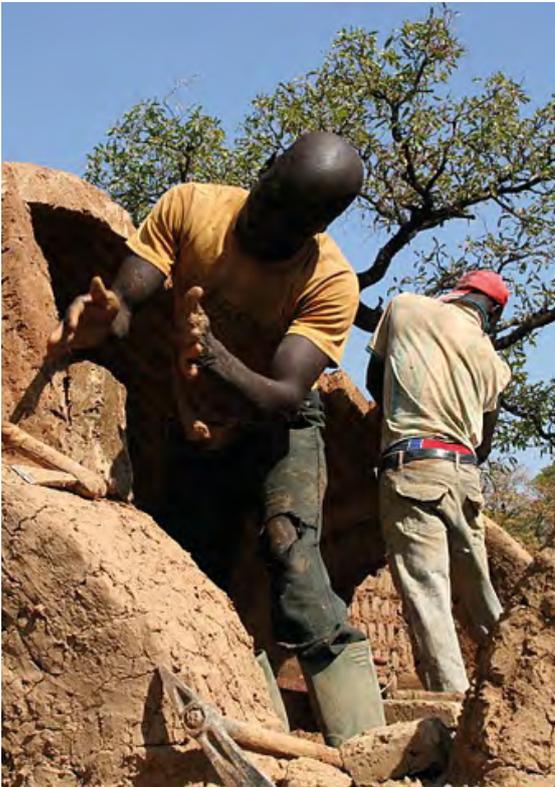


# Catalogue of AVN's proposals



This catalogue lists these different mechanisms and approaches in the form of proposals, and demonstrates their systemic coherence and their integration into relevant generic development themes (Climate, Gender, Nexus, public policies, IDP, etc.).

Thus, it allows the various development operators and donors to target those proposals that best match their own vision and action, and to integrate them into their operational strategies.



## Proposals

- 1 AVN's global programme
- 2 Regional dissemination of a NV eco-construction market
- 3 Opening the programme in new countries
- 4 Training and employment of vulnerable rural youth
- 5 Innovative approaches to professional training
- 6 Emergence of a green construction sector
- 7 Rural development
- 8 Climatic and environmental approach
- 9 Gender approach
- 10 Responding to the needs for adapted and sustainable infrastructures
- 11 Financial incentives for NV eco-construction
- 12 The gift of adapted and sustainable housing
- 13 Advocacy for a right to decent and sustainable housing

# General Presentation

## ■ The Association

Founded in 2000, the Association la Voûte Nubienne/ AVN has set itself the mission of deploying suitable, sustainable and low-carbon construction techniques in Sahelian Africa and more broadly in the dry climate territories of the African continent. **Our motto: "A suitable habitat for the greatest number, as quickly as possible"**. With an international office in France, AVN is today represented by national structures or partners in six countries: Burkina Faso, Mali, Benin, Ghana, Senegal and Mauritania. In 2023, the Association employs around sixty people in France and West Africa.



## ■ The construction and housing sectors: orphan issues

In Africa, the questions of evolution and adaptation of the construction and housing sectors are not sufficiently perceived as essential and urgent issues by public decision-makers and their development partners. However, these questions form an integral part of systemic major issues, themselves largely taken into account: population growth, economic instability, climate adaptation and mitigation, stabilisation and resilience of populations, etc.

In the Sahelian regions, desertification has led to the disappearance of bush wood used in traditional architecture. "Modern" architectural proposals, largely dependent on imported materials (cement, steel, sheet metal, timber) or over-exploited resources (gravel, sand), are increasingly unsuitable in terms of cost, thermal comfort, sustainability and environmental impacts. Moreover, by prioritising the purchase of materials at the expense of the labour force, they worsen the employment situation.

Thus, in terms of housing and infrastructure needs, the alternatives developed by construction and public works players are not up to the challenges: as a result millions of families are plunged into a vicious circle of poverty and discomfort, increasing their vulnerability, and with no satisfactory architectural alternative.

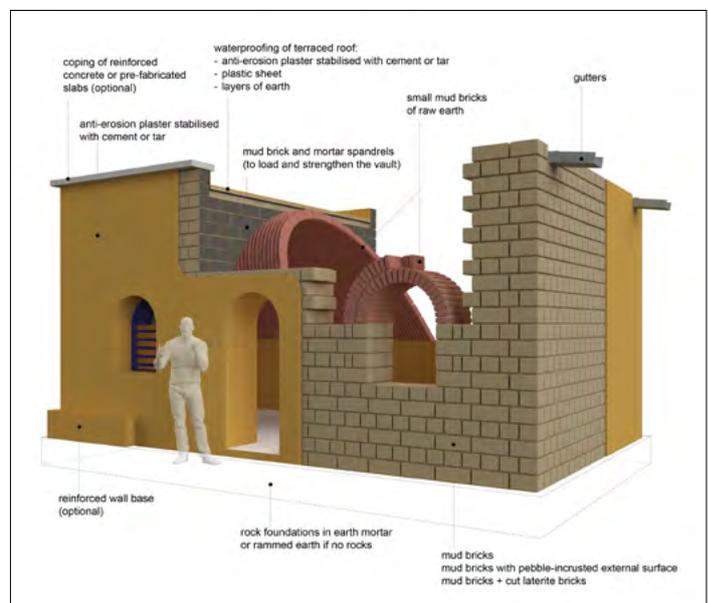


## ■ An African, ancestral and innovative architectural solution: the Nubian Vault

At the centre of the AVN programme: the Nubian Vault/NV. This ancient construction technique uses only widely available local materials (raw earth, water, rocks) and basic tools for the realization of all the major construction work. It relies predominantly on an endogenous rural labour force and accessible know-how.

The main benefits of this alternative architecture are:

- **Access to comfortable, resilient, affordable and efficient buildings and housing;**
- **Strengthening of the economic fabric:** emergence of a "green" sector, creation of permanent off-season jobs (particularly for young rural people), reinjection of construction costs into familial and national economies;
- **Improving the resilience and stability of communities:** comfort and durability of buildings, adaptation to climate change, reappropriation of an "archiculture";
- **Mitigation of GHG emissions** (low-carbon eco-construction).



## ■ The large-scale distribution of the NV architecture: a market dynamic

Whatever the relevance of a solution, only its appropriation by the greatest number can validate its interest over time. Since the beginnings of its programme, AVN has chosen market dynamics as an indicator of the validity of its technical proposal and as the main vector for its large-scale distribution. This emerging market for low-carbon eco-construction is built on three main axes:

### The Offer

Deployment of a structured NV sector, integrating builders from informal economies as well as those from the construction industry, and whose growth is supported by specific players and systems for dual and inclusive vocational training.

### The Demand

Responses to the construction needs of different clienteles and project owners (private or community, rural or urban) in both informal and formal economies, and distribution of financial incentives for green construction for rural families.

### Business Environment

Mobilisation of a wider panel of stakeholders contributing to the dynamics of development and adaptation of the construction and housing sectors and appropriating the mechanisms for large-scale dissemination of an eco-construction market.

Each of these three areas is broken down into different mechanisms and means of action that combine in a systemic and cross-cutting approach to give full coherence to the overall programme while promoting its adaptation to varied and evolving contexts.



### Programme Results *(march 2023)*



6 countries of action - **1,654** localities  
**62,300** users beneficiaries  
**6,700** worksites / **210,900** m<sup>2</sup> including  
**750** community buildings



In 2021-22 :  
more than **1,300** active apprentices, masons, artisans and entrepreneurs including  
more than **700** trainers involved in training courses  
**60** Trainer Masons having provided  
**391** training modules



**0** trees cut for construction  
**173,000** tons of CO<sub>2</sub> eq. and  
**5,350** MWh potentially saved since  
the beginning of the programme



**20%** average annual growth of the NV market  
(since the last 10 years)



**€5.9 million** generated in local circuit  
**40** Operator Partner structures mobilised

### Contributions to various Sustainable Development Goals



For more than 20 years and in six countries to date, the ambition of the Association la Voûte Nubienne / AVN has been to promote access to suitable housing as quickly as possible and for as many people as possible in Sahelian Africa. At the heart of the AVN programme:

- **the Nubian Vault, an architectural concept** that is both ancestral and innovative, adapted to local know-how and materials, and to the necessary changes in the construction and housing sectors;
- **a large-scale distribution methodology** based on the emergence and growth of a NV eco-construction market which articulates three complementary axes: the structuring of a specific «green» sector, the responses to the aspirations of different clienteles, and the establishment of a favourable business environment.

The AVN Programme is part of a systemic and cross-cutting approach that enhances and spells out each of the different components detailed in this catalogue.

Contributing to the financing of the overall programme will promote the coherence of this essential systemic approach and allow its large scale dissemination and deployment.



## STRONG POINTS OF THE PROPOSAL

- ➔ **Responses to priority issues** (adaptation of the housing and construction sectors to demographic, economic and climatic realities), insufficiently taken into account in development systems and public policies;
- ➔ **A low-carbon construction technique** requiring neither wood nor sheet metal, nor cement, and using widely available local materials (earth, water, rocks), while offering good thermal performance and durability;
- ➔ **An architectural proposal** adapted to the needs of affordable and decent private construction and community infrastructure, in both rural and urban areas;
- ➔ **Off-season training and employment opportunities for vulnerable rural youth** and their integration into a new eco-construction sector;
- ➔ **Strengthening of family, local and national economies**, both formal and informal;
- ➔ **A cascading deployment at the international, national and regional levels**, relying on well established local operational partners from civil society, as well as technical and institutional partners.



## EXAMPLES OF INSERTION IN INTEGRATED DEVELOPMENT SYSTEMS

- Rural development
- Vocational training and employment
- Climate adaptation and mitigation
- Water, sanitation and hygiene
- Gender
- Internally Displaced Populations response
- Support for entrepreneurship
- Peace and social cohesion
- Public policies
- Infrastructures

## DOCUMENTATION



The programme

Dynamics of AVN's programme

Results and impacts

**Nubian Vault eco-construction**  
(Pre-Operational Guide)

The territorial deployment methodology is based on the mobilisation of local civil society operator partners (CBO's etc.) and endogenous trainer masons. It combines various components realised over several years, at municipal and regional levels:

- the development of know-how in the eco-construction sector through the training and employment of young rural people and local artisan;
- a response to private and community construction needs;
- the establishment of an incentive scheme for green building for rural families;
- the mobilisation of a panel of stakeholders allowing the emergence of a business environment conducive to the sustainability of the NV market.

**In order to meet the expectations of Sahelian populations, AVN proposes the iterative deployment of this methodology in new zones, resulting in a regional and national network of distribution centres for the NV eco-construction market.**



## STRONG POINTS OF THE PROPOSAL

- ➔ **The support of AVN's solutions and systems** by operator partners from local communities who are well established in the areas of intervention;
- ➔ **A cascading deployment allowing a functional integration of the different actors:** AVN branch offices, local and regional operator partners, endogenous trainer masons, etc. ;
- ➔ **The transfer of skills in favour of operator partners** enabling them to act effectively on the emergence and growth of the market, including in threatened and insecure environments;
- ➔ **A municipal approach:** choice of municipalities according to the targeting of operator partners, concerted implementation of the methodology by the three main stakeholders (operator partners, endogenous trainer masons, and AVN), viral dissemination of the eco-construction market to neighbouring municipalities;
- ➔ **A regional approach:** choice of regions based on the targeting of partner umbrella organisations responsible for coordinating, at scale and over time, the deployment of the methodology and the growth of the NV market;
- ➔ **The inclusion of this territorial deployment methodology in a nationwide dissemination system.**



## EXAMPLES OF INSERTION IN INTEGRATED DEVELOPMENT SYSTEMS

- Rural development
- Vocational training and employment
- Climate adaptation and mitigation
- Water, sanitation and hygiene
- Gender
- Public policies
- Infrastructures

## DOCUMENTATION

**Diffusion of the NV : Strategy, methodology and partner roles**

**Deployment of the programme** (FR)

**Results and impacts**



AVN's programme aims to meet the expectations and needs of as many people as possible in Sahelian Africa (and elsewhere) in terms of adaptation of the construction and housing sectors. AVN relies on an architectural concept validated by the populations concerned, and a range of proven mechanisms for deploying the green construction market at local, regional and national scales.

To extend its programme to new countries with dry climates, AVN offers three alternative intervention proposals:

- the implementation of the methodology for the territorial deployment of the NV market in at least one region and three municipalities ;
- the deployment of this methodology in multi-stakeholder projects (integrated approach);
- the development of a pilot construction project offering good visibility, making it possible to promote the architectural concept and its dissemination to decision-makers and operators.



## STRONG POINTS OF THE PROPOSAL

- ➔ An experience of more than 20 years in six West African countries;
- ➔ The capacity to respond to growing needs given the challenges (demographic, climatic, economic, environmental, etc.);
- ➔ The ability to assess feasibility, stakeholder interest and market potential;
- ➔ A capacity for rapid implementation of training activities and construction projects thanks to internationally available skills (artisan masons, trainer masons, project managers, etc.);
- ➔ The mobilisation of a network of partners and the enhancement of the recognition of the AVN programme;
- ➔ A proven territorial deployment methodology based on operator partners from civil society, well established in the areas of intervention, as well as institutional decision-makers and technical and financial partners;

- ➔ Dual training courses and materials adapted to vulnerable young rural people and to all actors in an emerging eco-construction sector;
- ➔ The capacity to integrate this territorial deployment methodology into multi-actor projects (integrated approach).



### EXAMPLES OF INSERTION IN INTEGRATED DEVELOPMENT SYSTEMS

- Rural development
- Vocational training and employment
- Climate adaptation and mitigation
- Water, sanitation and hygiene
- Gender
- Public policies
- Infrastructures

## DOCUMENTATION



The programme

Results and impacts

**Nubian Vault eco-construction**  
(Pre-Operational Guide)

**Map of potential deployment areas** (FR)

Due to population growth and the fragile economic environment, the professional integration of Vulnerable Rural Youth / VRYS is a major challenge for Sahelian societies and economies. VRYS are the core target of the dual training courses offered by AVN (on-site training coupled with inclusive academic modules). The resources offered by AVN promote:

- an essential and concomitant link between professional training and remuneration;
- off-season agricultural jobs (construction work carried out during the dry season);
- the articulation of the informal and formal sectors within a "green" eco-construction sector.

These innovative approaches contribute to consolidating rural families, promoting the socio-economic stabilisation of communities and the strengthening of food security.

**In order to offer VRYS opportunities for economic integration, AVN proposes the deployment and/or strengthening of its system linking adapted vocational training and employment, on different scales, and its possible integration into projects with multiple components.**



## STRONG POINTS OF THE PROPOSAL

- ➔ **A construction technique mainly using raw earth** and part of the traditional know-how of the rural populations of the Sahel;
- ➔ **Dual training courses** (85% on-site training, 15% academic modules) and an inclusive andragogical approach adapted to the needs of VRYS;
- ➔ **Training courses carried out by endogenous trainer masons** (training by peers) deployed at municipal and regional level by local operator partners (CBOs etc.);
- ➔ **Trainees financially compensated** during training periods;
- ➔ **Trainees obtaining, through working on training sites, their own NV houses**, at the same time enhancing their future marketing capacity;
- ➔ **Inclusive academic training modules:** technical training, training in site management, entrepreneurial initiation, continuing education, etc. ;
- ➔ **Initial two or three-year training courses** (e.g. : apprentice = 1 season, mason = 2 seasons, artisan mason = 3 seasons);
- ➔ **A systemic connection** between the training programme and the emergence of a demand for the opening of NV eco-construction sites.

## EXAMPLES OF INSERTION IN INTEGRATED DEVELOPMENT SYSTEMS

- Rural development
- Vocational training and employment
- Water, sanitation and hygiene
- Gender
- Internally Displaced Populations response
- Support for entrepreneurship
- Peace and social cohesion
- Public policies

## DOCUMENTATION

**The vocational training** (FR)

**Results and impacts**

**Testimonies**

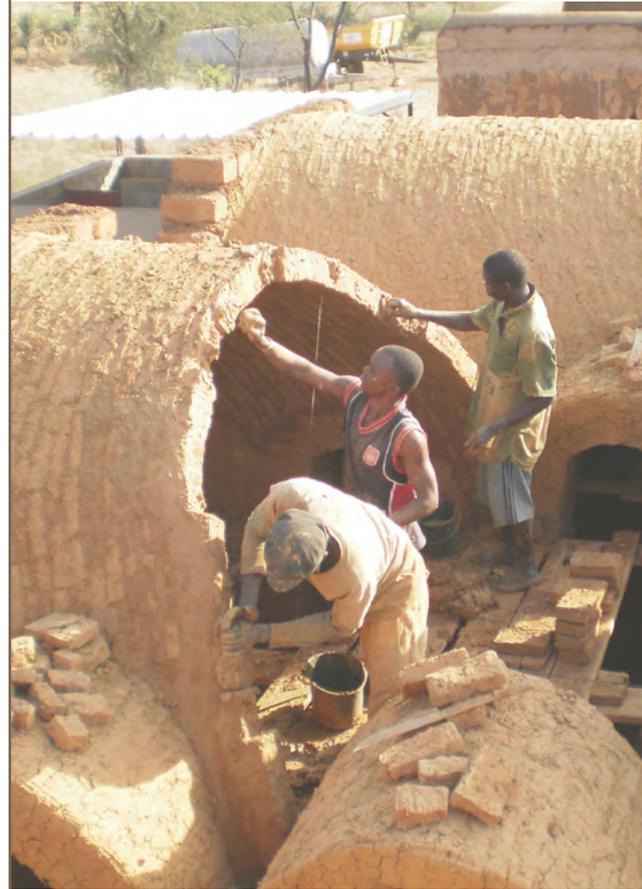


The innovative dual training system offered by AVN and its integration into an emerging market dynamic are the fruit of two decades of action research within Sahelian communities. It targets rural youth, apprentices and traditional masons as a priority, but also allows the structuring of an eco-construction sector by integrating into the training courses other players in the construction industry (technicians, companies, design offices, etc.). This offers:

- andragogical approaches deployed in both informal and formal environments, drawing on the resources of AVN and those of endogenous trainer masons;
- dual training combining on-site learning in real market conditions (peer training) and inclusive academic modules;
- the necessary remuneration of learners during their training.

In order to increase its formal recognition, AVN and its partners support the institutionalisation of its andragogical approaches (certification of skill levels, validation of acquired experience, accreditation of trainers, etc.). More broadly, this training system is associated with actions allowing the emergence and growth of a NV eco-construction market guaranteeing the employability of learners and the sustainability of the sector.

**AVN asks the authorities in charge of vocational training and employment, as well as their partners and donors, to widely deploy these innovative approaches in vocational training programmes and to integrate them into their public and national policies.**



## STRONG POINTS OF THE PROPOSAL

- ➔ **Training courses led by endogenous trainer masons** and deployed at municipal level by local operator partners (CBOs etc.);
- ➔ **Training and support for the federation of trainer masons;**
- ➔ **The consolidation and dissemination of training tools** adapted to different learners;
- ➔ **Adaptation of VTC proposals** in collaboration with endogenous trainers and AVN;
- ➔ **The access of rural trainees to their own NV house,** through on-site training, thus also promoting their marketing capacity;
- ➔ **Inclusive academic training modules:** technical training, training in site management, entrepreneurial initiation, continuing education, etc. ;
- ➔ **Efficient collaboration between informal NV artisan** (from rural areas) and **formal construction operators** within a low-carbon eco-construction sector;
- ➔ **The exemplary nature of these innovative approaches,** serving the development of public policies.

## EXAMPLES OF INSERTION IN INTEGRATED DEVELOPMENT SYSTEMS

- Rural development
- Vocational training and employment
- Climate adaptation and mitigation
- Internally Displaced Populations response
- Support for entrepreneurship
- Public policies
- Infrastructures

## DOCUMENTATION

### Results and impacts

**Report of the workshop on training and sustainable professional integration** (FR)

**The vocational training** (FR)



In its programme to roll out a low-carbon eco-construction market in the Sahel, AVN supports the emergence and growth of a “green” construction sector. The structuring of this sector is part of an approach that also includes the stimulation of demand and the development of a business environment favourable to the sustainability of the NV market. These three components jointly provide responses to the development needs of the construction sector and the adaptation of housing conditions, central themes in the demographic, socio-economic and climatic challenges faced by populations and local authorities. Mainly made up of masons and their teams from the rural world and familiar with vernacular construction techniques using earth materials on a massive scale, this sector also brings together other players in the construction industry (entrepreneurs, technicians, engineers, architects) and combines their different know-how and collaborative skills. This sector, which must meet the constructive needs of different clienteles (rural and urban, private and public), is necessarily stimulated by the challenges of the century in Africa.

**AVN asks authorities and development partners to reinforce the emergence and growth of this green sector:**

- by multiplying dual and inclusive vocational training and access to employment systems, as well as efforts to structure the sector;
- by accompanying the change in scale of the programme by supporting the systemic deployment of its three main components;
- by choosing the proposed architectural solutions and promoting their dissemination.



## STRONG POINTS OF THE PROPOSAL

- ➔ **Dual professional training** and continuing education adapted to all players in the sector;
- ➔ **Institutionalisation of the sector** (professional certifications, standardisation, inclusion in public policies, etc.);
- ➔ **Complementarity of informal and formal players** in the sector to meet the expectations of different clienteles and project owners;

- ➔ **Use of local materials with low carbon impact** in a short circuit and reduction in the need for imported materials with a high environmental footprint;
- ➔ **Emergence of a multi-actor business environment**, creating a dynamic and sustainable endogenous market.

## EXAMPLES OF INSERTION IN INTEGRATED DEVELOPMENT SYSTEMS

- Rural development
- Vocational training and employment
- Climate adaptation and mitigation
- Support for entrepreneurship
- Public policies
- Infrastructures

## DOCUMENTATION

### Results and impacts

**Report of the workshop on training and sustainable professional integration** (FR)

**The vocational training** (FR)



The evolution and adaptation of the construction and housing sectors in Sahelian Africa should be an essential component of development programmes in rural areas, strengthening local economies and stabilising communities. AVN's Programme, targeting the improvement of living conditions for the greatest number, is primarily aimed at rural populations. In effect :

- Artisan, masons and apprentices from the rural world, mastering the use of earth materials and traditional architectural practices, are the main players in the emerging eco-construction sector;
- The inclusive training paths and know-how offered by AVN are adapted to the uneducated or poorly educated profiles of vulnerable young rural people;
- Trades and jobs in the eco-construction sector, deployed during the long dry season (agricultural off-season), are an essential asset for rural family economies;
- Demographic realities, unsuitable modern architectural proposals and climate change require the large-scale dissemination of low-carbon, decent and sustainable housing solutions to strengthen the resilience of rural families;

- The growing needs for agricultural infrastructure (storage, processing, livestock, etc.) and more broadly for community buildings (health, education, etc.) require the use of efficient and appropriate techniques.

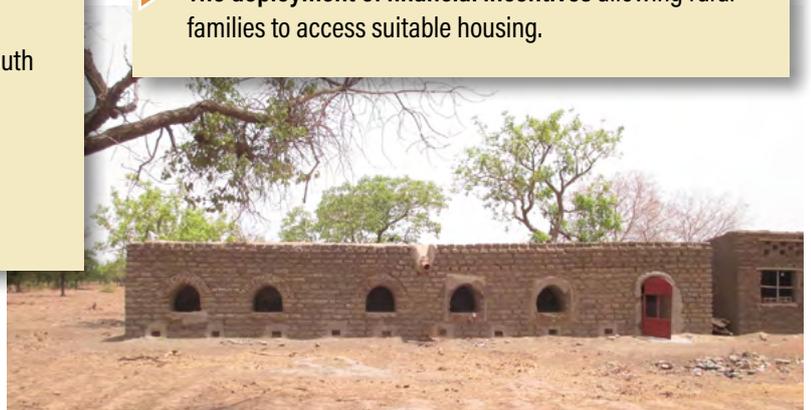
As part of responses to calls for projects or consortium proposals to donors, AVN offers rural development operators the opportunity to deploy the methodology for territorial distribution of the NV eco-construction market, and to associate it in the project designs, with integrated multi-component approaches.



©GERES

## STRONG POINTS OF THE PROPOSAL

- ➔ **An operational methodological deployment system**, calibrated at the level of municipalities and regions, based on the mobilisation of local operator partners (CBOs, etc.) and endogenous trainer masons;
- ➔ **Dual and inclusive training paths** for vulnerable rural youth and the creation of "green" jobs;
- ➔ **The reinjection of construction costs into regional economies:** transformation of the purchase costs of imported materials into local labour costs;
- ➔ **Impacts in terms of mitigation and adaptation to climate change;**
- ➔ **The deployment of financial incentives** allowing rural families to access suitable housing.



## EXAMPLES OF INSERTION IN INTEGRATED DEVELOPMENT SYSTEMS

- Rural development
- Vocational training and employment
- Climate adaptation and mitigation
- Water, sanitation and hygiene
- Gender
- Support for entrepreneurship
- Peace and social cohesion
- Infrastructures

## DOCUMENTATION



### Results and impacts

**Nubian Vault eco-construction**  
(Pre-Operational Guide)

**NV buildings for agriculture and livestock**

Issues related to climate change, environmental protection and natural resource management are at the heart of contemporary global and local challenges. The Sahelian populations, which have hardly contributed to climate change, are nevertheless among the most impacted in the world. The construction and housing sectors, which represent between 25% and 30% of global emissions, are insufficiently targeted in "green" agendas and mechanisms in Africa. AVN's programme addresses these questions in a cross-cutting and systemic approach allowing the large-scale distribution of an eco-construction market, with proven and efficient solutions:

- Emergence and growth of a "green" eco-construction sector;
- Ability to respond to different clienteles in terms of suitable low-carbon construction;
- Establishment of a business environment favouring this emerging sector at the local, national and international levels;
- Adaptation and resilience of Sahelian populations to climate change;
- Mitigation of the construction sector's carbon footprint by reducing the use of high-impact imported materials (cement, steel), of increasingly scarce local materials (gravel, sand, timber) and the energy requirements of a comfortable habitat;

- Abolition of the use of local ligneous resources used in traditional construction and their replacement by widely available natural resources and local materials (lateritic soil, rocks, water).

AVN asks public authorities, donors and development operators working to adapt to climate change, mitigate GHG emissions and preserve the environment, to support the resources offered by AVN and/or include them in integrated development projects and programmes.



## STRONG POINTS OF THE PROPOSAL

- ➔ **Widely recognized architectural solutions and large-scale deployment devices** (AVN is accredited by GABC, UN-CCD, UN-FCCC);
- ➔ **An approach linking adaptation and mitigation** in a virtuous iterative dynamic;
- ➔ **Financial incentive tools**, based on mitigation performance and compensation mechanisms allowing access to eco-construction for Sahelian families;

- ➔ **Exemplary systems for the large-scale dissemination of a "green" sector;**
- ➔ **Capacity to support public policies** in terms of environmental preservation, adaptation to climate change and implementation of their commitments in favour of sustainable development (INDC, SDGs, etc.).

## EXAMPLES OF INSERTION IN INTEGRATED DEVELOPMENT SYSTEMS

- Rural development
- Vocational training and employment
- Climate adaptation and mitigation
- Water, sanitation and hygiene
- Peace and social cohesion
- Public policies
- Infrastructures

## DOCUMENTATION



### Results and impacts

**The NV, a low-carbon housing solution**

**The Climate/Environment approach** (FR)

**Circular Strengthening of Mitigation and Adaptation**

In Sahelian Africa, developments in the construction and housing sectors directly affect women and their collective organisations in five main respects:

- The qualities of housing in terms of durability, comfort, accessibility and response to climatic and environmental changes directly involve women and mothers who mainly bear the responsibilities of these family issues;
- The costs of construction, maintenance and energy (thermal comfort) are borne in particular by the women who invest the proceeds of their businesses and their income generating activities there;
- The needs for community infrastructure are significant and growing, particularly in agriculture (storage, processing, breeding), development of income generating activities and for the cohesion of groups of women producers;
- Issues of employment of husbands and sons, particularly during the dry season, and family resilience, are at the heart of the concerns of Sahelian women;
- Leaders of women's organisations are best able to advocate for the right to suitable housing for the greatest number.

AVN asks public authorities, donors and development operators working to promote the empowerment of women, rural development and adaptation to climate change, to support AVN's proposals falling directly within a Gender approach, and/or to include them in integrated projects or programmes.



## STRONG POINTS OF THE PROPOSAL

- ➔ **The reinjection of construction costs into family economies** (education, health, food, etc.) by transforming the costs of purchasing imported materials into the participation of unpaid labour (family mutual aid, etc.) ;
- ➔ **The mobilisation of women's organisations** (FOs, CBOs, cooperatives) in the methodological deployment mechanism of the NV eco-construction market at municipal and regional levels;
- ➔ **Dissemination of financial incentives** providing rural women and their families access to suitable housing;
- ➔ **The promotion of a Gender approach and its articulation with Climate Adaptation responses**, to be included in the integrated projects and programmes of decision-makers, donors and development operators.



## EXAMPLES OF INSERTION IN INTEGRATED DEVELOPMENT SYSTEMS

- Rural development
- Vocational training and employment
- Climate adaptation and mitigation
- Water, sanitation and hygiene
- Peace and social cohesion
- Public policies
- Infrastructures

## DOCUMENTATION

### Results and impacts

**Nubian Vault eco-construction**  
(Pre-Operational Guide)

**Meet Adjaratou Yoin** (film)



AVN's Programme aims to meet the expectations of as many people as possible in Sahelian Africa (and elsewhere!) in terms of the evolution and adaptation of the construction and housing sectors. AVN relies on a low-carbon architectural concept offering technical qualities and appropriate thermal and economic performance, and on an innovative methodology for disseminating know-how already deployed in several Sahelian countries.

To meet the Climate Adaptation and Carbon Mitigation needs of new public or community construction projects, the emerging NV eco-construction sector supported by AVN can rely on a solid technical corpus and on experience acquired over more than 20 years on more than 7,000 worksites in six Sahelian countries.

AVN offers support to communities, partners, CBOs, women's groups, as well as public authorities, contracting authorities, donors and development operators, in the definition and implementation of their construction projects. This support can take the form of technical advice, drafting of ToRs for tender documents, project assistance, cost estimation, selection and monitoring of the various stakeholders, site control, etc.



## STRONG POINTS OF THE PROPOSAL

- ➔ **Response to the growing needs for suitable and sustainable infrastructure** in rural and urban areas in different sectors (storage and agricultural processing, small livestock, crafts, trade, health, education, administration, technical buildings, etc.);
- ➔ **Integration of eco-construction proposals on large-scale projects** (activity zone, electrified artisanal zone, social housing, housing programme for IDPs, ecovillages, etc.);
- ➔ **Improvement of the thermal and hygrometric performances of the infrastructures**, improving the comfort of the users and strengthening their production capacities;
- ➔ **Reduction of structural work costs** and use of local materials in short circuits;
- ➔ **Reinjection of construction costs into regional economies** (transformation of purchase costs of imported materials into local labour costs);
- ➔ **Strengthening and diversification of players in the eco-construction sector** through their positioning on the formal market (community or public procurement);
- ➔ **Reinforcement of the diffusion of the NV market** by the exemplary nature of the built infrastructures.

## EXAMPLES OF INSERTION IN INTEGRATED DEVELOPMENT SYSTEMS

- Rural development
- Vocational training and employment
- Climate adaptation and mitigation
- Water, sanitation and hygiene
- Gender
- Internally Displaced Populations response
- Support for entrepreneurship
- Peace and social cohesion
- Public policies
- Infrastructures
- Urban planning projects

## DOCUMENTATION



### Results and impacts

**NV buildings for agriculture and livestock**

**NV buildings for education**

**NV buildings for health**

**Typology of NV buildings in Senegal** (FR)

**The NV, a solution for community buildings** (film)

# FINANCIAL INCENTIVES FOR NV ECO-CONSTRUCTION: THE NV MARKET GROWTH LEVER

Like the public measures (tax credits, incentives, subsidies, etc.) implemented in the global North to promote the adaptation of the construction and housing sectors to contemporary economic challenges and the imperatives of GHG mitigation, financial incentives should legitimately support and encourage the emergence of an eco-construction sector in the Sahel, a region hard hit by climate change. The modest financial incentives offered by AVN to rural families (approx. €300) encourage them to choose a sustainable construction technique. In a virtuous approach, they guarantee the wages of skilled labour, reinforce the NV masons, promote the investments of development donors in a "green" sector, and are reinjected into local economies. This incentive system (distribution, monitoring, control and recording), already deployed by AVN and its partners, has demonstrated its efficiency and its contribution to the change in scale of the NV market.

AVN offers a wide range of stakeholders (foundations, donors, eco-contributors, development operators, public authorities, etc.) the long-term financing of a growing volume of financial incentives for eco-construction, either as a component of a project primarily aimed at the emergence and/or strengthening of the NV eco-construction market, or to support the adaptation of communities and make a "carbon solidarity contribution".



## STRONG POINTS OF THE PROPOSAL

- ➔ **An incentive representing 80% of the cash needs of families** who provide three-quarters of the needs of the site in kind (materials, transport, unskilled labour, etc.);
- ➔ **A multiplication of the production of buildings** favouring by their exemplary nature the dissemination of NV eco-construction;
- ➔ **A system combining adaptation and mitigation issues** and favouring socio-economic and stability impacts for the benefit of communities;
- ➔ **A response to the need for commitment** in terms of development and local and global solutions to climate challenges.



### EXAMPLES OF INSERTION IN INTEGRATED DEVELOPMENT SYSTEMS

- Rural development
- Vocational training and employment
- Climate adaptation and mitigation
- Gender
- Support for entrepreneurship
- Public policies

## DOCUMENTATION



### Results and impacts

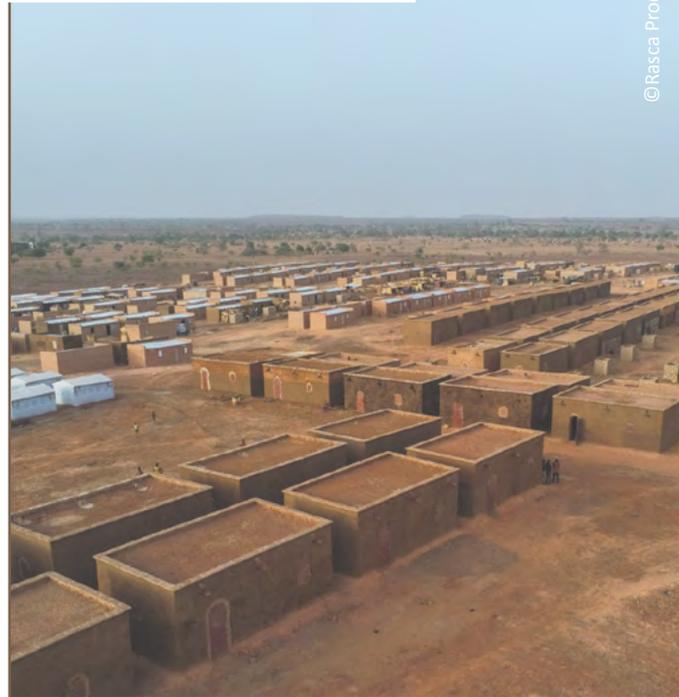
**Carbon offsetting and green building incentives** (FR)

**Circular Strengthening of Mitigation and Adaptation**

**Climate Solidarity CO<sub>2</sub> contribution**

Many emergency situations (natural disasters, forced displacement of populations, support for vulnerable people, etc.) or displacement of communities (construction of dams, mining, etc.) require the implementation of donor projects for re-housing. While meeting these fundamental needs, the choice of low-carbon eco-construction techniques makes it possible, in NEXUS and climate-positive approaches, to multiply the co-benefits of these operations: vocational training and employment, strengthening of regional economies, climate adaptation, exemplary building, etc. In addition, the implementation of these projects can be combined with the integrated economic development systems offered by AVN, making it possible, at the local level, to multiply these co-benefits while promoting social cohesion and the stability of communities and beneficiaries.

**AVN offers support to public authorities, humanitarian, emergency and development donors and operators, as well as owners of rehousing programmes, in the definition and implementation of their development projects. eco-construction and/or integrated development. This support is deployed in the form of technical advice, drafting of ToRs for tender documents, project assistance, cost estimation, selection and monitoring of the various stakeholders, site control, etc.**



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## STRONG POINTS OF THE PROPOSAL

- ➔ **The articulation between Humanitarian and Emergency projects** and multi-impact development systems;
  - Green impacts (adaptation / mitigation)** associated with the construction of infrastructure;
- ➔ **The mobilisation of local development operators** (FOs, CBOs) in NEXUS approaches;
- ➔ **A significant production capacity** allowing the rapid implementation of large-scale construction programmes;
- ➔ **Strengthening the emerging NV eco-construction sector** (business opportunities for artisan and companies, continuing professional training, exemplary buildings, etc.);
- ➔ **The training and professional integration offered to young IDPs** and their acquisition of useful know-how in their region of origin (preparation for return);
- ➔ **A cascading deployment and a transfer of skills** in favour of locally established stakeholders, making it possible to operate even in high security risk areas.

## EXAMPLES OF INSERTION IN INTEGRATED DEVELOPMENT SYSTEMS

- Rural development
- Vocational training and employment
- Climate adaptation and mitigation
- Water, sanitation and hygiene
- Gender
- Internally Displaced Populations response
- Support for entrepreneurship
- Peace and social cohesion
- Public policies
- Infrastructures



## DOCUMENTATION



### Results and impacts

**Nubian Vault eco-construction**  
(Pre-Operational Guide)

**Rehousing project in Diakré** (film)

In the transversal and systemic approach of the AVN programme, the emergence and highlighting of advocacy for the right of the greatest number to suitable, decent, sustainable and affordable housing in Sahelian Africa is essential. This advocacy, currently largely ignored, must be legitimately supported by the communities and their leaders, in particular the women's organisations directly concerned by this neglected issue. In addition, the urgency of adapting to climate change reinforces the need for this advocacy and its inclusion in public policies at local, national and international levels.

In view of its expertise in the large-scale distribution of adapted housing solutions, AVN can offer to coordinate the initiatives of all the players involved in the subject, and the deployment of their actions at different scales.



## STRONG POINTS OF THE PROPOSAL

- ➔ Mobilisation of the network of operator partners involved in the implementation of the AVN programme (CBOs, partners, women's groups);
- ➔ The training and federation of the natural leaders best able to carry out this advocacy;
- ➔ Registration of AVN in international networks of actors bringing different expertise and converging positions;
- ➔ Provision and production of a documentary corpus for promotional actions.



### EXAMPLES OF INSERTION IN INTEGRATED DEVELOPMENT SYSTEMS

- Rural development
- Vocational training and employment
- Climate adaptation and mitigation
- Water, sanitation and hygiene
- Gender
- Peace and social cohesion
- Public policies

## DOCUMENTATION



### Results and impacts

**Nubian Vault eco-construction**  
(Pre-Operational Guide)

**12 key points on appropriate housing**

**The integration of the NV in public policies** (FR)