

Mbakadou is a Senegalese rural village, population 500, inside the pre-desert Saharan area.

The primary school currently has only one classroom, and a catchment area which includes other villages dozens of kilometres away. There are problems of overheating of the classroom and erosion caused by strong desert winds.

Solidarietà Dimbalente contacted ASF-ITALIA to put together a sustainable and efficient project for the construction of the other five classrooms.

In addition to the consolidation of the existing building and the planting of extensive vegetation, the project foresees the construction of five new classrooms, a communal space and a protective wall against the winds.

The first phase foresees the construction of two new classrooms, consolidation of the existing building and the beginning of the planting project.

Mbakadou Primary School

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Principle 5

Facilitate the use of appropriate technologies, materials and labour adequate to local values, to the cultural specificity and responsive to the natural environment.

Appropriate materials
Waste materials such as tyres, will be used to build the wall protecting classrooms from winds. The classroom walls will be made with mud bricks in situ to avoid transport costs (the quarry thereby created will be used as a communal space for the village). Typha will be used as roofing and filling panels. It's a local vegetable fibre that can provide many benefits to indoor conditions.

Appropriate technologies
Bioclimatic principles will be used. Desertification and erosion will be mitigated by vegetation, a tyre wall and concrete base for each classroom block.

Appropriate labour
Construction will be led by a Mbakadou construction company and self-construction methods. As with the construction of the first classroom, men and women are very motivated to participate personally in the building of the school.
The goal is to develop new economic possibilities from their traditional knowledge.

Appropriate materials



typha

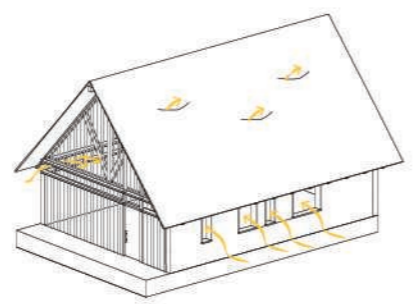


mud bricks

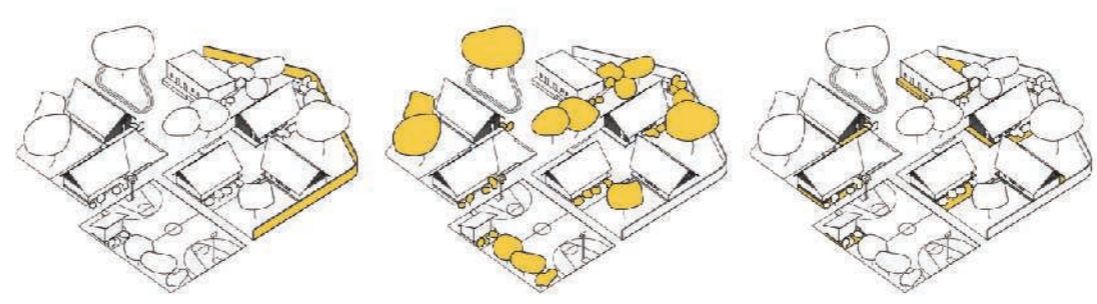


tyres

Appropriate technologies

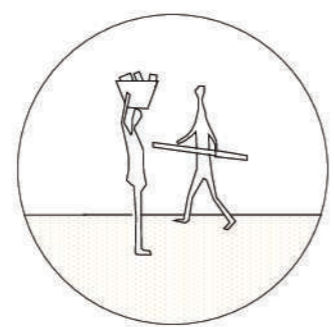


cross ventilation for thermal comfort

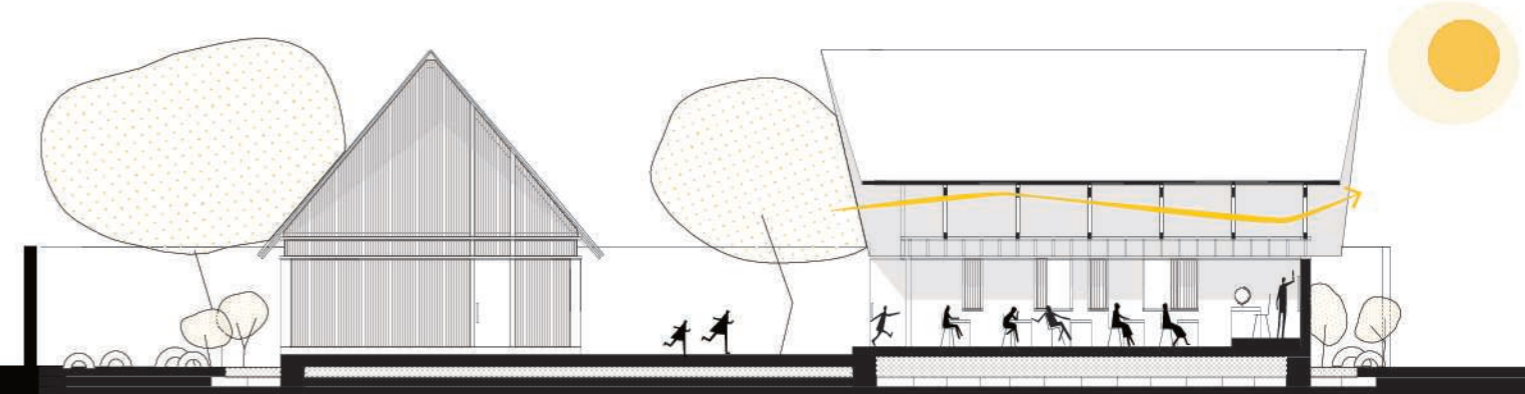
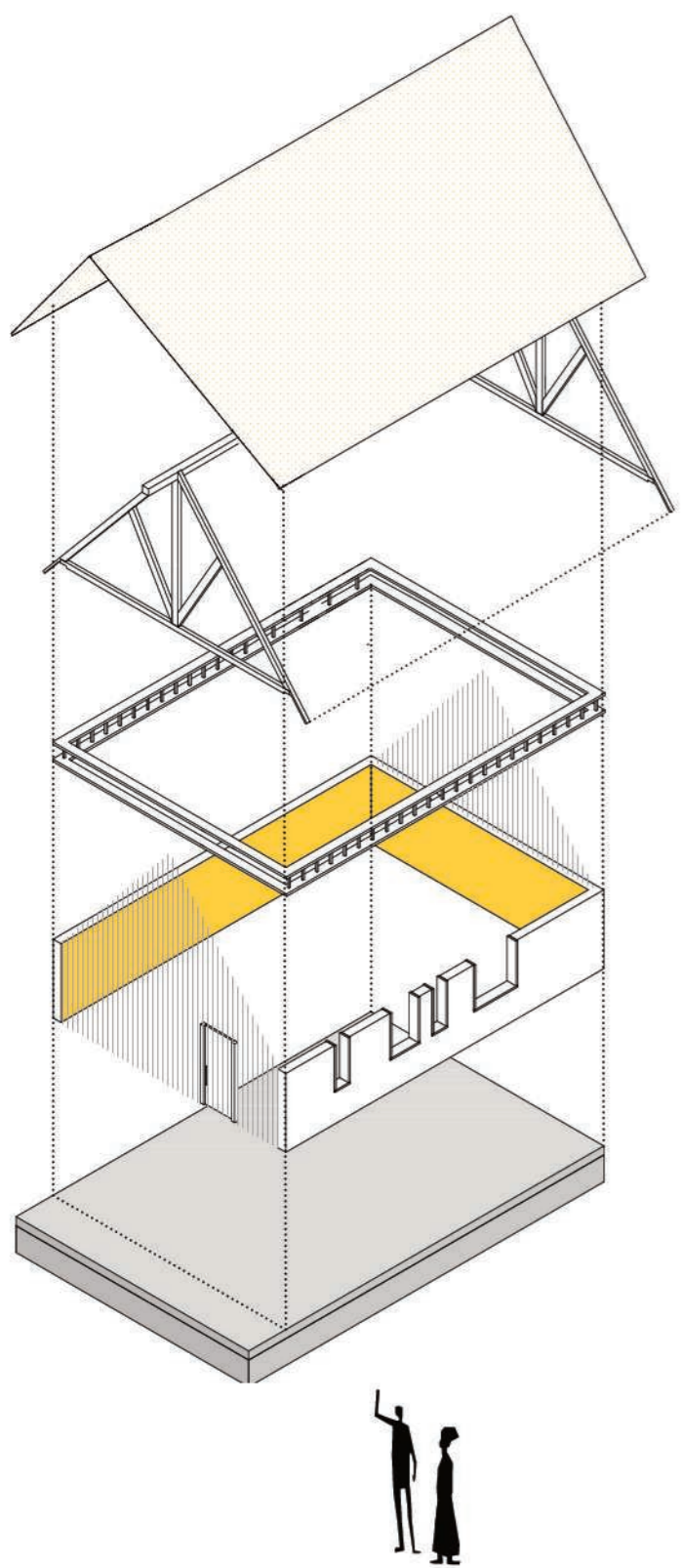


a tyre wall, vegetation and concrete base to mitigate desert wind erosion

Appropriate labour

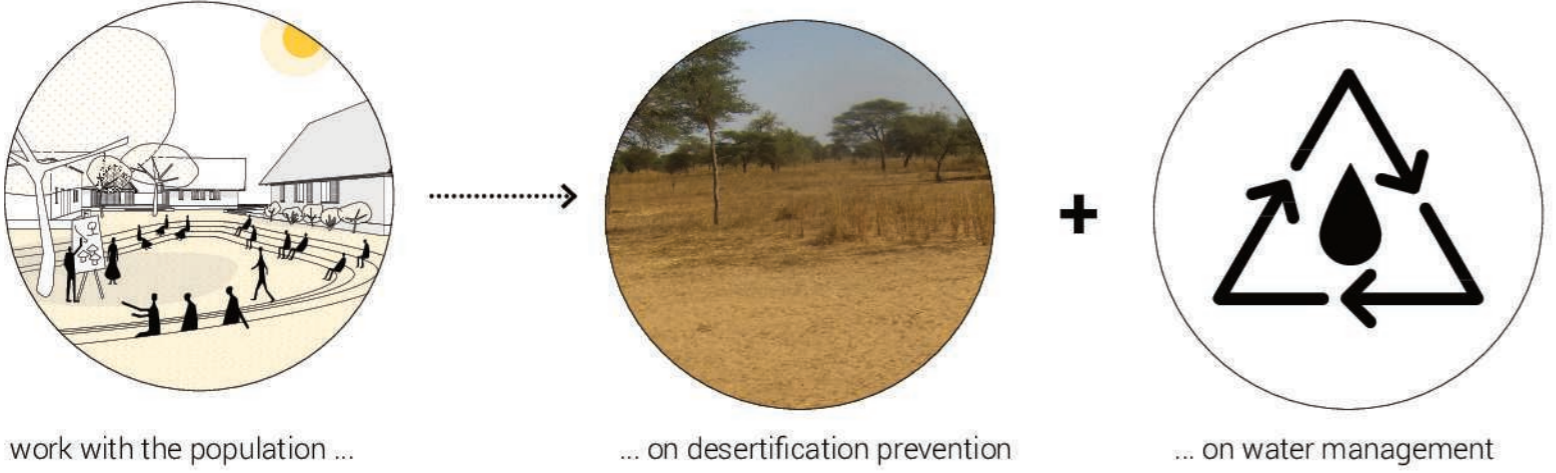


men and women of Mbakadou will be involved in self-construction



Principle 6

Sharing knowledge and promote discussion, reflection, awareness



work with the population ...

... on desertification prevention

... on water management

Sharing knowledge and capabilities

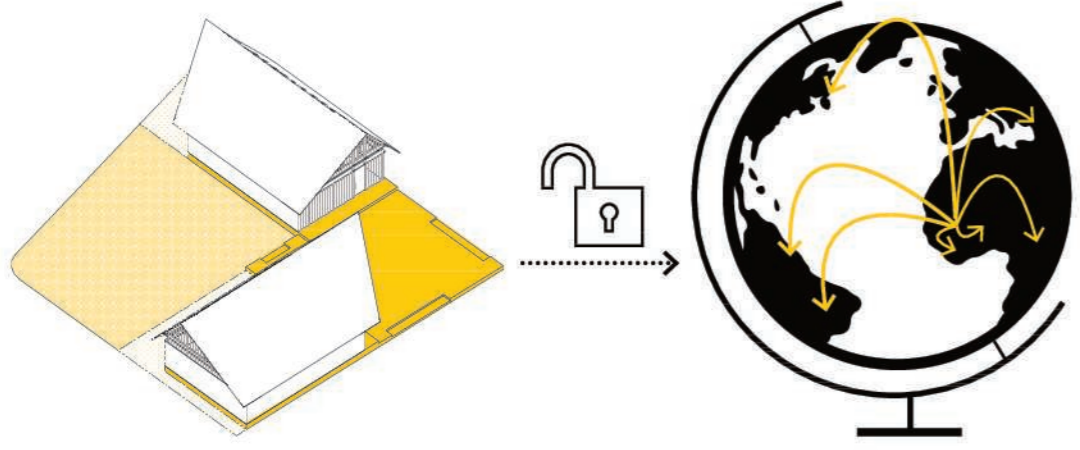


work with TypHass...

... on training local thatchers

... on experimenting new typha uses

Mbakadou Primary School is an Open Source project



Mbakadou Primary School

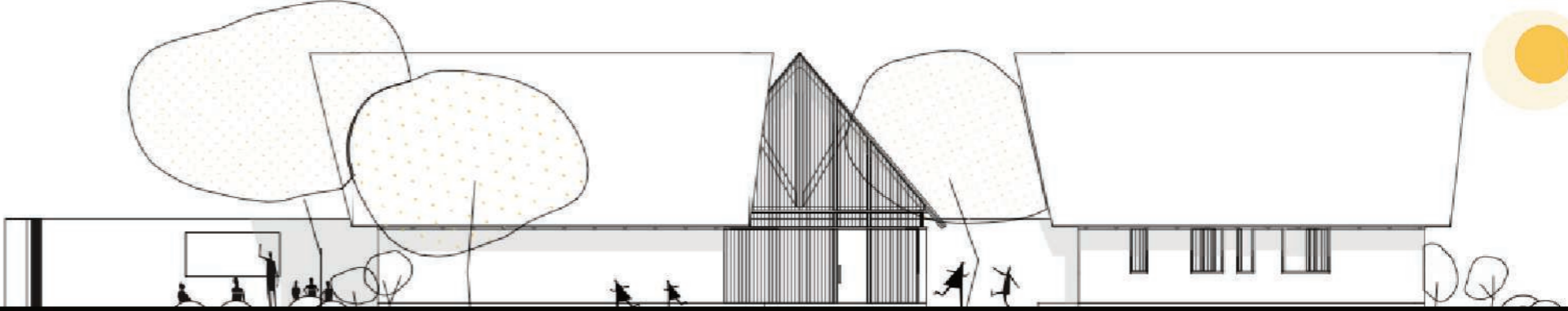
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Share knowledge, promote discussion, reflection and awareness, and collaborate in the advancement of the 'social production of habitat'.

Sharing knowledge
In this project we will apply water management in the bathroom block. The cooperation with TypHass is precious from many standpoints: in addition to training local thatchers, it gives us the chance to test this material in hitherto unused solutions.

Promoting discussion, reflection and awareness
We are now organizing an Indiegogo crowdfunding campaign to assist in funding and increase awareness of desertification. Through Solidarietà Dimbalente ASF-ITALIA is working with the population on desertification. We started with their knowledge (capability approach) of building techniques, planting and water management. We defined solutions together appropriate for their culture and responsive to the natural environment.

Collaborating in the advancement of the 'social production of habitat'
The aim of the project is to build a school, to create an autonomous local network, and to create an open source model available for other similar situations, with the aim of rural upgrading and land tenure.



Principle 10

Defend, promote and enable access to adequate and dignified habitat for all as a "Fundamental Human Right".

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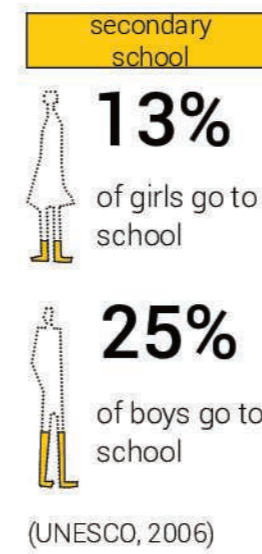
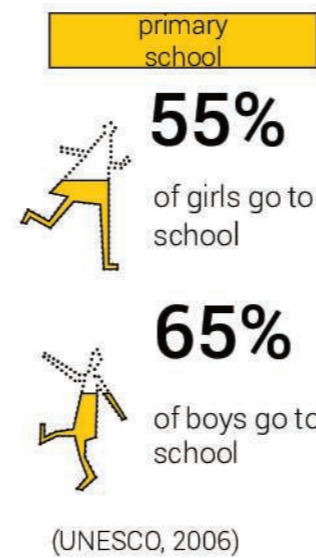
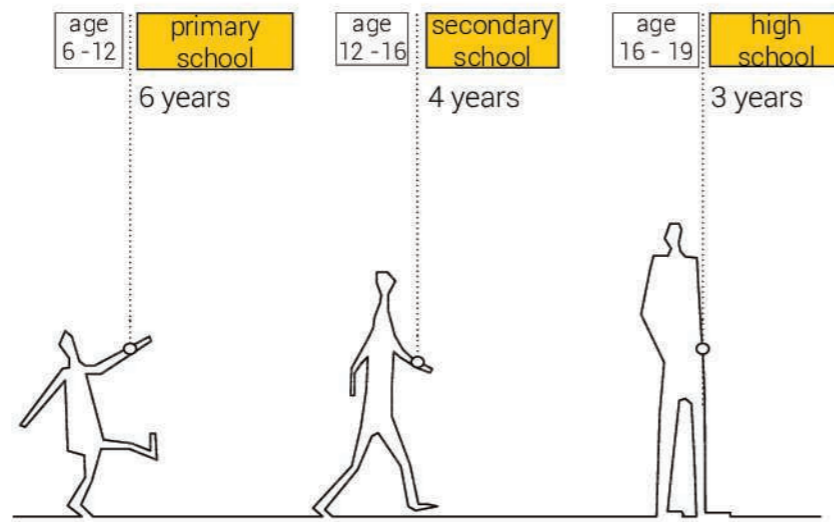
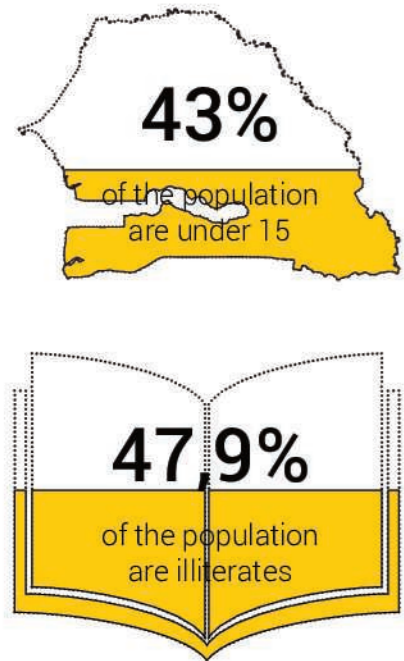
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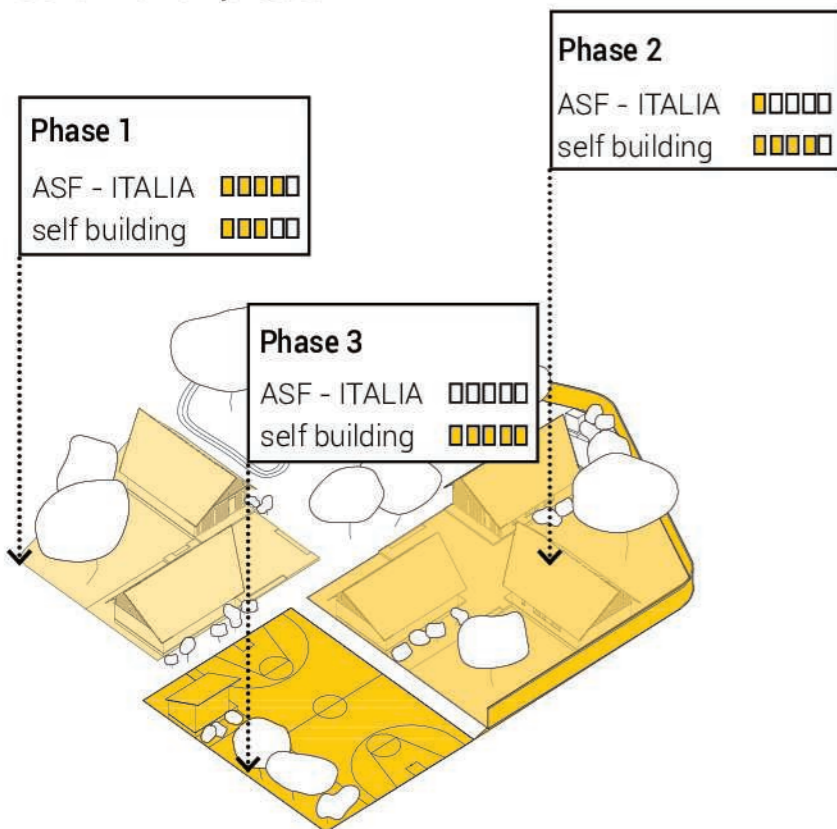
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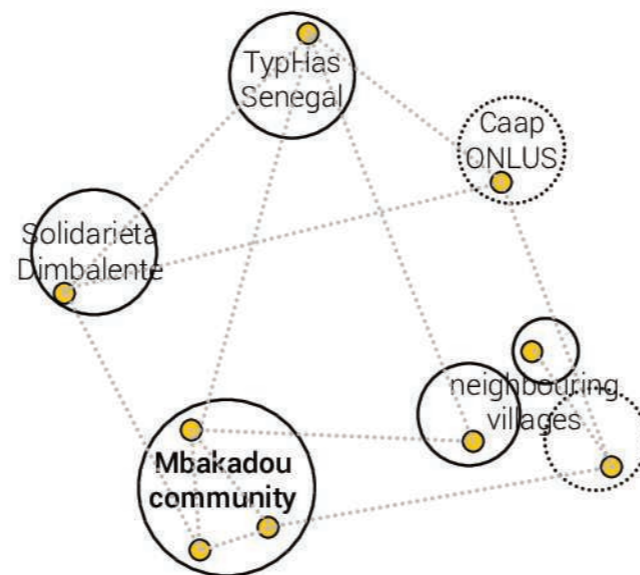
Understanding Senegal educational problem



Construction phases



Construction of a community-based powerful network



Mbakadou Primary School

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