INTERVENTION ON KSOURIEN INHERITANCE: BETWEEN PLANNING AND AUTOCONSERVATION. EXAMPLE KSAR OF KENADSA, BECHAR, ALGERIA

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Abstract

Per hour when the architectural heritages know threats, the need for their valorization is essential more than ever. Within these problems, the Algerian ksourien heritage today, strongly affected: the problems go from degradation, to almost whole regressions..., situation related an not controlled mailmens and the absence of global patrimonial solution. In the example of Kenadsa, the heritage present of the inheritances at great wealth which, in spite of the desertions, their models must with the prosperity of the area. But, these landscapes now face the crisis and constitute heavy liabilities for the communities. The experiment of their safeguarding was lacking in the achievements of the State and the interventions of the inhabitants posing the problems of the reports to the inheritance in the absence of a more concrete actions. Facing, this search is registered to question the shares realized: Which practices to be retained supporting the durability of the ksar as well as possible? And how to revalorize it in the respect of its authenticity? By mobilizing documentary analyzes, in situ observations and surveys, the results dictate an overhaul of the common methods of conservation and a return to a more specific comprehensive approach controlling the real data of the ksar.

Keywords: Inheritance; Ksour; Planning; Auto conservation, Restoration; Authenticity; durability

Introduction

This topic on the old sites, particularly on the ksar of Kenadsa, remains a concern of most relevant. The reasons which explain this interest are multiple, it is appropriate to point out its historical importance, its evidence of civilizations passed, its persistence lasting of the centuries, its harmony with the natural environment. This interest is all the more accentuated by the current problem of its abundance. It is what directed this work towards the problems of intervention on this site, its backup and conservation, to see its future.

The various institutional operations carried out up to that point to aim at the restoration of these sites led to the failure considering which they were held in an approximate way neglecting the characters specific of local architecture in report to the clean cultural supports [1]. Moreover, carried out work related to partial and isolated shares which, in front of the enormous contextual and especially economic stresses, did not reflect on ground of appreciable

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results. They, contrary, accentuated the ruptures with sociocultural involved balance and the decline of the oasien ecosystem. On ground, this situation attests two irrefutable facts: most of the completely abandoned ksar in ruin; and a partially inhabited ksar, forming an urban component of a Saharan city.

This last case of figure testifies to another type of share engaged by the owners themselves aiming at the hold and the durability of their patrimonial goods. Certainly, these last shares benefit from last by mobilizing old practices, but they reflect also a dynamics of a society in perpetual movement by registering new practices and new forms of appropriation of spaces [2].

Between these two different logics of intervention on an historical heritage, this search is registered to evaluate the various supports and shares realized by the institutional and deprived actors, and to try set up vision of an overall, specific and integrated conservation aiming at the durability and the valorization of the known as site. With this intention, search chooses three spaces supports: the inheritance ksourien like a socio-architectural fact, planned institutional shares and transformer practices operated by inhabitants.

Methodology

By choice of approaches, this study mobilizes the following methods of investigation:

- An abstract starting from the writings, of the works, former search and the cards on the study sites.
- Observations in-situ on the level of the transformations and their impact on the inheritance;
- A survey by semi-directing conversations concerning the local population, the notable ones and the local managers with a corpus based on a type of sampling by multiple cases or multi-case [3] which takes interviews with several individuals until empirical saturation of the collected data. In each situation, a corpus of 10 cases is then defined in connection with the qualitative aspect of the subject.
- Historical approach to analyze the various operations and the observation in situation to check the results.

General presentation of ksourien inheritance

The ksourien inheritance of Algerian south-west is one of the important components of the national heritage characterized by its bioclimatic architecture and its durability face to the physical and human risks. This heritage contains a great natural wealth, material and immaterial.

The Saharan ksour (Fig. 1) are human establishments formed with the yarn of times in spite of unfavorable conditions, with the crossroads of great routes caravaneers playing their part of formerly of relay. They shelter collective spaces, strengthened mosques and individual residences which make integral part of the identity and the landscape and esthetic quality of the Saharan areas of the south of Algeria [4]. They are harmonized perfectly with their natural environment (oasis, desert, etc.) and forward clean inheritances translating of the architectural buildings as well as practices and ancestral know-how adapted to this specific environment.

These establishments forward a form of rather specific occupation of space, collected and compacts dictated by natural conditions hard and governed by a specific social organization. This architecture leaves the elementary needs for the man (local materials, climate, way of life, forms, and colors). It constitutes a reference in the perfect harmony between the social organization, the system of urbanization, architectural typology, the control of the water resources and ecological balance. With the yarn of time, these ksour knew differentiated developments, marked by structural and functional transformations, sometimes radical [4, 5].
Although more the share of them are currently given up and a good part of their tissues is in a state of ruin. Those which persist remain until now by a variety of buildings, which particularize the landscapes of the area, emanate all the wealth of the styles, materials and the singular decorative components. Kenadsa, large ksar of Saoura, is currently inhabited only by one ten families, and there remain only some relicts of its palm plantation giving the indication of an oasis in difficulty.

**An inheritance under investigation: the ksar of Kenadsa**

Counted among the most important old cities of the area of Algerian south-west, the history of the ksar of Kenadsa rises from the preexistent elements: water, grounds fertile, caravan runways which started its progressive formation. In the beginning, a Kasbah was founded at the 15th century, an implantation offering an optimal protection against the climatic and defensive rigors, and being integrated perfectly into the rock dunes and cliffs. The 16th century made pass Kenadsa of a simple Kasbah to a ksar containing a seat of an important religious confraternity “Zawiya Ziania” which will shelter the establishment of the famous founder Abderrahmane BENBOUZIANE. Thus, this place became a relay incontinent to circumvent of the area [1], and a true space of spirituality, knowing and exchange.

The ksar of Kenadsa has of the historical potentialities and the architectural and urban wealth containing a charge symbolic system because of the historic buildings (mosques, zāwiya, dwîriyâ…) that are there. By this, it is classified in 1997 like national architectural heritage as an alive historical center and a site among the most important old sites of the country [6]. This ksar under investigation, now, is partially inhabited by ten families. In spite of, it did not lose its residential function completely and knew to keep its spiritual and cultural dimension.

The form of Ksar is the result of a regrouping of several houses which carry also a compact form, gathered around the interior exchange rates and distributed in many long and strait lanes. The all formant only one unity allowing limiting the quantity of surface to the solar ray, to create the most possible shade because of the projection of shade ones on the others as is shown in figure 2. This architecture takes into account sustainable development and adheres to the lifestyle of the inhabitants with simple means and materials adapted in collaboration with a clever know-how.

This ksar forwards the example among most dynamic of the Saharan ksour. Although he partially is inhabited and partly recomposed on itself, its inhabitants express their attachment
with his preservation, believe in the importance of their heritage and hope for effective shares for its best supported. Today, the established observations reveal a state of degradation and rather advanced physical transformations threatening it have to become. Precisely it forwards:

- Degradation of some of its parts due to its progressive abandonment by its inhabitants.
- Multiplication of new constructions out of concrete with the peripheries and same inside the ksar.
- Transformation of its style of bearing habitat reached with its authenticity.

**Patrimonial components of the ksar**

The immaterial patrimonies of the ksar rivet various forms of traditions and habits of edges, tales, legends, documents written and of files. The material inheritance is made up as for him by built landscapes, architecture and town planning represented by a whole of building and habitat (Fig. 3).

![Fig. 3. Patrimonial components of the ksar and tourist course of Mawlid](image)

**Fortress (El Kassaba)**

It is the first founded core located at the south-west of the ksar in its low part, formed by a whole of constructions protected by a wall and flanked turns from guet. The choice of this site to the intersection of two camel runways was dictated by the vital question of water.

Forwarding itself today in a state of ruin, the kasbah was equipped with the various components of a ksar: ramparts, mosque, cemetery, Souk “the kasbah is a kind of strong castle having of the turns (būrj) to the four corners, together with baffles and connected by alleys” [7]. Its strategic position supported its rise, initially economic and with a certain religious and cultural degree, following the foundation of its mosque, baptized on behalf of its founder and called later Mosquée El Atiq.

**Place (Rahba)**

The places of the ksour are called “Rahbas”, they represent Community public places discovered surrounded by constructions, they constitute elements structuring in urban space and are used of meeting places and exchange for the traditional social structures. These places are
also useful for celebration of the old traditions and religious holidays and allow in the same way the practice of the marketing activities. The important thing of all these activities is reflected in the configuration of the place and on its urban and social structure.

The case of Kenadsa forwards three main places connecting it to the city. It is question of the central place located in its center and two other places located on its sides: the place of Ain Sidi Mubarak with its fountains and places Souk. Three main streets organize these public spaces: the first includes lanes (Derb Dkhissa and Derb Dleema), which go from is in west and connect the place of the ksar to the mosque El Atik and the mosque Ben Bouziane. Second lane (Derb El-souk) and third lane (Derb Ain Dir).

The viare frame of these lanes is consisted rhythms passages, shaded sequences due to the alternation of covered or not sections, and whose width even varies according to the vocation of the lane. In spite of their actual position which attests deterioration, these spaces forward original configurations and seem to play a part of first command in the morphological structure of this human grouping.

The mosque

The ksourien mosque is a place of Muslim cult, a remarkable place by its space organization. It exceeds in its design the simple space of religious practice of the city. Contrary to the others ksour having only one mosque, that of Kenadsa counts a totality of two mosques. The El-Atiq mosque located at the extreme west of the ksar belongs to the Kasbah characterized by its architectural art and its decoration. And the mosque of Ben Bouziane located at the center of the entities, very remarkable by its minaret. More than of the places of cult, these mosques are places of memory [7, 8], they want to be the material expression of an origin of the ksar.

Zâwiya

The ksar owe its existence and its prosperity, only with the zâwiya, which takes a significant portion in built space. It is a kind of inn; place where a spiritual master with his disciples saw and where he greeting those which want to follow its teaching [7, 9]. It is an important component in built space; it serves as a center of cultural radiation and a religious center of attraction. Today the role of the zâwiya, was extended to the functions of readings and shelves where works of value in various disciplines are there. In the same way, the building knows other activities at the time of the spiritual occasions like that of Mawlid (birth of the prophet), at this time of the festivities are held and organize themselves there according to a course starting of zâwiya and going to the mosque El Atiq.

Dwiriyâ

The dwîriyâ is a house-zâwiya assigned to charitable works. It is a small house which is deferred from an ordinary habitation of the ksar by its architecture and its function, it is a public space and private “the dwîriyâ of Kenadsa, this kind of palate of the devoted royalty, is before all the seat symbolic system of the capacity of the zâwiya. Each new founder built its own dwîriyâ, thus marking the advent of a new reign” [7]. The dwîriyâ occupies a space much more important than that of a simple dwelling with its architecture which determines all the organization of the habitat. Following the example main dwîriyâ, about thirty others dwîriyâs, more modest aspect, and all currently deserted by their former inhabitants, occupy a good part (more than one third part) of the ksar.

The housing

Since always, the ksouriens of the Sahara practice art to build according to adequate techniques and type of an original and thousand-year-old habitat. The space which is resulted from it develops concepts worthy of an index reference frame for the durable architecture which associates comfort, respect of the environment and local crop [10]. For this purpose, the dwellings are built out of raw ground brick (Touba) and have powerful architectural qualities with simple means, making it possible to manage thermal inertia and to fight against overheating of the day by creating a natural split with the openings of the parts of the house through the patio. These residences are built with the concern of the decoration which expresses
engineering and the control in the use of the geometrical forms, the blind arcades and the details of ornamentation. Their architecture keeps, until our days, of the examples of most interesting dictating a typical model at this city.

But, now left with the abandonment, these majestic housing units are threatened and fall in ruin, with the risk to disappear from the landscape and the Saharan inheritance. The houses giving on the new city are the only ones which are still occupied, the others testify to rather old constructions. They are divided into three categories: degraded dwellings, dwellings in process of hull slamming and dwellings completely demolished.

**Actions of the conservation: problems and complexity**

One can define the conservation of the architectural heritage like the process by which the materiality, the history and the conceptual integrity of the built inheritance and humanity are prolonged by carefully planned interventions. It is question of the direct and voluntary operations about the ship to cure its defects and to give again it its aspect of origin, its perception. “It is a question of prolonging the life of a thing which is likely to die” [11].

Today, the question relates to any evidence of a last activity representative of the human activity or wealth of the environment. For this reason, one can refer to the action of UNESCO on the inheritance which integrates, beyond the esthetic aspect, the wealth as well social as technique which justifies the backup of it. It is not enough to only wonder about the monuments, but to consider the whole of the memory and its significance.

During its history, the action of the conservation of the inheritances knew several experiments calling upon the scientific work to determine all the conditions and criteria of the safeguarding of the buildings, their authenticity and their securities history (Violet-le-Duc, John Ruskin and Camillo Boito). Thus according to Bénévolo [12] “to preserve an historical center means above all, to protect or rebuild a stable relationship between population and tallies physical which is its primary characteristic”. A definition which puts in first rank a main actor appointed by the population most concerned with this operation.

In practice, the conservation of the structures of the built heritage requires simultaneously qualitative analyzes and quantitative. The first relate to the direct observation of the disorders and the degradation of materials, being based on the historical research and archaeological. The seconds are based primarily on the specific tests, the follow-up of the data and the structural analysis. Thus, the decisions which in front of being taken concerning an intervention on structures, take into account the causes of the disorders, and the evaluation of the security levels of the structure [13].

In addition and according to European experiments, the principles for the conservation of the built cultural heritage are the result of years of theoretical and practical experiments accumulated by several actors in the processing of the related questions to the backup of the built inheritance and the protection of the sites. These principles concern several shares of which that which recognizes that society must protect and back up the monuments, because those testify to its historical heritage while making integral part of its contemporary space of life.

As example, for the French experiment, the conservation of the inheritance is always encouraged by the state playing a great part like incentive with the conservation of the inheritance and as financial actor who can subsidize up to 40% of the effective expenditure in the event of repair or maintenance work necessary to the conservation of the buildings or parties of registered buildings. In addition, of the documents are designed to define the objectives of setting in capital value as well as the regulations and architectural and landscape recommendations to follow while defining patrimonial actors specialists in the service of the conservation [14].

Other international experiments as in Africa reveal the emergence of a collective conscience of conservation on the level for the young occupants of the built inheritance, to perpetuate a Community tradition of life for the future generations. Some other projects of
conservation hope to rehabilitate historical buildings, while keeping the same architectural style and the techniques of manufacture by recommending the reinforcement of the framework of legal protection of the built inheritance and the deadlines precise thus the placement of the framework of management of the historical places [15].

By examining the Algerian experiment, the examples of Témacine in Ouargla and Tafilalet of the valley of M’Zab in G harda‘a reveal the intervention of associative fabric in a very active way to preserve the survival of the ksar and to give the priority to the structuring elements of the public life such as collective spaces, the enceinte of the ksar, the places of cult and the infrastructures basic. Also, the reinforcement of the capacities of the local actors and the co-operations main road, under regional and international thus the improvement of the conditions of backup of the natural heritage oasien by the knowledge and the transmission of know-how of the traditional master masons [10, 16].

**Interventions carried out in the ksar of Kenadsa**

To cure in an advanced state of degradation of the ksour, the Algerian state set up starting from 2000 various financings (Fonal, PSRE, high plateaus, Fond Southern, road of the ksour…) aiming at starting their conservation. The stake was to maintain in operating condition this traditional framework built by specific shares on buildings and public spaces, in the objective to reinstate the main components such coranic mosques, zâwiya, schools and mausoleums in their functions and their original role.

**Institutional plans**

*Actions of town planning and construction administration (DUCH)*

Between 2003 and 2008, Bechar profited from a public program which enabled him to launch studies for the whole ksour of the wilaya. The rehabilitation of the ksar of Kenadsa related to two distinct operations:

- 1st operation (2003) consisted of the architectural study by the research department of Wilaya, to note and diagnose the faults and degradations for which it is necessary to cure.
- 2nd operation was used to rehabilitate public spaces and following places of cult:
  - Small Square of the ksar entrance.
  - Coranic School (Medersa).
  - Rooms of abolition.
  - The public fountain.
  - Part of the main dwiriyâ (library).
  - And some lanes (Droub).

These operations (Table. 1) were carried out in 3 sections for a resumption of the places in their initial state in their allotting new functions to the example of the main dwiriyâ which was converted into house of hosts (Dar Dyaf) currently accommodating guest tourists, travellers and others.

*Interpretation of the experiment by the actors of the administration*

Like first experiment, the operation study was well led but the achievements had several problems on ground.

Work completed was started without knowledge thorough on the inheritance with complete lack of the means specific to this type of rehabilitation of old sites.

Choices of operations to be realized were made without precision of aim and functions specific to valorize.

Absence of means for use of specific construction materials, such as stone and the cob.

After this first experiment undertaken by the DUCH, the operation was not successful because it was carried out in conditions of ignorance of the place to properly meet the criteria of desired restoration of ksour. Thereafter, the procedure on the matter changed to be entrusted either to the DUCH, but to the culture direction which will be able to choose craftsmen specialized to undertake the repair of this type of inheritance.
Table 1. Result of the experiment of the conservation carried out by the town planning and construction administration

<table>
<thead>
<tr>
<th>Operations of rehabilitation</th>
<th>Problems</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Square of the ksar entrance</td>
<td>Degradations and Absence of arrangements</td>
<td>Only the place of Ksar is relatively development. As for the others, the diagnosis showed that the place of the “souk” does not have known any arrangement and that the place of “Sidi Mbarek” is in a dilapidated state.</td>
</tr>
<tr>
<td>Medersa: Koranic school</td>
<td>The situation of the old Coranic school forwarded great damage threatening the stability of the masonry in particular the floors.</td>
<td>The rehabilitation related to the coatings of the walls only.</td>
</tr>
<tr>
<td>The fountain</td>
<td>Degradations of the fountain which made the fame of the place Sidi Mbarek</td>
<td>Resumption of the fissures with coating of reinforcement.</td>
</tr>
<tr>
<td>Lanes</td>
<td>Strongly degraded and threatening ruin on several sections: hull slamming of the floors and large fissures on the level of the walls.</td>
<td>Enlargement of the entrance lane of the ksar and coating of the walls</td>
</tr>
<tr>
<td>The mosque abolition rooms</td>
<td>Walls dilapidated and fissured by spot, threatening constantly to collapse</td>
<td>Resumption of the fissures Coating of reinforcement containing mortar</td>
</tr>
</tbody>
</table>
**Actions off the culture direction**

Since 2008, the culture direction is designated as first person responsible for any operation on the ksour. It was assignee of four distinct operations:
- Restoration of the main lane of the ksar (derb dkhissa) with its wall of access.
- Restoration of the Coranic School.
- Restoration of the mosque El Atik.
- Restoration of the main structural elements.

While following this program, the operations were launched in 2008 with research departments and local enterprises; it’s until now always in progress (Table 2).

**Table 2. Result of the experiment of the conservation carried out by the culture management**

<table>
<thead>
<tr>
<th>Restoration operations of spaces and public edifices</th>
<th>Problems (Before restoration)</th>
<th>Results (After restoration)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Main Derb of the ksar (derb Dkhissa with the wall of access)</td>
<td>The walls degradations and absence of installation</td>
<td>The ksar entrance of Kenadsa into major repaired part.</td>
</tr>
<tr>
<td>The coranic school</td>
<td>Degradation of the coating and cracking of the walls</td>
<td>Surface corrections of the problems of degradation</td>
</tr>
<tr>
<td>The mosque El Atik</td>
<td>Various problems of ruptures appearing on the level of the arcades.</td>
<td>Surface correction of the problems: coating and painting</td>
</tr>
<tr>
<td>The dwiriya of 12 posts</td>
<td>Various problems of settlement and sags appearing on the level of the structure of the douiria</td>
<td>Partial Repairs and resumption of the gates and the decoration elements.</td>
</tr>
</tbody>
</table>
The culture direction of the wilaya exerted a kind of tutorship on the ksar, but was not equipped with means allowing him to play truly this roll.

The interventions were operated by splitting in several parcels and selection of the essential elements and identity of the ksar to be rehabilitated.

In his missions, the building owner made appeal using associations and of the public. He also chose the integration of a local manpower, but these human resources were insufficient.

- **Transformer practices of the inhabitants**
  Although they knew advanced degradations and devitalization, the dwellings which remain inhabited know several transformations affecting their identity reference partly.

*Shares of the notable ones*
In 2004, an operation of consolidation of the building sheltering the library “khizana” (Fig. 4) was engaged. Despite of work executed, the bad weather recorded in 2008 and 2014 put in danger an important national immaterial patrimony, represented by the manuscripts being there. The building, located inside the ksar formed in the past part of the commonplaces of the zâwiya and the mosque. This new threat of hull slamming caused notable ksar to collaborate in the consolidation of this structure with renovation work.

![Fig. 4. The library manuscripts and photograph of interior space after rehabilitation. File of Khizana](image)

*Shares of the inhabitants owners (dynamics interns)*

The participation of the ksar inhabitants for the conservation of their buildings followed a double logic of consideration: an action which maintains the principles ancestral and that which follows the technological changes and lifestyles as is shown in table 3. Beyond the morphological rupture between the two urban parts, it is the structure even of the habitat which evolved/developed, in the use of construction materials, the spaces composition of life even in the equipment of the house (Table. 4). This partial rehabilitation was supported by variable aid amounts state between 150,000 and 250,000 DA to repair facade, to spread out housing and to improve the conditions of the habitat.

*Situation analyzes*

If one refers to the remarks of the people responsible for the wilaya and the public, the results of this work of rehabilitation were considered to be non-conclusive. The difficulties encountered during this experiment are presented in the form of as follows:

- Insufficiency of financial investment granted to the conservation of the inheritance compared to the importance of the heritage to preserve.
- Disturbances within the mechanisms of management and the framework of legal protection of the built inheritance.
- Absence of technical competences as regards conservation.
- Weak institutional coordination.
- A planning related to administration more than that technical.
- With types of operation very differentiated supporting the interventions outsides of the ksar and neglecting its interior spaces.
### Table 3. Result of the shares of the owners slices the notable ones

<table>
<thead>
<tr>
<th>Habitat of the notable ones</th>
<th>State</th>
<th>Problems</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Good state</td>
<td>Incompatible and inappropriate materials (earthenware, concrete brick, sheet, false ceilings…) are inserted. The concerned ones thus replaced local materials by modern materials</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Restored</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table 4. Result of the inhabitants shares

<table>
<thead>
<tr>
<th>Habitat of the ksar</th>
<th>State</th>
<th>Problems and causes of transformation</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Degraded, not restored with some maintenances</td>
<td>Modification of spaces surfaces by the division of certain parts or the addition of openings. This fact is accompanied by a change of the general envelope of the house</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Average state, restored</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Good state, restored</td>
<td>The transformation of internal textures such as the walls (earthenware), floors (false ceilings) coatings of the ground.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Demolished, in court of construction</td>
<td>Multiplication of new concrete constructions with the peripheries and same inside the ksour</td>
<td></td>
</tr>
</tbody>
</table>
Legal context

From the point of view of the regulation, the assumption of responsibility of this inheritance would require a legal framework in adequacy with the field reality, a suitable expertise and average techniques and financial consequent [17]. In this field and since independence, Algeria produced only very few legal texts referring to the backup of its inheritance:

- The ordinance no. 67/281 of December 20th, 1967, relating to the excavations and the protection of the sites and historic buildings and natural like a renewal of the texts of the colonial time, with some corrections.
- The legislative decree no. 94/07 of May 18th, 1994, relating to the conditions of the architectural production and the exercise of the occupation of architect, and who actually referred to the architectural heritage without stipulating specific proposals.
- Law 98/04 of June 15th, 1998, relating to the protection of the cultural heritage which appears more complete, but which understands it also weaknesses and insufficiencies.

And concerning the areas of the South and the High plateaus of Algeria, at the end of the years 1990, the culture direction created a special content for their development integrated through the rehabilitation of the traditional inheritance. This last knew an intense activity of the operations of revalorization, but concretely, during this last decade and through the majority of the ksour of the national territory, actions were carried out and operations were launched with like results on ground of the failures compared to the awaited balance-sheets.

This aspect of shift and discordance remain however essential with the historical built environment. Because actually, without an adequate legal framework, any proposal reflections, or interventions would finish by being useless and without effects.

Process of financing

In reality, the funds intended for the safeguard of this inheritance remain insufficient and are limited to shy specific and partial interventions compared to the importance and to the ksourien capital values. In its development strategy, the Algerian state, to face the crisis of housing attaches importance more to the new construction that with this work of rehabilitation. Its intervention with effectiveness thus remains very insufficient. In addition, the economic low-incomes of the ksar inhabitants do not allow them to face the extraordinary expenditure of these operations. This defective double gave on ground only negative consequences.

Management mode

The absence of definition of a precise framework of management in the operations quoted into high made it possible to accentuate the failures as regards results [18]. The adopted process clearly followed the standard vertical method actors between building owner, project owner and undertaken by denying the horizontal routing which would make it possible to regulate unforeseen ground and to make take part the administrative authorities buildings (daïra, common) as well as the public indicated by associations and the inhabitants themselves in these operations.

Intervening actors

The lack of qualified human resources, combined with the rare inappropriate interventions led in the urgency and precipitation accelerated the decline of the site and put at evil it’s perennially. The local actors (inhabitants and rare person qualified) are almost marginalized in the safeguard operations of the site. From this attitude a feeling at the latter emerged, of resignation which made the situation even more dramatic. In the same way, local know-how was neglected by marginalizing the rare still existing Masters to copy their ancestral techniques [18].

Alternatives declares by the surveys

According to these analyzes, it proves that the process of conservation of the historical buildings is based on several practices. This action is summarized in a whole of the alterations while preserving the major architectural characteristics of the buildings under conditions of the
comfort and satisfaction of habitability and utility in order to improve quality of life. How to answer suitably then a request for conservation of a built inheritance?

With this interrogation, the answers stated by the different ones surveyed put forward a whole of alternatives classified by set of priorities, and which they judge like optimal method for the assumption of responsibility of the standard ksourien inheritance.

### On the administrative guidelines

<table>
<thead>
<tr>
<th>Reinforcement of the financing support of the state</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wished per 100% between administrators and inhabitants</td>
</tr>
<tr>
<td>• The state will have to make more efforts and to think of making take part the co-operations, the promoters public and deprived and the inhabitants owners in the financing of the operations of conservation.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Creation of sociocultural associations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opinion of 80% administrators and 60% inhabitants</td>
</tr>
<tr>
<td>• Charged with contributing to the conversation, the safeguarding and the embellishment of the site</td>
</tr>
<tr>
<td>• Charged with revealing the cultural and tourist image inheritance.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Installation of a consensus administration/inhabitants</th>
</tr>
</thead>
<tbody>
<tr>
<td>60% administrators 80% inhabitants</td>
</tr>
<tr>
<td>• As the solution of complete membership of the civil society and local authorities and power station around a common strategy</td>
</tr>
<tr>
<td>• To cause the interest, and responsabiliser ksouriens in the businesses of the ksar.</td>
</tr>
</tbody>
</table>

### On the objectives to be reached

<table>
<thead>
<tr>
<th>To give interest to the memory of the places</th>
</tr>
</thead>
<tbody>
<tr>
<td>100% administrators 90% inhabitants</td>
</tr>
<tr>
<td>• To introduce the specific identity by specifying the aim of the conservation in report to the cultural activities of the area.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>To confer on this inheritance a role of economic development</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opinion of 85% administrators and 50% inhabitants</td>
</tr>
<tr>
<td>• By the valorization of its tourist assets by the creation of the structures of lodging of the houses type of hosts of the tourist tours.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Development and valorization of the knowledge to make local</th>
</tr>
</thead>
<tbody>
<tr>
<td>80% administrators 80% inhabitants</td>
</tr>
<tr>
<td>• To bring up to date the capacities of realization of the inhabitants to find ingenuosities and the knowledge to make local current.</td>
</tr>
<tr>
<td>• Resuscitier and to develop the original work of the local craftsmen.</td>
</tr>
</tbody>
</table>

### Actions to be undertaken

<table>
<thead>
<tr>
<th>To encourage the idea of school working</th>
</tr>
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<tbody>
<tr>
<td>75% administrators 60% inhabitants</td>
</tr>
<tr>
<td>• By the opening of the workshops of specialization and the reinforcement of the capacities of the actors.</td>
</tr>
<tr>
<td>• To invest in the training area by aiming at a category of young people of the professional field</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>To engage of the studies of diagnoses and pathologies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opinion of 65% administrators and 55% inhabitants</td>
</tr>
<tr>
<td>• To diagnose the state of the patrimonial works</td>
</tr>
<tr>
<td>• To identify the possible disorders in the buildings carrying and carried.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Introduction of a conservation guide</th>
</tr>
</thead>
<tbody>
<tr>
<td>75% administrators 80% inhabitants</td>
</tr>
<tr>
<td>• A guide to be followed to the architect, the engineer and the manufacturer concerning the intervention in this type of inheritance.</td>
</tr>
<tr>
<td>• He claims to propose a method of work on the inheritance.</td>
</tr>
</tbody>
</table>
Results and discussion

This study enabled us to draw up a synthesis on the state and the situation in which the experiments already undertaken on the inheritances are which marked the history of Kenadsa. On the basis of this synthesis, several results and nuances could be deduced according to three levels from intervention in particular:

**Level 1: Participation of the state**

**Overall interventions**

The conservation of the heritage must, in the first time and mainly, being encouraged by the state which holds a great role like incentive with the inheritance conservation. The funds intended for the safeguard can be overall and diversified. Thus, other actors can subsidize by additional percentages for the repair or maintenance work necessary to the conservation. The state can also proceed to an incentive tax with the conservation by granting tax incentives for the property owners of the ksar.

*A concerted planning*

The operations of conservation remain considered acts but well before planned and put in point by all the actors concerned. Within this framework, the implication of the local actors remains essential to intervene as regards suitable area specificities.

**Definition of the strategies**

Being a classified national heritage, the state is able to determine a comprehensive conservation strategy in order to ensure the durability of ksourien spaces. This central level, he must confer on this inheritance a role of economic, cultural development tools like in particular the valorization of these tourist assets.

**Level 2: Decentralization of competences**

**Definition of the objectives by local actors**

Local actors appointed by the various managements decentralized (DUCH, culture, residences, research departments…) are able to define objective truths of setting in ksourien heritage value and to fix the urban regulations and recommendations, architectural and landscape to follow. They represent, with the owners, main actors for action for execution, protection and control to the service of the inheritance.

**Specialization of conservation actors**

The local actors in charge of the assumption of responsibility of the inheritances must answer specific conditions directed and controlled by the state. For that, they must think of the specialization of the speakers in study, realization and expertise in the field of the inheritance. It must also implement human resources qualified by education and training for resurrect the still existing rare Masters and copy their ancestral techniques.

**Taken into account culture identity**

The sensitizing of the community to the culture identity is also important, because it is essential that its actors recognize the value of his architecture for taking part well in decision makings. The local culture identity must then be found and resurrect by local craftsmen.

**Level 3: Role of the owners**

**For the local rediscover of know-how**

To give the opportunity to the owners of the goods of Kenadsa to rediscover their current know-how this is presented in the form of an updating of their ancestral know-how. Because today, the production of better architectures knows a blockade situation face to the economic limits of the private individuals, it is thus necessary now to encourage the various operations with the intervention of the owner and the release of financial means by the state. Indeed, this guideline can be only favorable in the future for the installation of the future human establishments in continuity, without clash with the old built framework, which is the traditional system.
An active participation of the public

The active participation of the public can help the administrative and technical people responsible to obtain better results which are in perfect conformity with the development of their needs and preferences. This collaboration, by using local knowledge to inform the projects, also makes it possible to the town planners to make decisions which reflect the needs and the securities of the community.

Conclusion

This study on the modes of conservation of ksourien inheritance made it possible not only to present but especially to support the patrimonial components of the example of the ksar of Kenadsa in connection with the complexity of the conservation actions or preservation which they are planned by the state or auto-engaged by the inhabitants. To answer suitably to a conservation of such a heritage, the study put forward a whole of alternatives stated by the different ones surveyed and considered to be ideal for an assumption of responsibility from this type of inheritance. What made it possible to draw up the following synthesis; on the status report of the various operational experiments of restoration of Ksar of Kenadsa and the situation for which one could in particular put the point on three levels of intervention (official, competences and owners):

- The state intervention was organized on several ladders (overall, concerted planning and programming and definition of the strategies).
- The decentralization of competences for which the definition of the objectives is under the aegis of the local actors (various specialized administrations) in order to fix the urban regulations and recommendations, architectural and landscape that it would be necessary to follow. This will require the qualification of the various intervening in the operation of restoration and also the capture in consideration of the ancestral heritage (MAALEM).
- The KSOURIENS, by their intervention will have to discover their own know-how brought up to date compared to that ancestral and to keep the spirit of collective work resulting from the principle of (TOUIZA).

References


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