

# BAMBOOS AND RICE



Reading the subject, we focused our project on the condition we considered to be the most important : very low maximum cost.

We made two decisions for our project :  
 - the use of local materials  
 - the use of non-high qualified workforce

First, we choose the bamboo for the structural system, which is growing abundantly in south China, north Laos and Vietnam, a region close to project location.

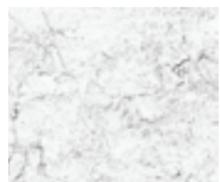
The second benefit of the bamboo is its very easy use. With it, there is no need of boards, but poles and beams fixed together, and also woven bamboo panels. All these materials can be used and prepared by non-qualified artisans, and without the use of industrial equipment.

For isolation, we choose another local material. The area is full of rice paddies, so using the rice balls was just an evidence. This lagging has many advantages such as very low cost, big thermal inertia and on top of that, it's ecological.

The structure is really the aim of our building and our plans, but the furniture fittings and interior design will also depend on it. The structure is to define the organisation of the space but not only. It will also be part of the inside design.

More precisely, the school lunchroom will be strictly functional, the tables will be extensions from the poles. In the library, we wish to extend the structure inside with our system of poles and beams in order to create shelves and benches. In there, children would occupy the space the way they wish.

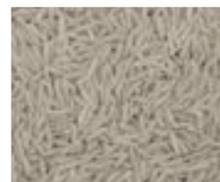
## INSPIRATION MATERIALS



Stones



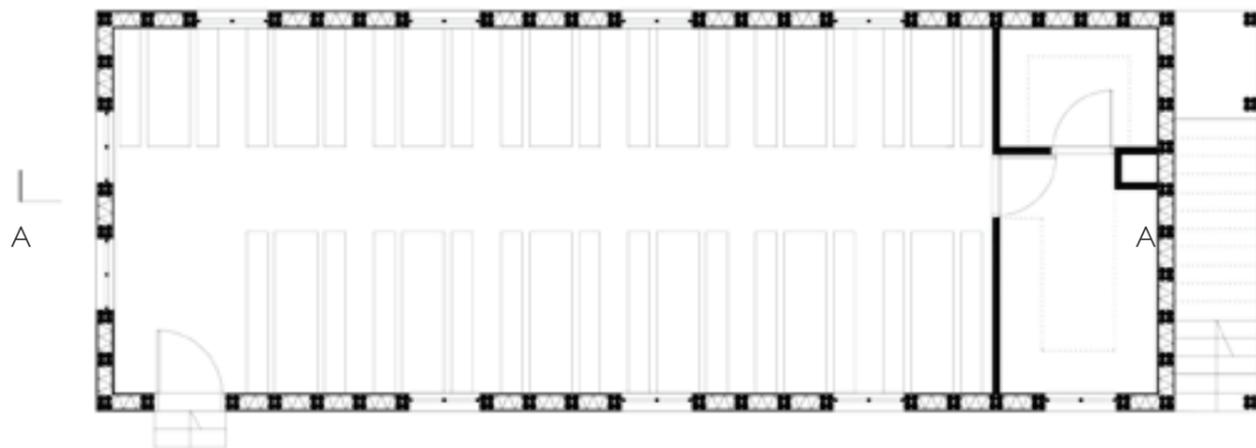
Bamboos



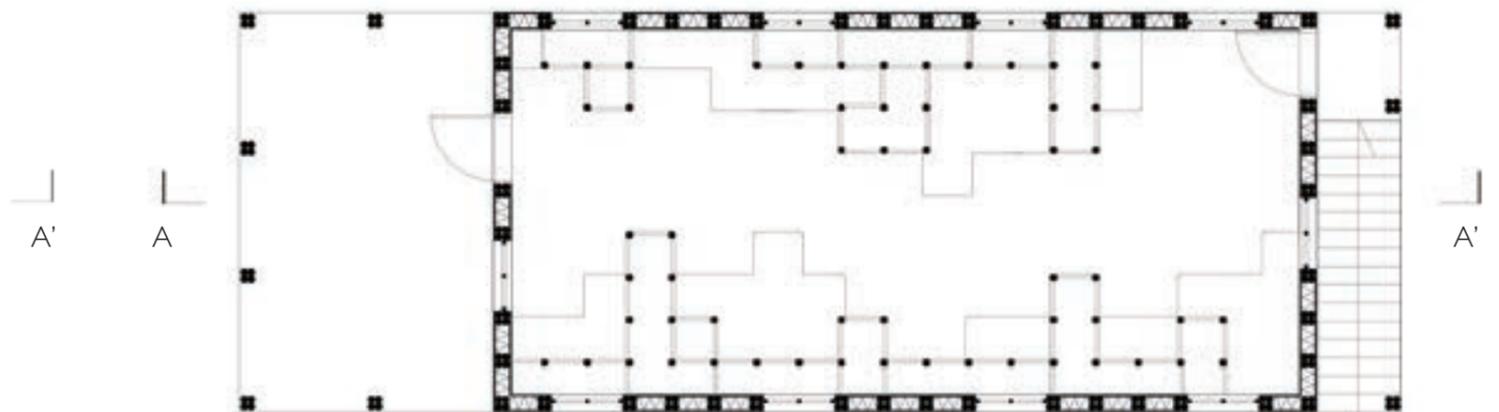
Rice



Tiles

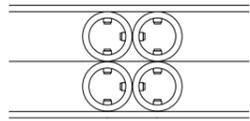


GROUND FLOOR 1:100

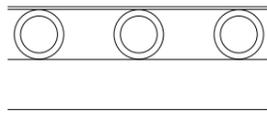


FIRST FLOOR 1:100

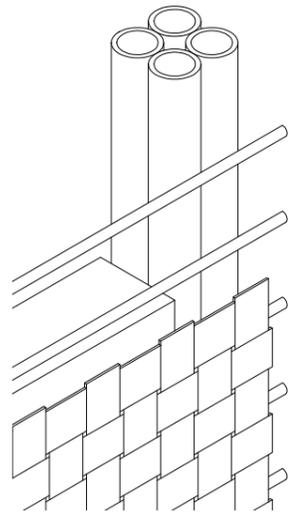
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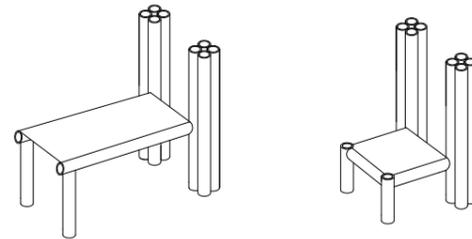
**The wall.**  
Poles are made of 4 bamboo tubes fixed together with dowels.



**The floor.**  
A system of crossed bamboo poles will sustain the floor in woven bamboo, a very resistant material.



**Axonometry of the different components of the walls :**  
On the system of crossed poles, an intermediate structure made of thin bamboo pole cut lengthwise is nailed to strengthen the structure. Above it, the woven bamboo floor will be fixed. In between, we place the rice balls for isolation.



**Pattern of two types of furniture :**

Tables are extensions of the structure with two beams slot into the wall poles and sustain by two small poles. On top of it, we place a piece of woven bamboo similar to the one on the floor and on the walls

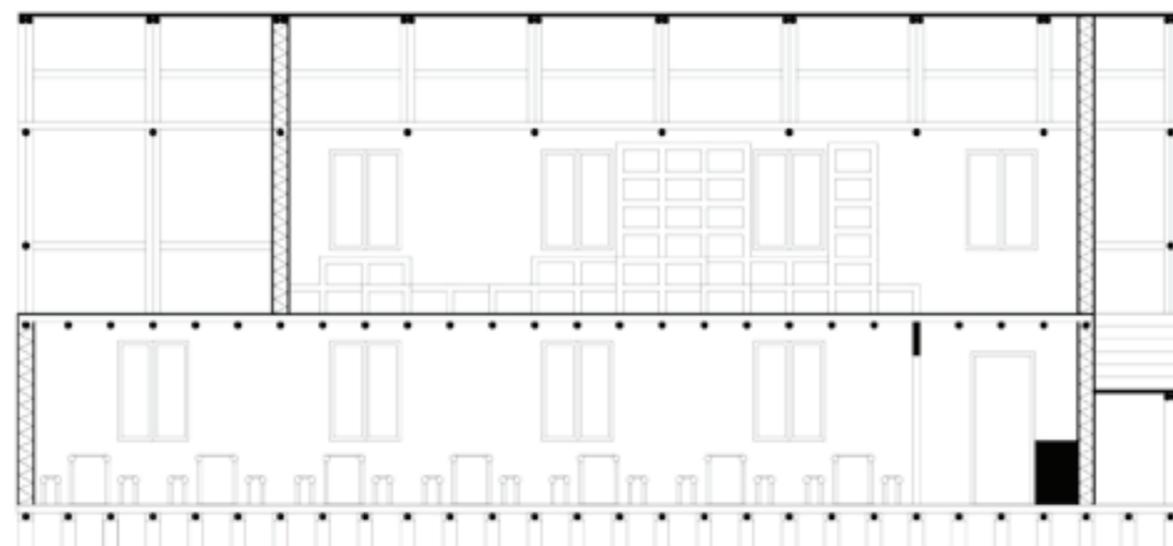
Shelves are slightly similar, the difference is the extension which create an overlap of benches or shelves



Inside view of the canteen.



Inside view of the library.



SECTION AA' 1:100