Towards a Sustainable Access to a Lasting Habitat for all in Sahel Africa: Using Ancestral techniques.

Objectives:
- Promoting the Voûte Nubienne ("Nubian Arch") technique through awareness-raising towards local populations (creating demand)
- Organizing the training of local builders (creating supply)
- Supporting the market hence created to widely disseminate its positive social impacts.

Methodology:
The popularization program “Sahel Dirt Roof” of Association Voûte Nubienne (AVN) reverses the habitat problematic in Sahel.

Summary
The Association Voûte Nubienne ("the Nubian Arch Organization") promotes an ancestral African technique for the construction of timberless vaulted roofs.
Materials are found locally. The technique is easy to develop. The builders are trained by local people.
Results: Changes in the supply and demand for these products.
Because of the lack of wood, Sahel populations have no choice but to use their meager food, health or education budgets to use sheet metal roofs that are expensive, fragile and utterly non-adapted to the local culture and environment.

The VN technique lies on building roofs with dirt as the sole material. Awareness activities led by AVN create demand for VN building and training. The AVN teams follow-up with the builders so that they can meet this demand in a manner that it as autonomous as possible. New constructions and trainings provide examples that strengthen the newly established markets.

**Success hypothesis:** once the number of beneficiaries of VN is over 5% of the population of Sahel, the movement towards ownership of the VN technique will enter a new internal dynamic for societies concerned. It will therefore respond to the major social challenge of sustainable access to quality architecture for the populations of Sub-Sahara Africa.

The integrality of actions is coordinated by AVN International. The organization trains, through its missions, new local staff as to control the efficient development of its popularization program.

NB : AVN does not directly build buildings; its role is to generate and energize an autonomous market driven by independent local actors. The majority of trainings happen “on the job” in a real market context: they take place on existing constructions sites, rather than in schools where teachings would be disconnected from reality.

### Results:

<table>
<thead>
<tr>
<th>Provisional</th>
<th>End of 2009</th>
<th>End of 2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>VN built</td>
<td>890</td>
<td>7400</td>
</tr>
<tr>
<td>Thousand euros in salaries generated</td>
<td>356</td>
<td>2900</td>
</tr>
<tr>
<td>Trained builders</td>
<td>196</td>
<td>1600</td>
</tr>
<tr>
<td>Beneficiaries</td>
<td>9000</td>
<td>60000</td>
</tr>
<tr>
<td>k€ of cumulated annual costs</td>
<td>280</td>
<td>2000</td>
</tr>
</tbody>
</table>

- Several tones of CO₂ are offset
- Over 70% of average annual growth

### Sources:

**Association la Voûte Nubienne** : [www.lavoutenubienne.org](http://www.lavoutenubienne.org), Traduction Estelle Fach.