The programme of the Nubian Vault Association (AVN) and its partners

Dynamic and adapted responses for a low carbon construction sector
Habitat in Africa... A major challenge!

- Deforestation and population growth:
  - disappearance of timber and straw
  - housing deficit

- Climate change:
  - mitigation
  - adaptation

- Use of imported materials and energy:
  - fragilised local economies
  - inappropriate (cost, environmental aspects...)

- Loss of traditional architectural identity and know-how
The Nubian Vault (NV) construction technique
An adapted African alternative architecture

An ancestral concept based on:
- Local materials
- Local skills
- Local economies
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The NV market:
A large scale and dynamic vector for diffusion

3 complementary axes

A ROOF
Involve stakeholders in the diffusion of the NV concept

A SKILL
Strengthen the skills of the NV trades sector

A MARKET
Stimulate the demand for NV construction

An innovatory development model:
« Rather than giving people fish, teach them to fish for themselves, and also to repair their nets and sell the fish »
The deployment of the NV market
A proven and transferable methodology

1998 – 2000
R&D and conceptualisation of the NV technique
- Standardise a locally transmissable adapted technique

2000 – 2014
Kickstart a NV market
- Create the market and demonstrate the validity of the solution and its market potential
- Diffusion methodology

2014 – 2018
Densification of the NV market
- Involve the construction sector, develop NV professional training and increase the demand
- Training methodology

2018 – 2030
Skills transfer and capacity building of partners
- Mobilise and support local actors to implement the NV concept in their own intervention territories
- Transfer methodology
The deployment of the NV market

- Habitat
- Employment
- Mitigation Environnement
- Stakeholders
- Adaptation Climate
- Local economies
The deployment of the NV market
A proven and transferable methodology

A programme deployed in 5 countries and 13 regional and national centres
The deployment of the NV market
A proven and transferable methodology

32,000 beneficiaries living or using a NV building

3,000 construction projects completed since 2000

770 active NV apprentices, masons, artisans and entrepreneurs

25% annual market growth rate

85,500 tonnes of CO₂ potentially economised

3 millions euros generated in local circuits
The programme of AVN & of its partners

The urgent need for upscaling

AVN’s axes of intervention

Mobilisation, training & support of Operational Partners who adopt the system modelled by AVN and replicate it in their action zones

Support functions: training, technical support, monitoring, evaluation, capitalisation, management of partner networks, advocacy, etc.

Continuing implementation of the NV concept as an operator in some territories to consolidate the deployment methods and explore new technical and methodological approaches
The AVN programme is composed of different « products » which contribute to the general diffusion strategy of the NV market.

- A territorial methodology for deployment of the Nubian Vault market
- Implementation of Nubian Vault construction projects
- Programme of incentives for construction of sustainable houses

These various propositions can be considered separately or in combination to reinforce each other’s impacts.
3 proposals
How to get involved?

Proposal 1

A territorial methodology for deployment of the Nubian Vault market

Average cost: 65,000 € (excluding incentive payments)
Duration: 3 years

Results at the level of a commune:

- 1 local organisation promoting the NV territorial market over 3 years
- 36 trainees following the technical and entrepreneurial training programme, and able to respond to the demand for NV construction
- 42 exemplary NV houses completed, with incentives, for around 210 direct beneficiaries
- 20,000 to 40,000 beneficiaries in total as a result of the deployment and growth of an adapted housing market
- 840 tonnes of CO₂-eq economised
Proposal 2

Programme of incentives for construction of sustainable houses

3 proposals
How to get involved?

Average cost per client incentivised: 350 €
(the cash incentive + distribution costs)

Duration: +/- 2 weeks of construction time per house

Results

- an exemplary adapted house of 25 m² built for and by a Sahelian family
- strengthening of the local economy and creation of jobs in the adapted housing sector
- 20 tonnes of CO₂ eq economised
3 proposals
How to get involved?

Proposal 3
Implementation of Nubian Vault construction projects

Average cost: 190 € per m²
Average duration: 40 days for 50 m²

Results
- more cost-efficient buildings for agriculture, education, healthcare, etc.
- strengthening of the local economy and creation of jobs in the adapted housing sector
3 proposals
How to get involved?

Operational Partner
- Civil Society Organisation
- NGO, development actor

Relay Partner
- Civil Society Organisation
- NGO, development actor
- Institutional and public actors

Financial Partner
- Donors
- Foundations
- Public development agencies

- Implement territorial methodologies in your own action zones, for the benefit of your communities
- Support the mobilisation of local actors & the diffusion of the NV concept
- Implement NV construction programmes
- Finance the various methodological proposals