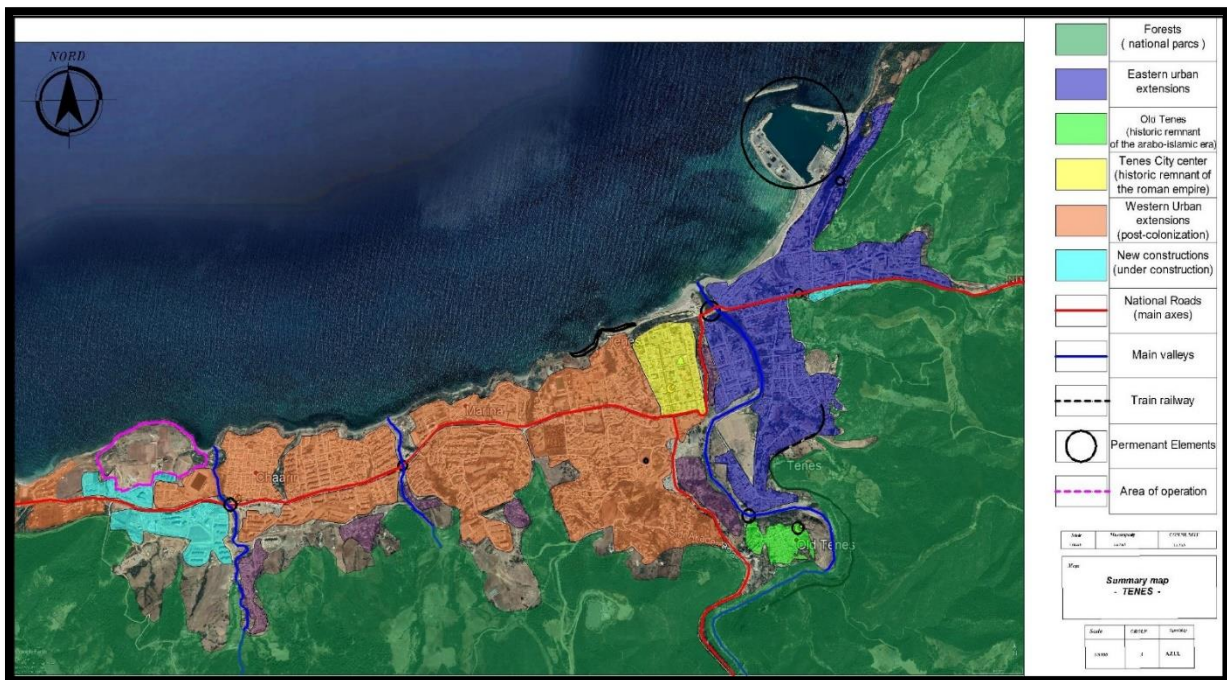
4.1.9. The city's assessment summary:

From the analysis we have made, we can summarize the following points:

1. N.R.11 is the only East-West axis located on the coastal strip, linking the agglomerations of the territory.

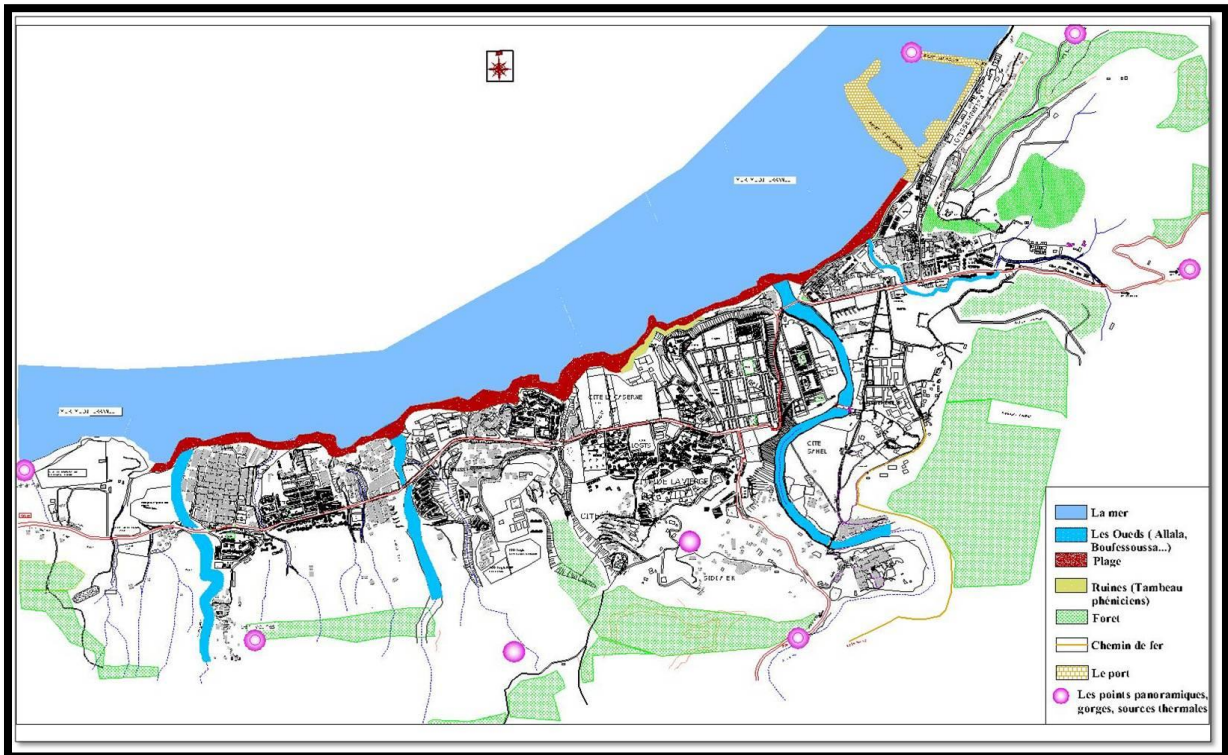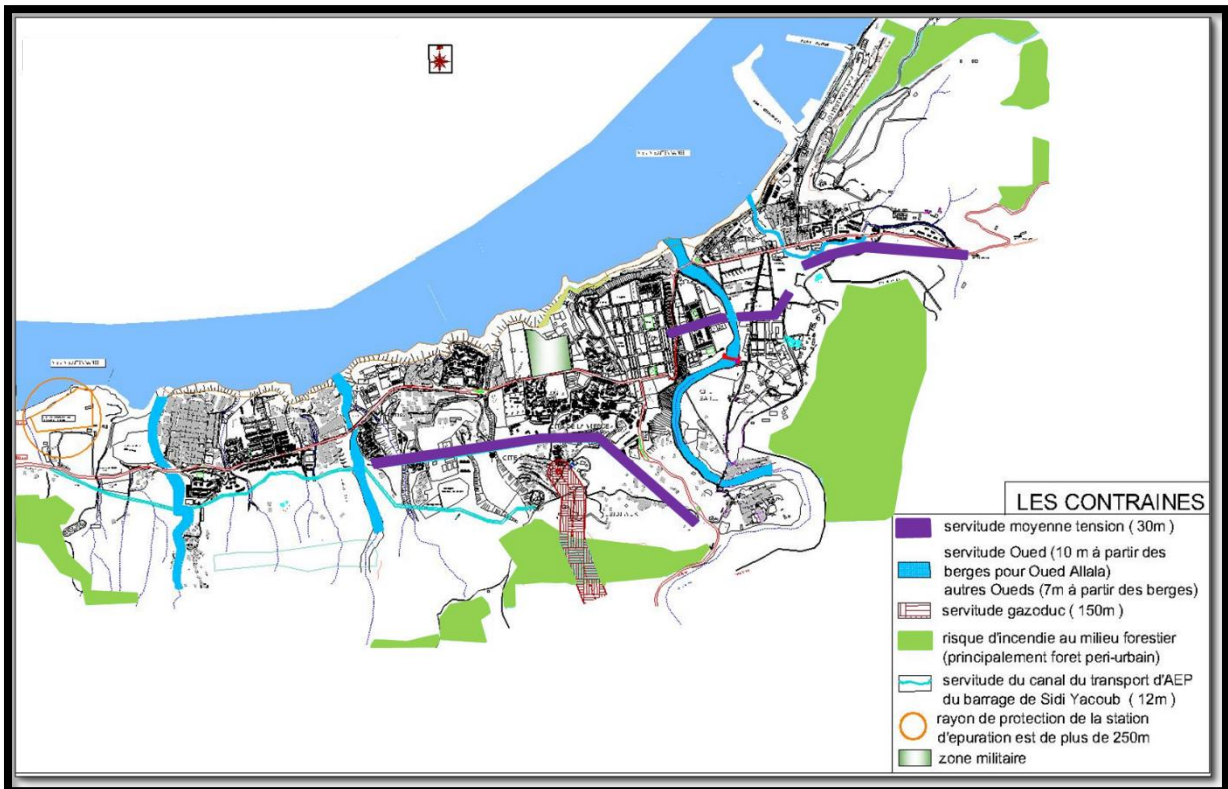2. N.R.19 is the only North-South axis linking the agglomeration of Tenes and the capital of the State of Chlef.

3. The lack of planning along these two axes.

4. The road system does not provide Sufficient links between the city's entities.

5. The railway, which could be another way to enter the south of the city, is not functional.

6. The Valleys divide the entities into several parts.

7. Presence of housing on the shores of the Valleys (Floodplains).

8. Poor neighborhood structuring.

9. Degradation of the architectural heritage (destruction of the ancient roman ramparts gates and bridges).

10. The absence of a sea-city relationship (the discontinuation and rupture of the seafront).

11. The lack of various activities and infrastructures in old Tenes.

12. The Lack of touristic infrastructure.

13. The Presence of pre-manufactured cities (Bergui city, the Cellar city, the Station city and the Virgin's city) that have exceeded their lifespan and have become a danger to the inhabitants.

14. Poor structuring of the road network, especially in the city of Riacha and Ain Louz

15. The Lack of green spaces, public spaces and recreational areas.

16. The pollution of Allala valley by sewerage (discharge point).

17. The presence of a large number of urban discharges and solid waste of anthropic origin that degrade the quality of the environment and natural resources of Tenes.

4.1.10. Urban actions plan of the city:[18]
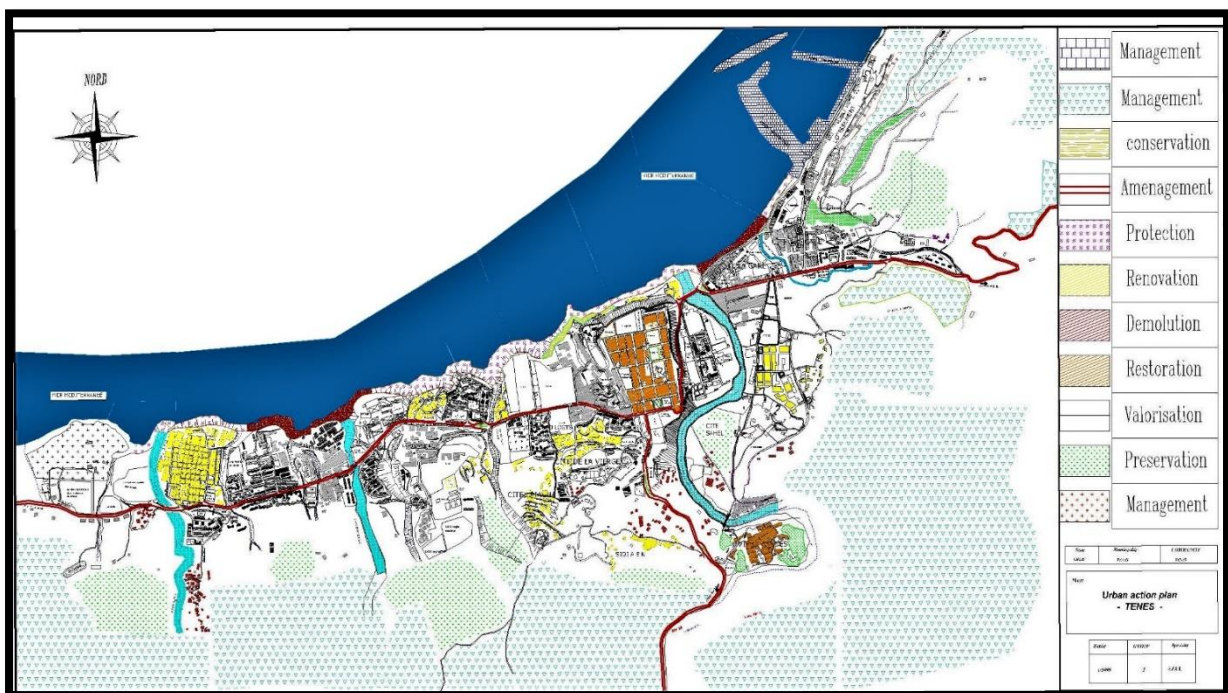
Urban actions map of Tenes

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[18] Extracted from the land use plan of the city of tenes and modded by the author

4.1.11. The city's schematic diagram:
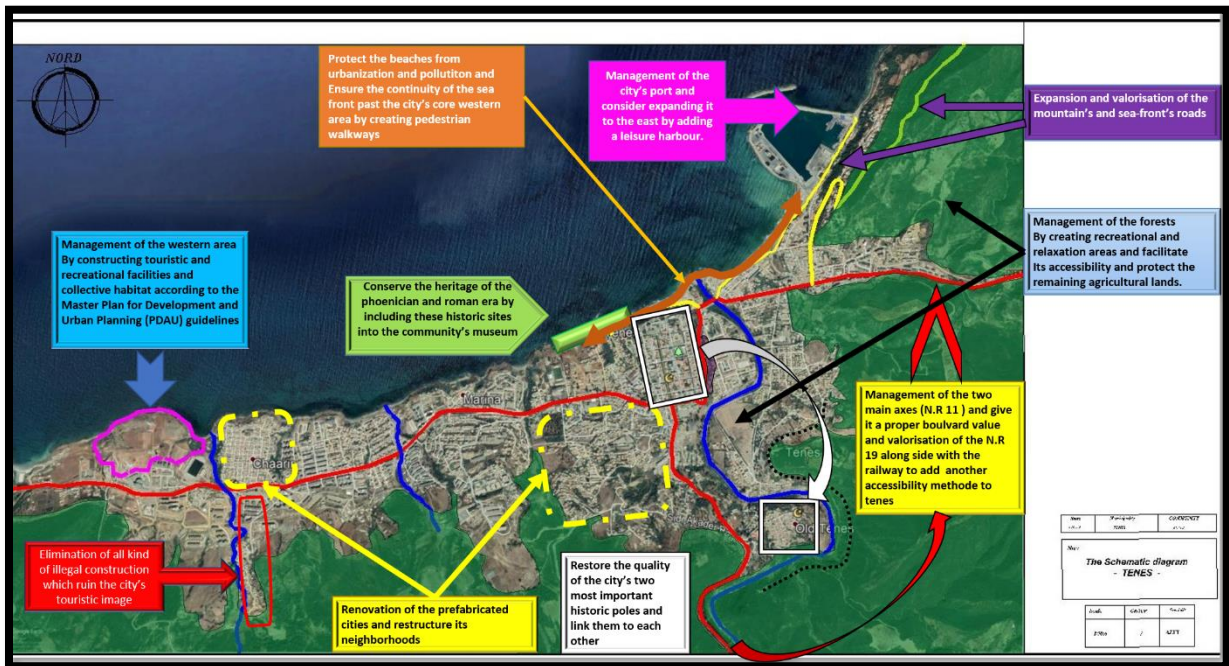
The city's Schematic diagram map

4.2. Intervention site analysis:

4.2.1. Geo-location:

Our site of intervention is located on the western part of Tenes, about 3 km west of the city's core and about 250m north west of chaarir city.
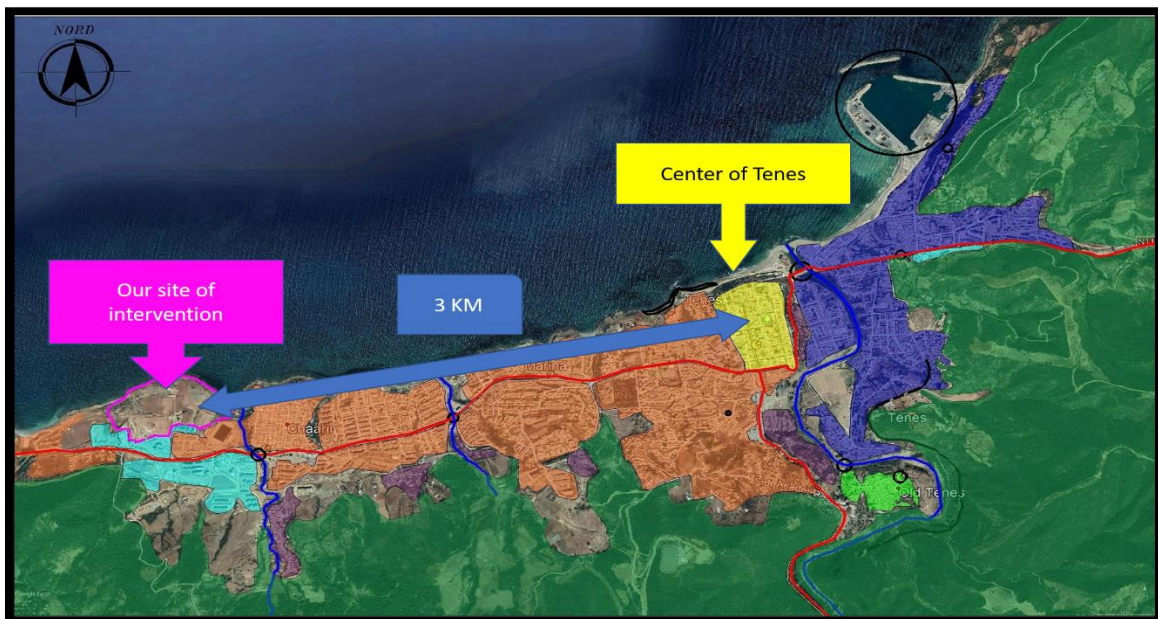
The location of our site of intervention in comparison to

The city's center

4.2.2. Site of intervention Layout plan:
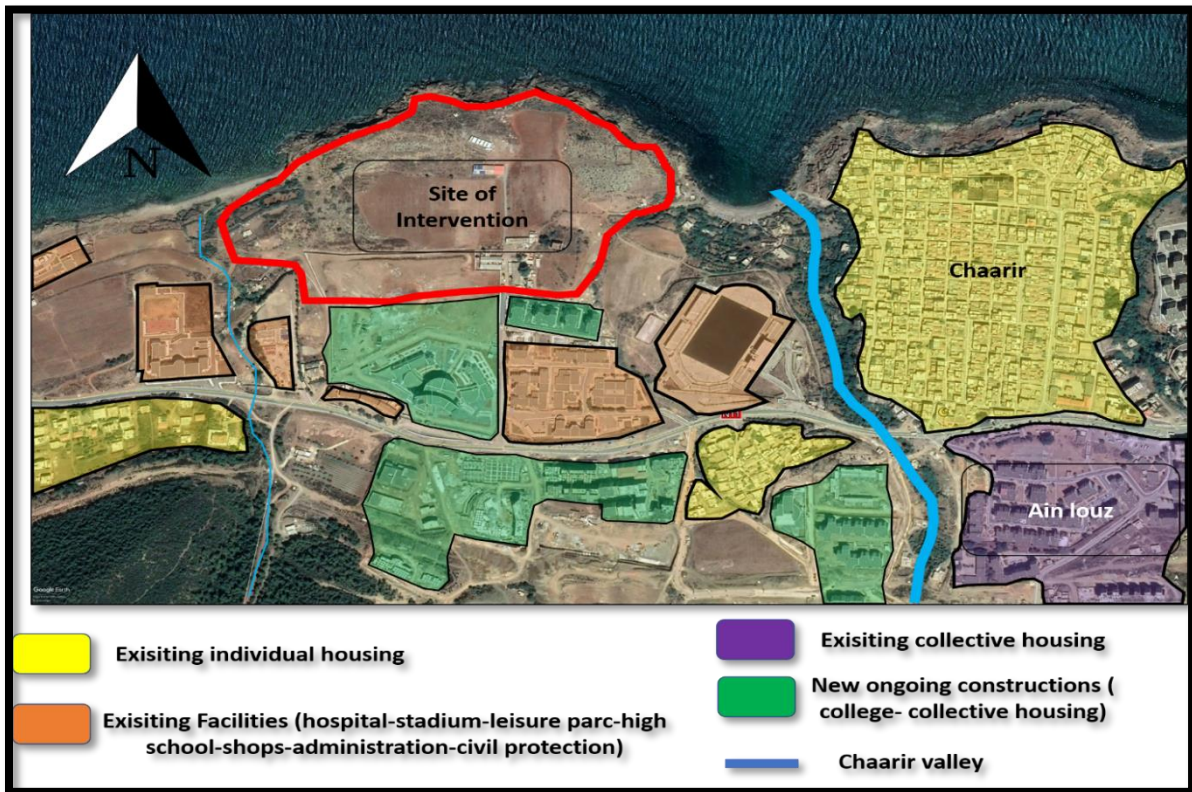
Site of intervention mass layout plan

4.2.3. Morphology and physical shape:

Our site of intervention has an irregular form due to its location and its surroundings.

The site is limited to the north by a 12m high cliff overlooking directly to the Mediterranean Sea, from the east by a scrubland, from the south east by Chaarir stadium and some animal stables.

From the south by a 4 collective housing buildings and Higher college of Oceanography (projetcts still under construction).

From the south west by a leisure park and a high school, and from the west by another scrublands.

The site's slope (inclination – tilting) is considerably low, about 5%

The morphology and shape of our site of intervention

4.2.4. Immediate surroundings:

4.2.4.1. Natural:

Our site is an empty terrain surrounded by scrubland and bushes from both east and west, And by a very low level valleys to the west

Photos of site's surroundings

The site is surrounded by various constructions, which are:

Animal stables - 1 floor -

Collective housing – 5 floors - (under construction)

Higher college of oceanology – 7 floors - (under construction)

Leisure parc – 1 floor -
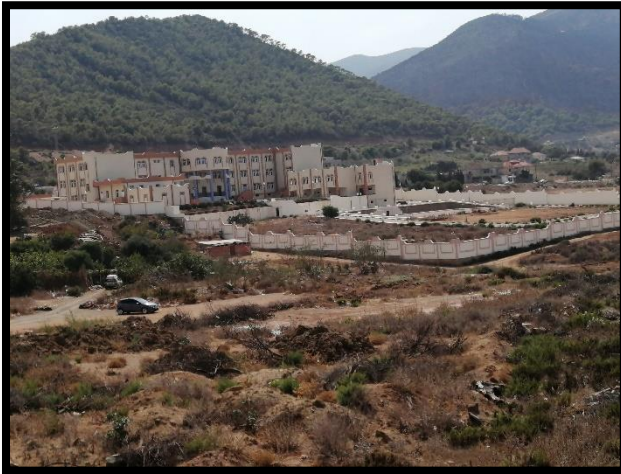
A high school and a civil protection unit base – 3 floors each -

4.2.5. accessibility:

our site is accessible through two unpaved roads, the first one is on a straight ahead read on the right side of the site between the hospital and the college, the second one is on the extreme left of the site, between the Regional Trade Inspectorate office, the college and the leisure parc, both these two roads are directly linked to the national road n°11 which cross the city of Tenes from the east to the west.
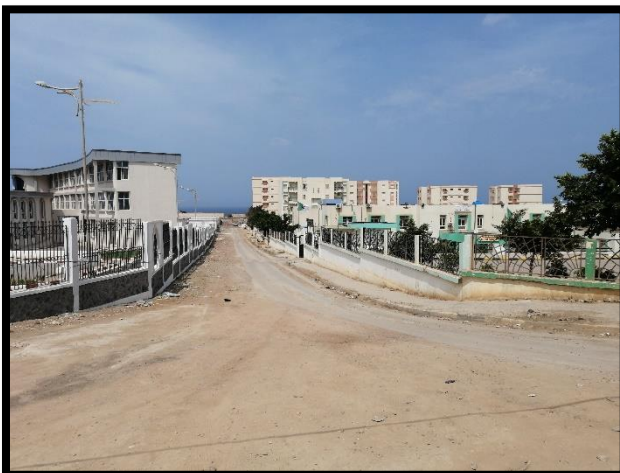
The site's accessibility

4.2.6. the traffic flow:

since the site is still unurbanized, both of the unpaved roads are considered both as pedestrian and mechanical until the site is properly managed.

———	National road n° 11
- - -	Unpaved roads
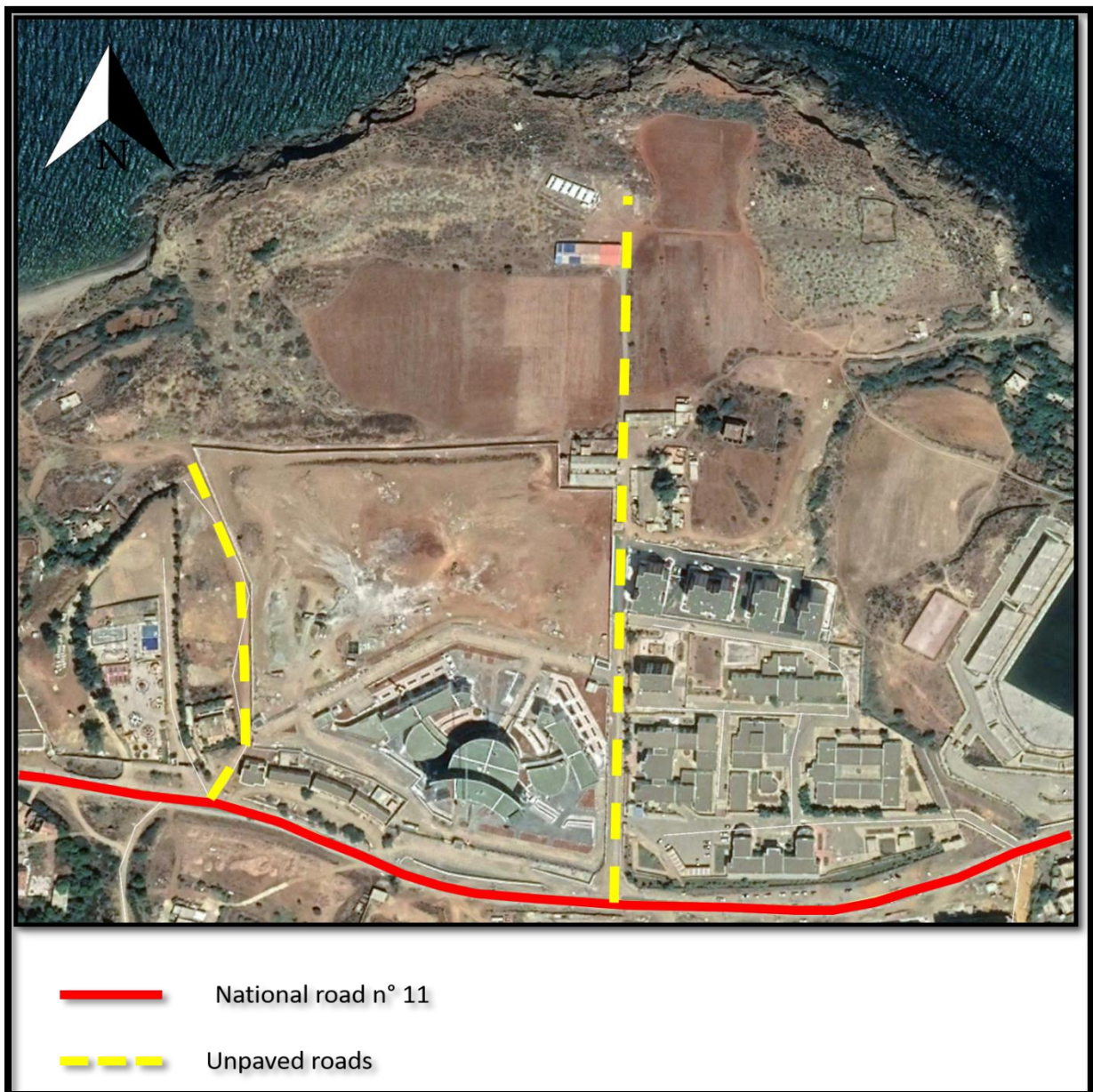
Site"s traffic flow

4.2.7. Climat:

The site's temperature and precipitation levels are the same for the city of tenes, during the summer is between 28°c and 30°c and it falls down to 14°c to 17°c during the winter.

And the rain fall gauge is considerably above the average on the winter (95mm -> 100mm)

and it has a very low precipitation level during the summer (0 -> 5mm).

4.2.8. The sunlight exposure:

The site is very well illuminated and exposed to the sun light without obstructions all day long.
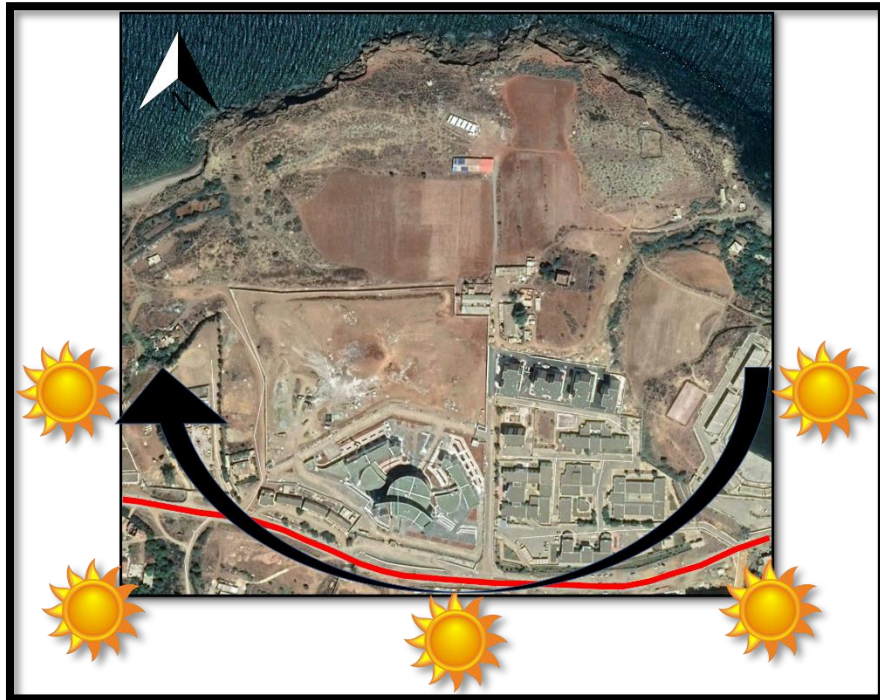
Site's sun light exposure

4.2.9. Dominating winds:

Summer winds – east / south east

Winter winds – west / south west

Hot seasonal winds – south
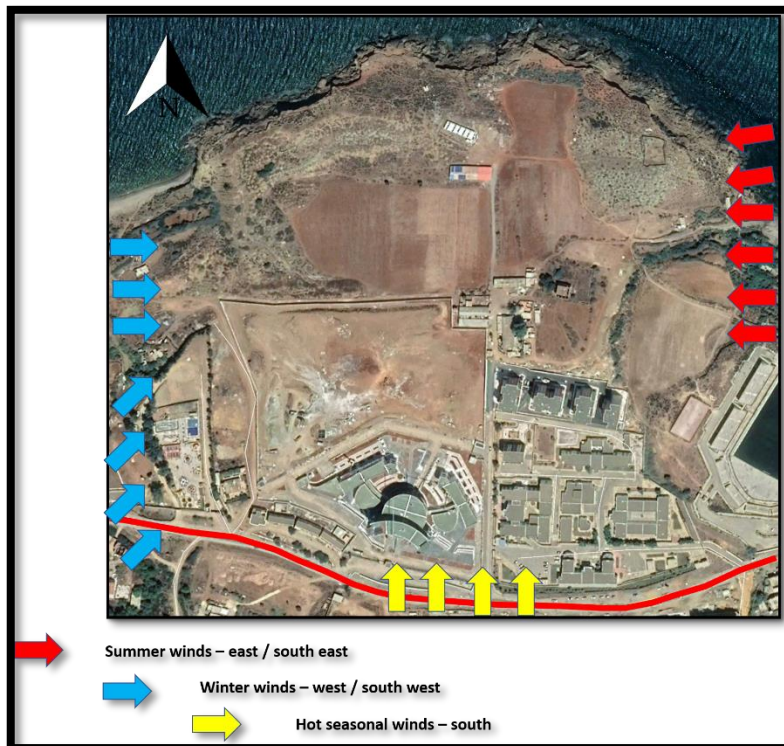
Site's sun light exposure

4.2.10. The site's panoramic view:
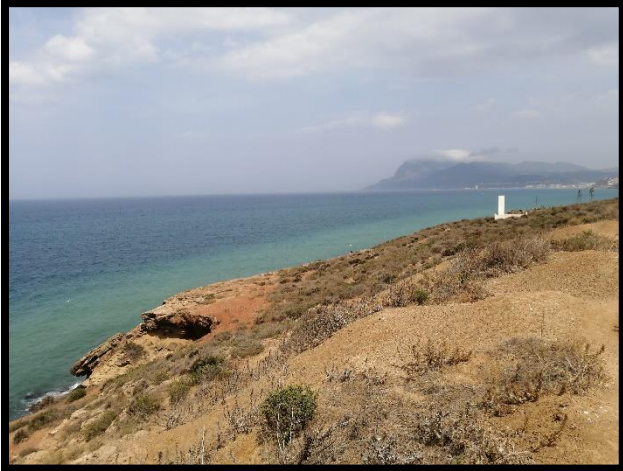
Panoramic view of the site

Land use plan (pos) guidelines concerning the site:

According the the land use plan made in 2011 by the urbanization management office of the city, the site is a target to a major urban intervention, a list of various facilities has been studied and prepared for realization, which as as displayed in the picture below.
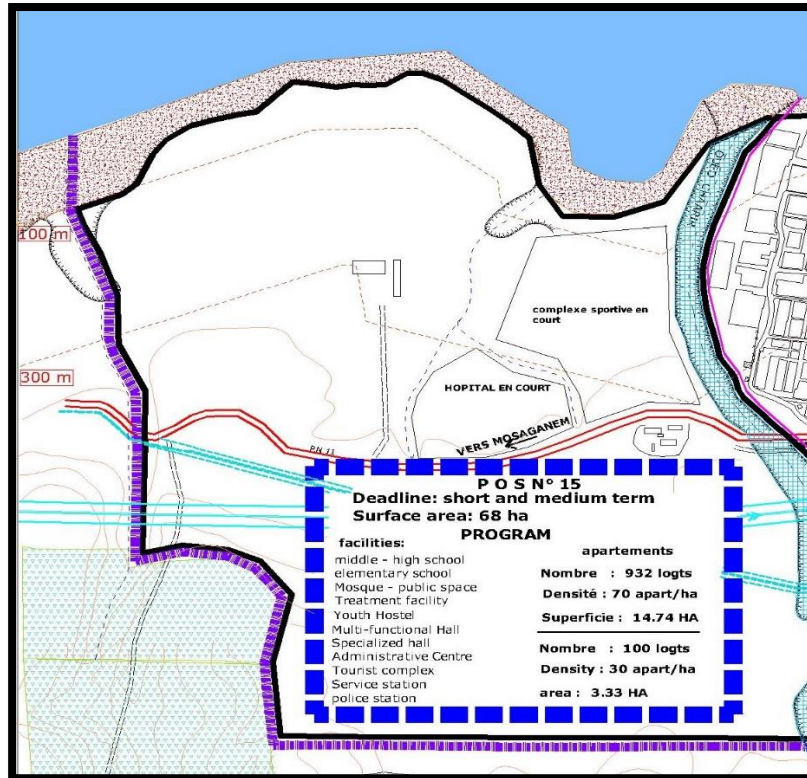
Land use plan (pos) guidelines and suggestion for the site.

Source: official Lnad use plan 2011 Version

And what concern the Master Plan for Development and Urban Planning (pdau) , the didn't mention any details or restrictions on the land use and height of the constructions whether it was a facility or a housing projects.

Create an 11 level luxury hotel in the northern part of the site which will inlude its own parking lot and private pool,plaza,club... this will make it as a reference point to the entire project

Construct an aqua museum will will function in harmony alongside the higher college of oceanology, and to preserve the city's marine history and life forms. It'll also play as a consistant income source

Construct public relcreational areas and children playgrounds beside the already existing leisure parc to sustain the same function of the parc and render it more efficient

Construct an administrative facility to relieve the heavy work loads on the city's main administrative center and a police station, to compensate the extreme lack of security services in the western part of tenes

Divide our site into major entities with different function
The one on the right is a residential entity which will include collective, semi collectivve and individual housing, and finally the hotel. The second entity is leisure and recreational entity which will work alongside the leisure parc, it'll caontain an aqua parc, recreational spaces, playgrounds and aqua museum

Create a large pedestrian walkway all the way alongside the cliff to benifit as much as possible from the views, the walkway should incorporate different types of service lots to secure public comfort

Construct an aqua parc at the heart of the site, it'll also be the heart of the ecomomic inome of the project perfecting its sustainability.

Create plazas between the different types of the housings, to achieve the intended mixity and accomplish a sustainable durable neighborhood

Construct a semi collective housing and private individual housing across the collective housing the ensure the continuaty of of the template type and to fulfill the diversity and the social and functional and intergenerational blending.

Construct collective housing beside the existing one which includeparkings lots sufficient enough for the inhabitant, also it'll include the business and commercial function in its ground floor to ensure the compatibility of the existing the new constuction on the economical level

Conserve the two road and use them as the two main mechanical and pedestrian accesses from the national road n°11

Eliminate the animal stables

Contruct business offices buidling and communal mall to cover the shortage of such facilities in the western area of tenes, also to facilitate the trade operations between the inhabitants and the visitors and also it'll play a major role in securing a substantial income source all the year long.

Site's schematic diagram

1. Conserve the two road and use them as the two main mechanical and pedestrian access axes from the national road n°11.
2. Divide our site into two major entities with different functions,
   The one on the right is a residential entity which will include collective, semi collective and individual housing, and finally the hotel,
   The second entity is leisure and recreational entity which will work alongside the leisure parc, it'll contain an aqua parc, recreational spaces, playgrounds and aqua museum.
3. Eliminate the animal stables.
4. Construct a communal mall to cover the shortage of such facilities in the western area of Tenes, also to facilitate the trade operations between the inhabitants and the visitors and also it'll play a major role in securing a substantial income source all the yearlong.
5. Construct collective housing beside the existing one which include parking lots sufficient enough for the inhabitant, also it'll include the business and commercial

function in its ground floors to ensure the compatibility of the existing new constructions on the economical level.

6. Construct a semi collective housing and private individual housing across the collective housing the ensure the continuity of the template type and to fulfill the diversity and the social and functional and intergenerational blending.

7. Create plazas between the different types of the housings, to achieve the intended mixity and accomplish a sustainable durable neighborhood.

8. Construct an aqua parc at the heart of the site, it'll also be the heart of the economic income of the project perfecting its sustainability.

9. Create a large pedestrian walkway all the way alongside the cliff to benefit as much as possible from the views, the walkway should incorporate different types of services to secure public comfort.

10. Create an 11 level hotel in the northern part of the site which will include its own parking lot and private pool,plaza,club... this will make it as a reference point to the entire project.

11. Construct an aqua museum which will function in harmony alongside the higher college of oceanology, and to preserve the city's marine history and life forms. It'll also play as a consistant income source.

12. Construct public recreational areas and children playgrounds beside the already existing leisure parc to sustain the same function of the parc and render it more efficient.

13. Construct an administrative facility to relieve the heavy workloads on the city's main administrative center, and a police station, to compensate the extreme lack of security services in the western part of Tenes.

With the management guidelines clear, we can now design a proper management plan.

4.2.13. The management plan:
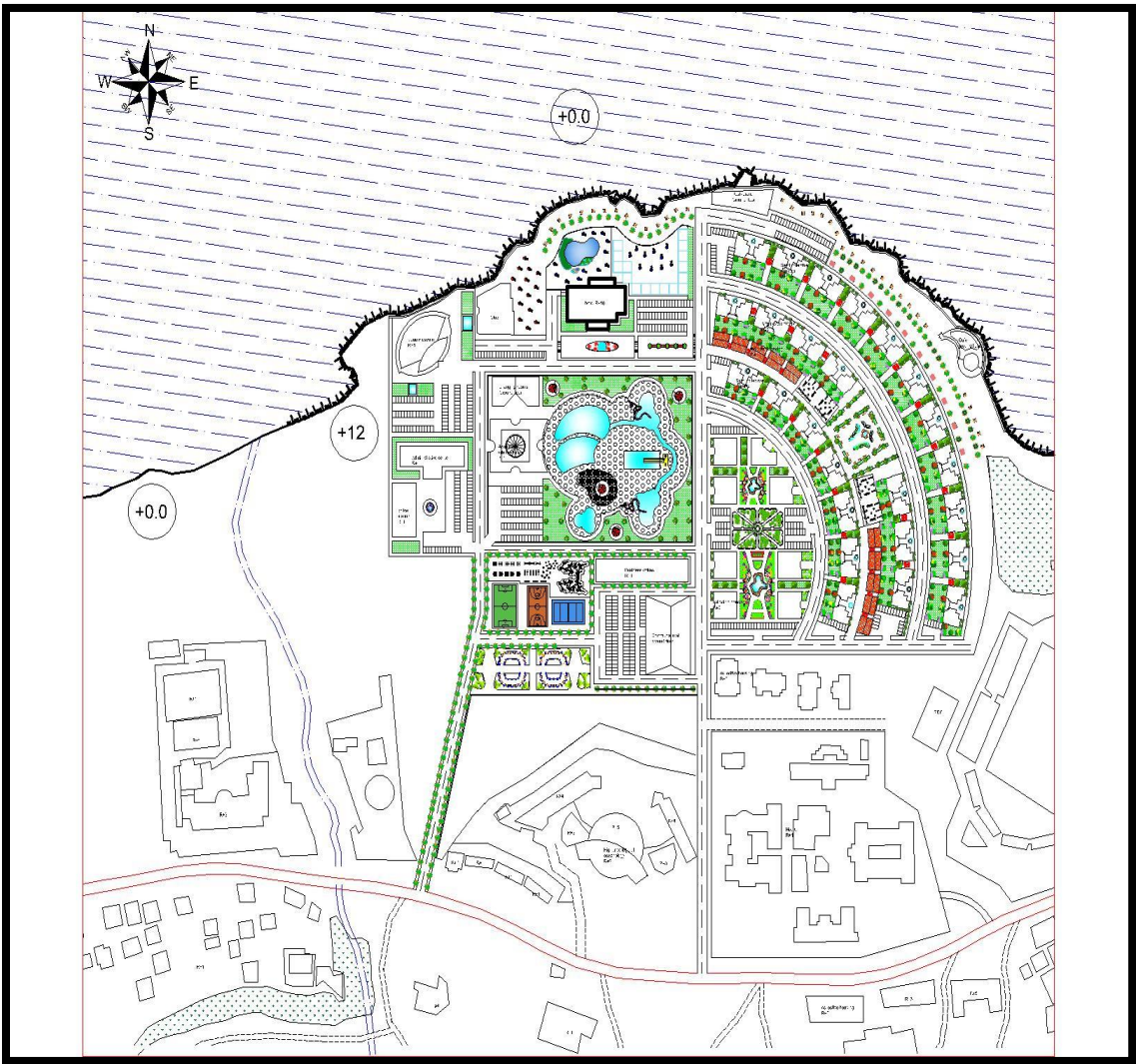
The management plan

Our specific project is a hotel; thus, a thorough analysis must be conducted in order to come up with a correct program, and a well-designed mass plan and floor plans, and to understand all its spaces and its various functions.

4.3. Analysis study of hotels:

4.3.1.Definition of a hotel:[19]

Accouring to Larrousse, a hotel is a classified commercial accommodation establishment, which offers furnished rooms or apartments, rented for daily, weekly or monthly occupancy to a clientele who do not have a home, who's occupied all year round or during one or more seasons.

the hotel is any establishment that sells customers a private space for personal use for a limited period of time.

A commercial establishment that provides furnished rooms for a mobile clientele for a daily fee.

4.3.2.Component of a hotel:

Public part: a part intended for customers and also for the public. It offers several services, such as reception, catering, entertainment, leisure and business. It is this part of the hotel that is able to increase its profitability by diversifying and improving the quality of the various services offered.

Private part: this is a part reserved exclusively for customers. It is composed of single, double, triple, quadruple rooms, suites and a relaxation lounge with room service for maximum comfort and a feeling of well-being.

Internal part: it is an essential part for the proper functioning of the hotel. It includes administration for management and finance, and technical premises for smooth operations and rapid services.

4.3.3.Hotel Classifications:[20]

Hotel are classified into 5 categories:

- luxury hotel, 5 stars.
- second class hotel, 4 stars.
- third category hotel, 3 stars.
- Fourth category hotel, 2 stars.
- Fifth category hotel, 1 star.

This classification is based on:

- comfort level
- number of rooms

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[19] http://www.businessdictionary.com/definition/hotel.html
[20] https://www2.unwto.org/agora/about-hotel-classification-systems

- diversity and quality of the services and equipment offered
- forms of ownership
- form of management and marketing
- target customers
- location and size of the project.

The purpose of this classification is to inform the traveler about the category and the level of quality and comfort offered by the hotel according to the number of stars awarded.

4.3.4.Hotel example analysis:

Case study of Chrome Hotel

ARCHITECT: SANJAY PURI ARCHITECTS

•LOCATION: KOLKATA, INDIA

• HOTEL TYPE: BOUTIQUE HOTEL

• NUMBER OF FLOORS: 8

• HEIGHT OF THE BULIDING: 24m

• NUMBER OF ROOMS: 63

• 4 FLOORS OF PUBLIC SPACE INCLUDES COFFEE SHOP, RESTAURANT, BAR, LOUNGE, CAFETERIA, BANQUET HALL. • OTHER 4 FLOORS OF ROOMS, GYM, LOUNGE BAR AND POOL.

The hotel is entered through a 7m high lobby.

The small lobby space is perceived with openness by virtue of its volume and its extension into an open coffee shop that is segregated by low pink glass partitions.

Four levels of rooms house the 63 rooms, with each floor having a judicial mix of twin bed and double bed configurations, along with a suite and a themed room. The rooms thus offer a wide range of experiences.
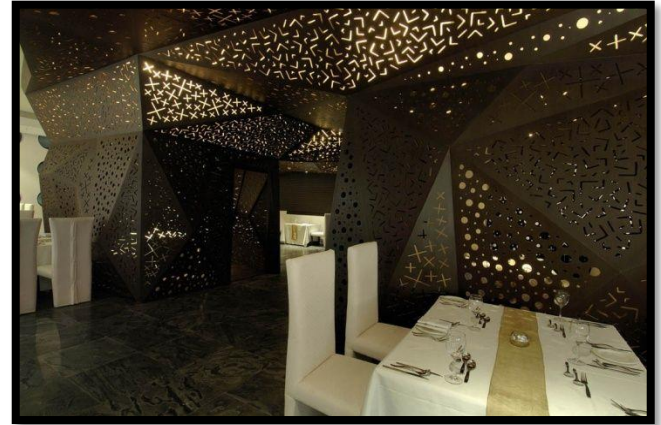
The topmost floor houses a lounge bar with an open terrace along its length. The bar being small in area is designed in a fluid manner that allows it to be perceived as a larger space while being rendered in a sculptural way.
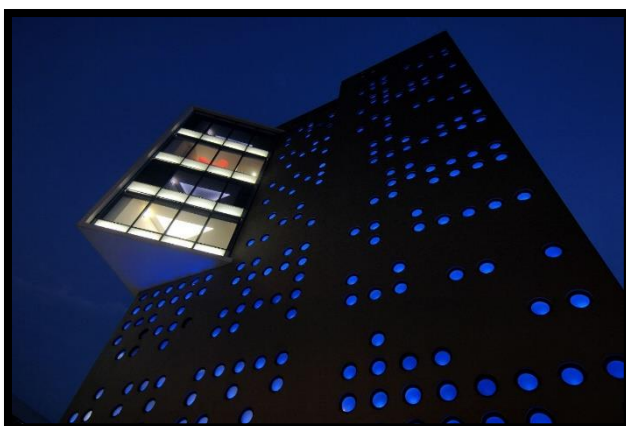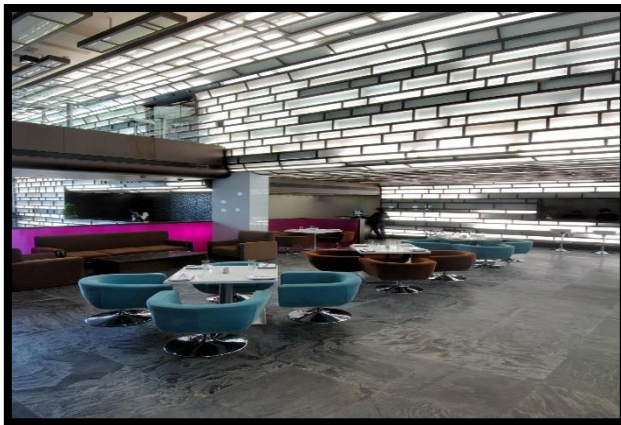

Hotel chrome facade
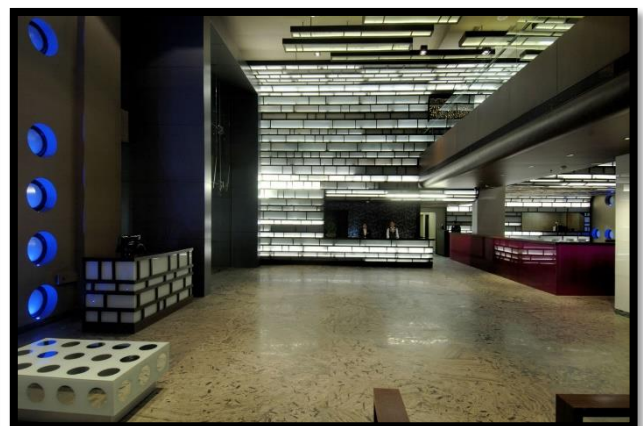
Hotel's entrance

Hotel restaurant

Hotel lounge

Hotel's typical double bed rooms

Hotel lounge bar

AREA COMPARISON

FACILITIES	AREA AS PER DESIGN BRIEF
ENTRANCE LOBBY, RECEPTION	300
CONCIERGE, CLOAK ROOM	100
COFFEE SHOP WITH PANTRY	150
CAFÉ	-
ALL-DAY DINING	150
SPECIALTY RESTAURANT	150
BAR LOUNGE	-
BUSINESS CENTRE	40 x 3
HEALTH SPA	250
GYMNASIUM	150
BANQUET HALL	300 x 2
MAIN KITCHEN AND STORE	200 + 140
SWIMMING POOL	90
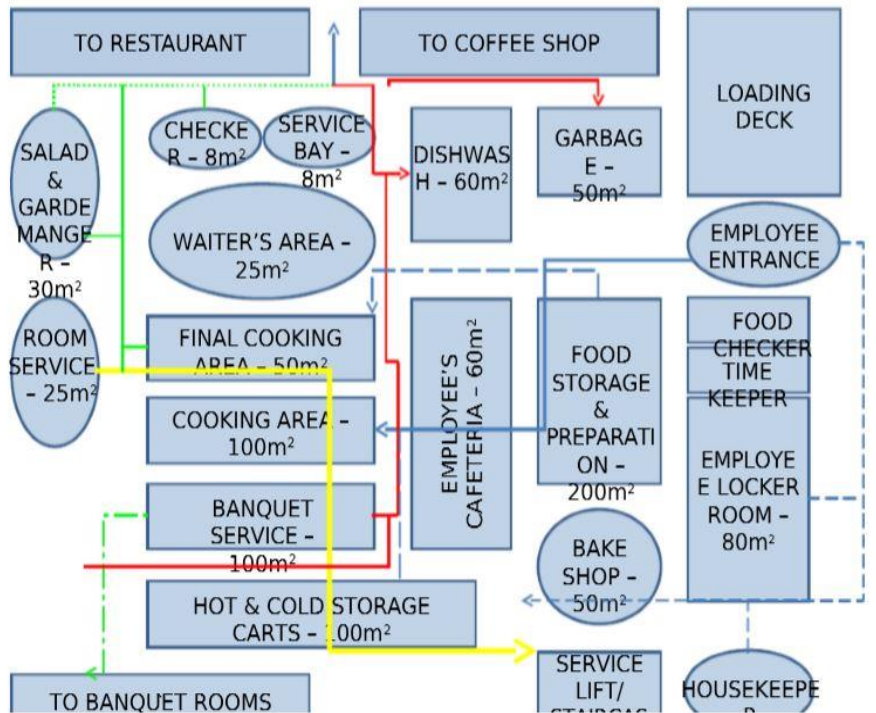
Hotel's different spaces and their

Respective areas

Hotel special diagram

4.3.5.Conclusion:

After this analysis we concluded with a qualitative and quantitative of the hotel:

Service	Activity	spaces	Surface (m²)
Internal services	administration	Director's office	50-60
		Secretary's office	20-30
		Accountant's office	30
	service spaces	Savings	40
		Garbage facility	20
		Kitchen	50+
		Freezing units	40
		Storage room	50+
		Laundry room	50
		Technical and HT room	+30
		Staff room	70
		Store room	50
			undefined
Public services	Reception hall	Entrance hall	50
		Waiting lounge	50
		Bathroms	20-30
		Reception	40-50
		Luggage room	60

75

		Lounge	70
	Catering	Coffee lounge	200+
		Restaurant	250+
		Pantry	40
		Bar	200
		Roof restaurant	300+
	Fitness and beauty	Gym	+100
		Beauty salon	+100
	relaxation	Double bed rooms	50-60
		Separate bed rooms	50-60
		suits	80-100

4.3.6. Design of the layout plan:
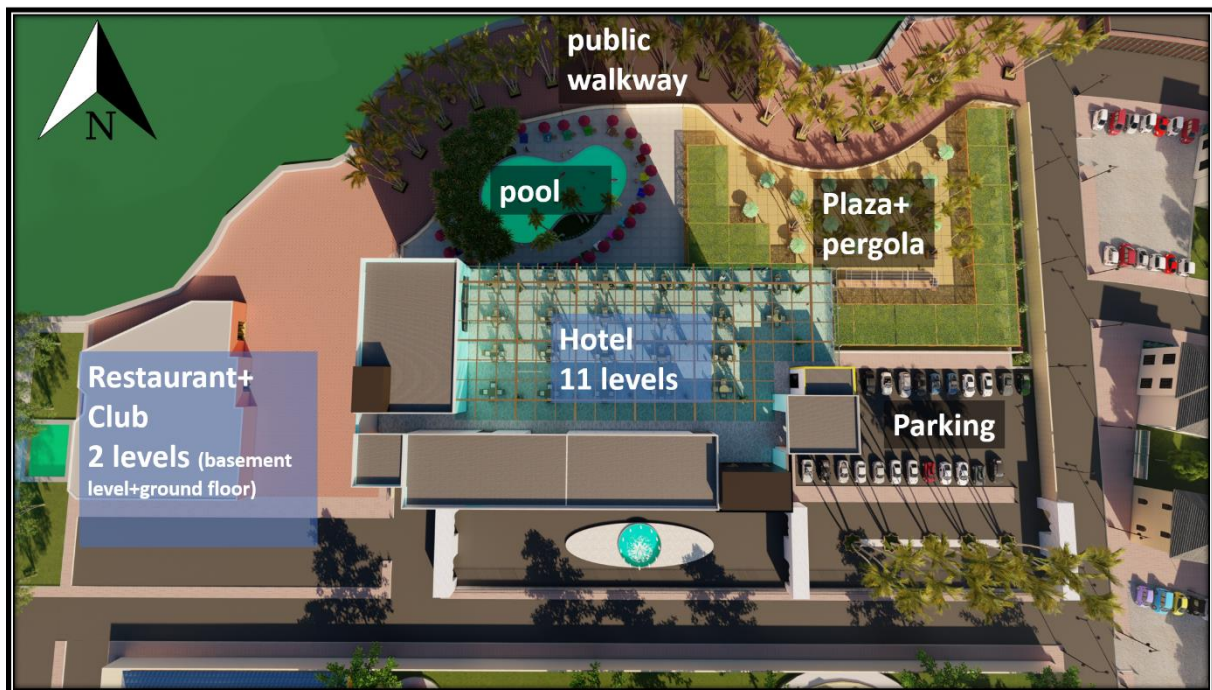
Layout plan of our hotel

4.3.7. Why a hotel?

-The choice of the project (hotel) was due to the extreme lack of touristic infrastructure in this part of the city, especially a proper hotel which fit the name and the potentialities of the city as best as possible, and the choice was also backed by the guidelines and suggestions of the land occupation plan and the Master Plan for Development and Urban Planning,

moreover, it matches our interests and our specific theme which targets durable and sustainable tourism.

The hotel's location was planned strategically in relation to the site, it's height gives it an edgy advantage over the panoramic views toward the sea, the city and all the surroundings.

The pool and the plaza, the restaurant and the club located in the ground floor level outside of the hotel, the first ones accessible for members only while the second ones are open for public.

For parking, we decided on an outdoor parking spaces on the east side of the hotel.

4.3.8. The project's genesis description:

the hotel is planned in 11 levels, with public spaces occupying the first two floors, and nine levels of large rooms and suits above totaling 117 rooms and 18 suits; with an open-air rooftop restaurant, since there's so much stunning views to exploit, each one of the northern rooms were equipped with a balcony overlooking the amazing views of the Mediterranean Sea and a panoramic view over the whole city of Tenes and its near surroundings.

Because the city of Tenes is a medium sized shoreline town, which lacks hostel infrastructures, choosing organic forms for our desired hotel would make it look like an odd intruder, especially on the almost empty western side of the city, that's why we decide that the shape of the hotel would best be regular, so we chose a rectangular based shape, with a couple of rectangular additions and subtractions from the original form, we ended up with its actual form, giving it a very simple yet very satisfying shape which makes it blend in with the surrounding constructions and makes it also stand out as a unique building due to its different façade and colors and it's remarquable height.
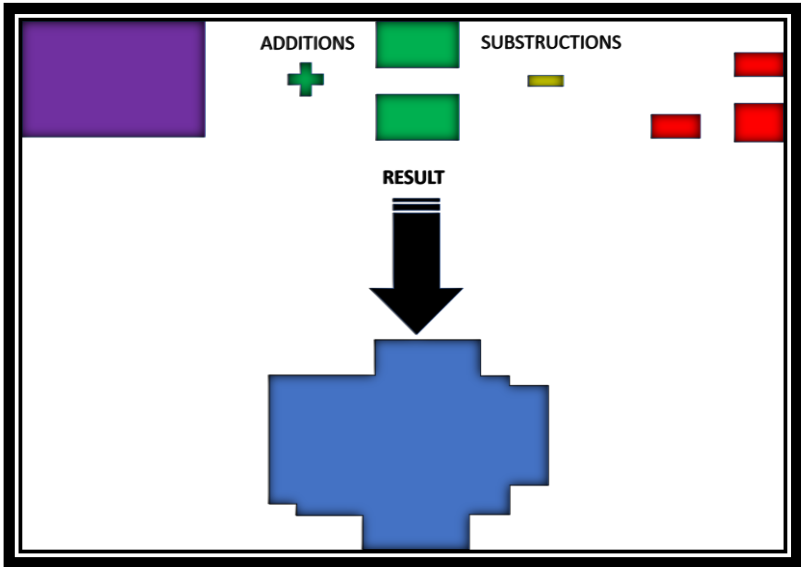
The hotel's shape genesis

### 4.3.9. Structure and Materials:

With regard to the height and function of our project, we opted for a combination of reinforced concrete bearing walls with a reinforced concrete structural slab, making our building perfectly stable and very resistant to huge amount of loads and exterior and interior mechanical forces with ease.

4.3.10. Facades design:

We have two main types of facades in this hotel:

On the Northern façade, with double bed rooms and the suits which are more open to the north and north east, and full take advantage of the panoramic views over the sea by balconies

On the southern façade (main façade) which include the lounge bar and the separate double bed which have less openings and less attractive views comparing to the northern ones, but still maintaining transparency and visual continuity with the outside, thanks to the glass windows and curtain walls.
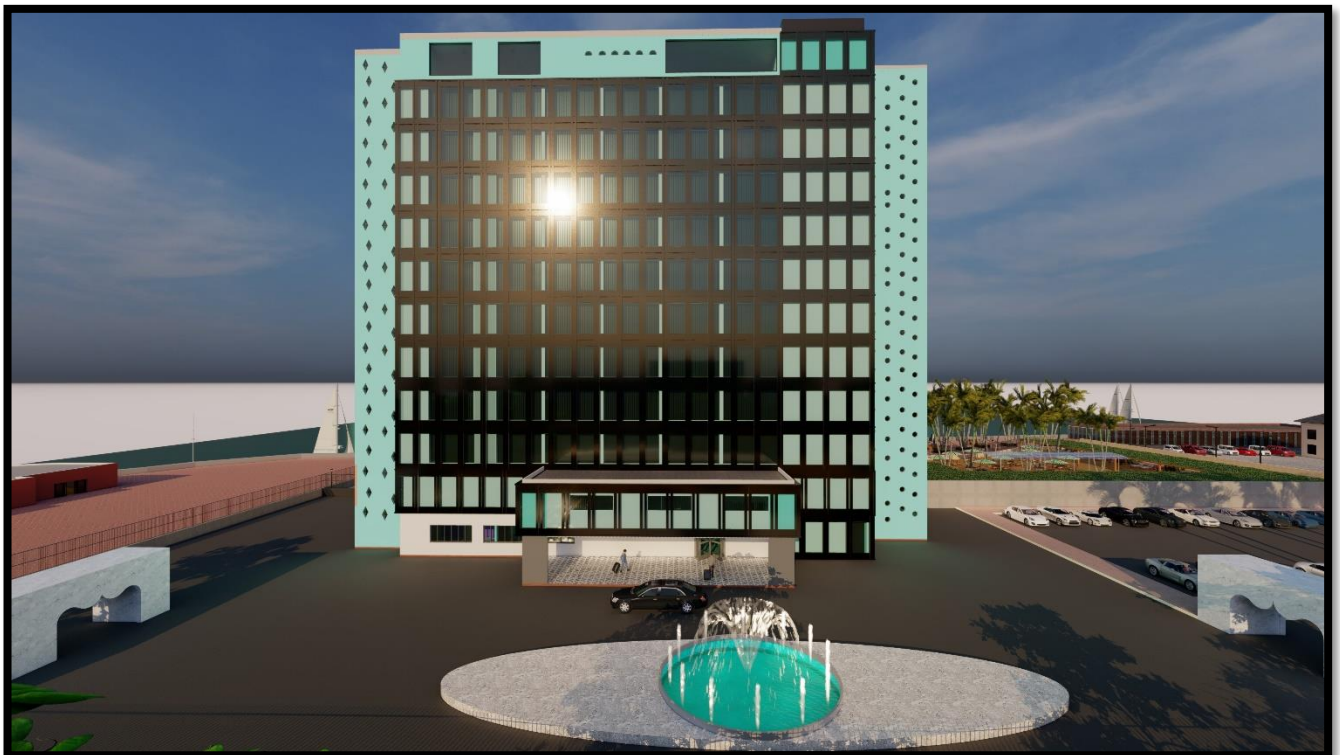
Main Façade (Southern)

Northern facade

Eastern facade

Western Facade

South eastern Facade

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