

Ghadamès, Libya

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Ghadamès, Libya

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Background

Known as the 'pearl of the desert', Ghadamès is an oasis town located 650 km south-west of Tripoli, where Libya meets with Algeria and Tunisia. This ancient city, a vital stopping point for many trans-Saharan caravan routes, was inscribed on the UNESCO World Heritage List in 1986, under criterion (v).

Ghadamès is one of the oldest pre-Saharan cities and an outstanding example of traditional settlement. The urban fabric consists of tightly clustered houses, made of mud and palm wood. The rest of the oasis is occupied by palm groves and cultivated gardens that sustain the population living in this arid mineral landscape. The only source of life is a freshwater spring, Aïn al Faras. The built area occupies approximately 8 hectares while the perimeter gardens cover an estimated area of approximately 200 hectares. This comfortable mud town in a green environment is a lesson on how to adapt architecture and agriculture to the harsh desert environment. The site as a whole illustrates the fantastic ability of humans to adapt to the most hostile environments.

The 1,300 houses that make up the town have a typical vertical architecture organized in three levels. The ground floor is used to store supplies, the second floor is the family living area, and the top floor is an open-air terrace used by women. The roof also serves as a circulation area, exclusively used by the women to move freely between houses. Men use the ground floor network of alleys, covered by overhanging structures.

Most parts of the old city are conserved, but the owners have migrated to the new city, which is a few hundred metres outside the oasis. The new town houses approximately 10,000 people, most of whom have a strong link with the historic district. Returning to live in the traditional houses is not seen as an option by the population, although they go back occasionally to rest and enjoy the quiet and comfortable atmosphere. Some people rent out their old homes as guest houses. The balance of this jewel is fragile, and preservation of the whole is only possible if every architectural and landscape element is conserved.



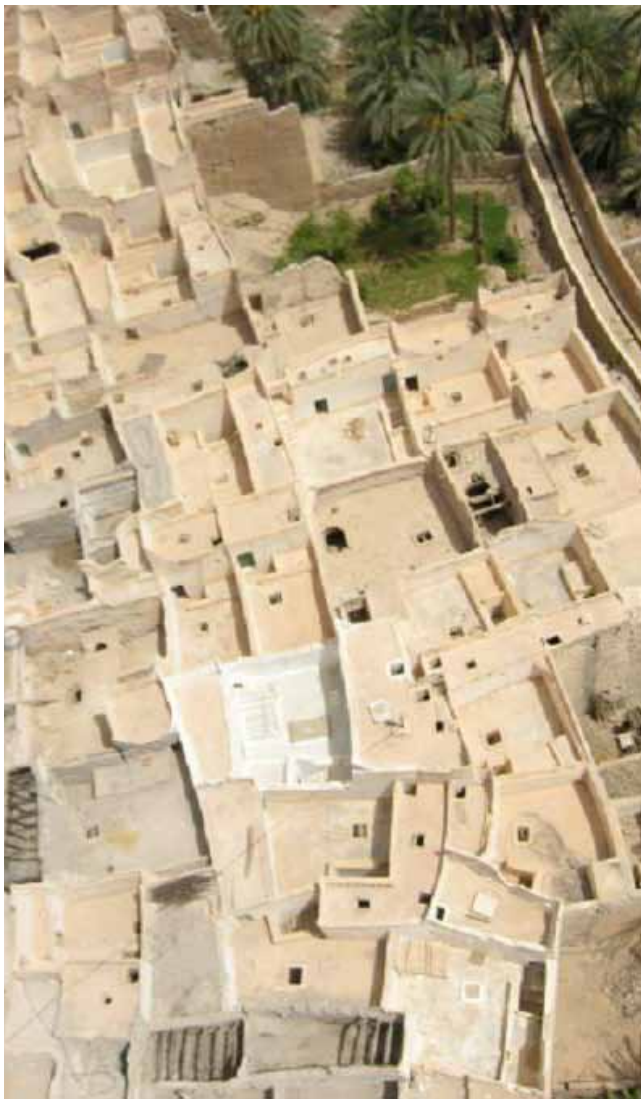


Figure 1: The oasis with the desert in the background.
Top: © Thierry Joffroy; bottom: © Grégoire Paccoud



Figure 2: Abandoned houses. Left: © Grégoire Paccoud; right: © Thierry Joffroy

History of Ghadamès

According to a legend, the origin of the town is related to Ain al Faras, a spring in the middle of the desert discovered by a horseman of the Nemrod tribe. Thanks to this important source of life, Ghadamès became progressively peopled by nomads, who settled in the area. Each group brought its culture and traditions to the oasis, from all parts of the desert. Over the centuries, Ghadamès became known as an important crossroads of the great trans-Saharan trade routes, where an important Berbero-Arab culture emerged.

The first written records on Ghadamès date back to the Roman period. During his reign as Roman emperor, Lucius Cornelius Balbus conquered Cydamus (Ghadamès) and strengthened the fortifications, turning the oasis into a Roman stronghold. Under the reign of Emperor Septimus Severus, Ghadamès became a Roman castellum which hosted a detachment of the Third Legion.

Today it remains a small oasis city nestled in a palm grove, with evidence of fortifications on the edges of the city. The access through massive bastions which can be closed at night and through strong defence walls gives evidence of the fortification network which prevented invasions. The intricate network of streets through the gardens also serves as a good protection against enemy attacks.

House structures

The houses have a minimum of three floors. The ground floor, which may be underground, is accessed by a single door that opens onto a narrow hallway leading to a rectangular-shaped room where provisions are stored. At the back of this storage space, a staircase leads to a much more spacious upper level. The first floor generally includes a raised attic and bedrooms, and sometimes a sitting room. Some houses display a second floor with a similar layout. The living space covers the blind public alleys on the ground floor, forming various arcades and tunnels which protect the streets from the direct heat of the sun. At the terraces level, only the projecting portion formed by the raised attic



Figure 3: Examples of living rooms. © Thierry Joffroy



Figure 4: Examples of terraces. Left: © Thierry Joffroy; right: © Sebastien Moriset



Figure 5: Examples of the covered alleys at the ground floor level. © Sebastien Moriset

rises above the roof. Each terrace is enclosed by low parapet walls. In the corners, these walls rise up in the sky to form small fortified points, the 'ears', that can rise 1 m above the main wall level.

The terraces of adjacent houses are linked together, forming an open cityscape. The terraces, painted in white, are the domain of the women exclusively, and give them a great deal of freedom. The roof of the city is theirs; they use it to meet with friends and neighbours and organize various activities. The covered arcades at ground level are generally reserved for men.

Conservation efforts before the 2011 revolution

The ancient city of Ghadamès was abandoned more than twenty years ago by its inhabitants, who preferred contemporary concrete buildings and their amenities. As a result, the site progressively lost its vitality and lustre and the buildings gradually started to deteriorate. This process is unfortunately not limited to Ghadamès; it represents the general evolution of Libyan cultural assets.

Several environmental and social factors led to the gradual deterioration of the oasis. The receding of the water level in the Ain Al Faras well was one of the problems, because irrigation of the oasis became difficult. The natural ageing and lack of maintenance of some buildings after the departure of its inhabitants became another serious issue, because all the buildings are connected. When one of the buildings suffered damages, all adjacent buildings began to deteriorate. The multiplication of collapses made the decline visible to all. The fortunate effect is that people began to feel bad, they realized the danger affecting the city, and decided to react.

Then began a series of appeals to all stakeholders concerned (associations, governmental institutions, interested individuals) to save the city and address the situation, but most of those appeals failed because of the lack of interest of the government in ancient cities and historic sites in general.

Unable to rely on the authorities, we concluded that one solution was to ask individuals to undertake personal initiatives in order to preserve and rehabilitate the city at their own level. Everyone could contribute in different forms, by providing time, by funding, or by helping physically. While



Figure 6: Some of the restored elements: the water reservoir, a street and the mosque. Left and centre: © Thierry Joffroy; right: © Sebastien Moriset



Figure 7: Brick production and restoration works organized in 2009. © Grégoire Paccoud

some people actually worked on site, others mobilized all their energy in trying to convince and sensitize officials on the real values of the city. This was not sufficient to maintain the fabric but it helped to sensitize many individuals.

The situation remained like this until the mid-1990s, when UNESCO was informed about the seriousness of the situation, and in turn asked the Libyan government to act urgently. The government decided to dedicate some of the budget received by the UN Development Programme (UNDP) Office to the rehabilitation of the old town. The project was actually financed by the Libyan state for the benefit of UNDP. In 2000, a vast programme was launched to rescue the city. It comprised scientific studies, the restoration of several buildings, the removal of hazards, general site cleaning and the rehabilitation of the alleys. Capacity building of competent managers was also part of this effort. The project was managed by Dr Abdul Gader Aboufayed, Amal Elmogharabi and their national team. The population reacted very positively to these activities, especially the house owners who felt great satisfaction. The important role of UNESCO was also well understood and highly appreciated.

During this phase, a large number of conservation experts visited the city, listened to the population and shared views on the way forward. They provided solutions and proposals for many technical problems, especially those related to building materials, skills conservation and know-how development. Many data and useful scientific reports were compiled during the same period.

In addition, 400 masons were trained in this project. This represented a real achievement in terms of skills transfer and expertise development. The high quality of works implemented by them also helped to set high technical and professional standards.

Between 2007 and 2009, CRAterre, the international centre for earth construction based in Grenoble, France, was brought on board to continue the conservation efforts. They showed great experience and high professionalism in dealing with the earthen heritage, and undertook a deep study on the building materials used. Several houses were restored with CRAterre, especially in the Mazhir area and along Ouled Belil.

The emergency situation during the 2011 conflict

Ghadamès is a peaceful city in the middle of the desert, its people are peaceful, and they still appreciate the true value of their historic mud houses, especially in the very hot summer.

In 2011, the Libyan people revolted pacifically against the dictatorial regime of Muammar Gaddafi, to demand justice, democracy and basic rights. The regime's reaction was a violent armed oppression. As in all other Libyan cities, the citizens of Ghadamès revolted and organized peaceful demonstrations, demanding 'change'.

A military force of 300 infantry soldiers from Gaddafi's brigades were stationed 50 km away from the city. Their plan was to attack Ghadamès on 19 April 2011, on the grounds that the city harboured opponents of the regime. They intended to use rocket launchers. Fortunately, the attack was prevented thanks to the responsible way people treated the situation, through careful planning and cooperation in all directions.

As an attempt to save the city, the conservation office decided to contact UNESCO and inform them about the seriousness of the situation. But all communications and media channels were then cut off, and communication with UNESCO failed despite the great determination to act. Finally through an Algerian phone line the office managed to contact Thierry Joffroy at CRAterre. CRAterre then contacted UNESCO and conveyed all the information received from Ghadamès. UNESCO swiftly reacted by asking Gaddafi's military forces on 24 April 2011 to cease all plans to shell the city. UNESCO's demand contributed to halting shelling, but search and inspection operations continued in the old city to capture potential rebels and political opponents.

The next day, twenty-five troops entered one of the main streets, Garsan Street, in the southern sector of the city. They sowed disorder in the houses, destroyed and dislocated some of the doors and entered Ahmed Qassem Dawi's house to vandalize the interior.

The population realized that the situation could lead to the unnecessary destruction by fire of the entire city. They agreed to close all gates leading to the old city and promised not to enter the city until the situation settled down.

CRAterre was contacted again and informed of the proposed idea to close all doors to protect the city, which they entirely approved. All the main doors to the city were therefore blocked with mud bricks, except some clandestine access routes known only by the rebels and some residents. These secret entrances allowed people to keep entering the old city without being detected by Gaddafi's brigades.

In fact, the appeal launched by UNESCO to stop bombing Ghadamès was helpful and saved the old town. It made all the plans to protect the city feasible, because this international organization enjoys a high reputation, even among the conflicting parties. This can be explained by UNESCO's neutrality and humanitarian goals. We hope that this organization will never hesitate to intervene and appeal to all conflicting parties in the world to protect the outstanding universal value of World Heritage sites and save the lives of those who may seek refuge inside.

To conclude, we would like to thank all those who have contributed to the protection of the historic city of Ghadamès, and all other cultural heritage sites on earth. Ghadamès citizens specially want to thank Mrs Irina Bokova, Director-General of UNESCO, for her special commitment during the conflict.



Figure 8: Traces of conflict, Ghadamès, April 2011. © Nourdeen Althini