



EARTH ROOFS IN THE SAHEL

Since 2000 a French mason has been reintroducing the ancient Nubian technique of the vaulted roof to sub-Saharan Africa. This ecological and economical alternative to timber and sheet metal is supported by the Hermès Foundation.

How do you go about improving living conditions in the Sahel, a region where over 70% of inhabitants do not have access to decent housing¹ and where the population is expected to double by the year 2020? Thomas Granier has found a solution: an adaptation of the Nubian vaulted roof. Using earth and mud bricks dried in the sun, this technique developed in Nubia (Sudan and southern Egypt) thousands of years ago provides an alternative to timber, which causes deforestation, or sheet metal, which is expensive, fragile and causes pollution.

Made with local materials by local labour, these pleasingly curved structures are strong, afford good insulation against heat and cold,

and fit harmoniously into their environment. So far some eight hundred of these roofs have been built, mainly in Burkina Faso but also in Mali and Senegal. One hundred and forty local masons have been trained in this method which does not require any special technical competence, and four thousand months of wages have been generated. And that is only the start. "Our aim", says Granier, speaking of his association² "is to develop the Nubian vaulted roof so that it becomes an integral part of local practices." This is no pipe dream: the number of constructions is increasing by 70% a year.

1. UN-HABITAT, World Resources Institute, 2006.

2. www.laconstruction.org