PLACE

The project’s context: ‘ksar ait benhaddou’ village

1. Important position in the national context
2. Important position in the regional context
3. Authentic character: the traditional village
4. Attractiveness: the natural and built components

The project: improving the urban intervention

1. Finding similarities and connections to preserve & reinforce
2. Fostering connections through projects injection
3. Triggering the creation of a new centrality

The primary school: a modular configuration

The training center: a permanent component

Architectural quality & aesthetic impact

1. Fostering tactility through the use of natural components, closely linked to the identity and memory place
2. Creating a strong interaction with sunlight

Space sequencing to ensure movement organicity and ambiances diversity

In order to preserve a strong interaction with their environment, the two buildings comprehend:
- outdoor, open components: circulation spaces
- space sequencing tends to enhance the dependence of the space through the permanent transition between openness that ensures visual and sensorial connectivity with the surroundings, and enclosed spaces that foster social interactions through providing a cozy atmosphere within human scaled spaces.

The extension: concrete construction

Concrete houses in the ksar’s extension

Architectural finishes: wooden elements

THE PROBLEM

The village extension placelessness

The ksar extension: concrete construction

Concrete houses in the ksar’s extension

The extension: concrete construction

Concrete houses in the ksar’s extension

Architectural finishes: wooden elements

1. Ensuring adjustable lighting
2. Fostering light and shadow

- horizontally rotating windows to control western sun rays access.
- multi layered windows in order to ensure light filtration at different levels.

AW17-LNEO
BEGINNING OF DISCONNECTEDNESS BETWEEN THE LOCAL COMMUNITY AND ITS CULTURAL CONTEXT / THE NECESSITY OF RECONNECTING THEM

Community enginuity: (social order and communal life) the key factor of the ksar sustainability

Collaboration between diverse stakeholders in order to ensure a comprehensive development

"At Assia" local association:

"At Assia Association" has been the official collaborator of the UNESCO since the ksar inscription as a world heritage. It is the main responsible and manager of development projects within the ksar and its extension.

"We speak citizen" creation:

"We speak citizen" was created by Eco-activa, along with other disciplines in order to be a national expert collective that ensures holistic interventions and development projects, given that taking into account all the aspects of the key factor of any project's sustainability.

"We speak citizen" role:

"We speak citizen" is the organism that connects "Eco-activa" to "At Assia Association". It is a collective that promotes development and ensures accommodation to local associations, not through financial aids, but through providing multi-disciplinary expertise.

The strong community inclusion within all the parts of the project:

- The local community is an important and strong stakeholder, because of the following:
  - Land tenure: The absence of private proprieties in the village as well as the extension: legally, all the lands are communal.
  - Social organization: Social organization within the village follows a set of rules established by the local community. Delegates are chosen to preserve this order and manage all the aspects of the social life, including land management.

Providing fulfilling working conditions in construction on-site

The community:

- Ait Benhaddou Village and surroundings

The village:

- Local community: Ait Benhaddou local population

The village cluster:

- The absence of educational platforms in the surrounding villages is the importance of the village school

Empowering human factor: Building new skills

Boosting local know-how: Reviving and enhancement

Improving physical context: Ensuring a viable environment for education

Actions

- Building a training center
- Rebuilding the existing school
- Upgrading crafts and integrating them in construction process

Fostering dynamics and promoting shared values

- Other regions participating in national & local development
- Skills cooperation with other regions: New skills education and training in the village

Providing fulfilling working conditions in the construction process

1. Gender equality
   - Both genders equally take part in the construction process

2. Workers health & safety
   - The use of natural building materials preserves workers health and safety

3. Sustainable benefits for workers
   - Construction will be ensured through instructional workshops where volunteers are trained for free + paid for their work.
Fostering economic autonomy to ensure sustainability and allow development

- Financial returns generation in both children school and training center
- Integration within the network of return-generating projects in the village, and equitable allocation of returns to cover operation and development costs of all the projects.

Ensuring economical robustness of the project as well as similar future projects:

- Using clay as the main construction material
- High adaptability with climate changes because of clay peculiarities
- Affordability of renewable energy (solar energy) because of the reduced need for artificial, light as well as heating and cooling
- Using local materials, not necessitating corruption or chemical processing
- Forming a local autonomous workforce

Through the project's construction process and the learning provided in the training center, the local population will become an autonomous workforce. Able to build other projects in the village, using materials that are all reusable on-site and not necessitating any costs, as well as simple, affordable processes that, along with materials, ensure a high comfort level and energy efficiency.
Adoption of Passive Design Strategies to Foster Affordable Comfort & Energy Efficiency

Innovative Use and Readaptation of Local Crafts

Reviving and Boosting Local Crafts Through:
- Establishing alternative uses, adapted to the contemporary needs
- Integration within a vital sector: Construction
- Creating a synergy with passive design techniques in order to foster energy efficiency

Using Simple Passive Design Techniques that are Affordable and Easily Deployable:
1. Air refreshing through a fogging system
2. Sunlight control through a manual rotation system
3. Double skin facade
4. Adjustable pergola

Synergy Between Materials Integration and Construction Process to Insure Optimization in Construction and Operation

Recycling as a Tool to Raise Awareness

Participatory Monitoring and Evaluation

Project Transferability Through Process & Stakeholders

The project is intended to be a reference, an even a trigger, of similar projects in the region and abroad.

GLOBAL
LOCAL & REGIONAL

Design Process: Global-Scale Dissemination

Construction Workers: Local/Regional Scale

We Speak Citizen:
National-Scale Dissemination

The experts collective will ensure transferability at the national scale through the study design assistance of other social and dimension projects in Morocco.

Skills buildings through construction workshops will ensure the transferability of construction techniques in the villages as well as those in workshops will be able to duplicate the design techniques in other projects in the region.

Recycled wheels

Introducing Recycling in primary school furniture in order to raise awareness among children, educate them, and promote environmentally sensitive practices.

Participatory monitoring and evaluation

Strategic role: Data gathering and analysis

Operational role: Data gathering and analysis

In order to accompany and boost the project development, we adopted a participatory monitoring that involved:
- The experts collective / the local association / the local population / the public authorities.

This diversity of stakeholders ensures:
- Comprehensiveness of the gathered data (qualitative / quantitative)
- Incorporation of all stakeholders in the project
- A holistic evaluation
- Perceivers of process quality and success

PROJECT DEVELOPMENT REFERENCES

Local population

We speak citizen: Regional Local & National

- We speak citizen: Regional Local & National

Ministry of Education

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Adoption of Climatop (climate-topography) based design to ensure a sustainable environmental responsiveness.

1. Reduced CO2 emission within all phases

Materials
- Construction
- Use & Upkeep

2. Optimized ecological footprint

3. Reduced waste in construction & operation

4. Near zero energy buildings

Utilizing conclusions for best performance and lowest environmental impact.