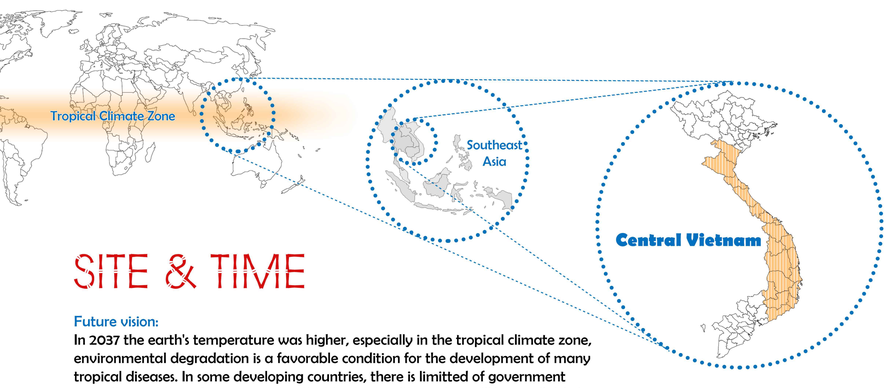
A241

BAMBOO HEALTHCARE CENTER 01



BAMBOO HEALTHCARE CENTER

2017 UIA-PHG International Student & Young Architect Competition
SMART, GREEN & BEYOND: HEALTHCARE FACILITY OF THE FUTURE



SITE & TIME

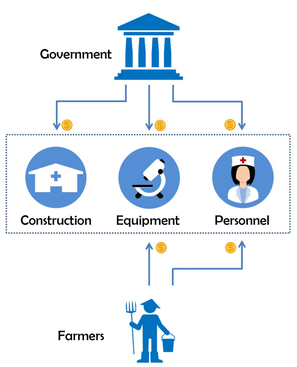
Future vision:
In 2037 the earth's temperature was higher, especially in the tropical climate zone, environmental degradation is a favorable condition for the development of many tropical diseases. In some developing countries, there is limitted of government capacity and there is no guarantee that better health services will be available in all regions. Central Vietnam is one of the typical cases. In the rural areas, farmers can not enjoy better medical services or must pay more money to get it. In order to create a better future for vulnerable groups in rural area, we propose to build a new health care system.

A HEALTHCARE CENTER BUILT BY LOCAL FARMERS
A HEALTHCARE CENTER SERVING IN RURAL AREAS
A SUSTAINABLE ARCHITECTURE DESIGN

TODAY

In general, the government is responsible for the cost of construction of healthcare facilities, such as equipment and personnel for each medical center. Farmers also need to pay more when they use medical services.

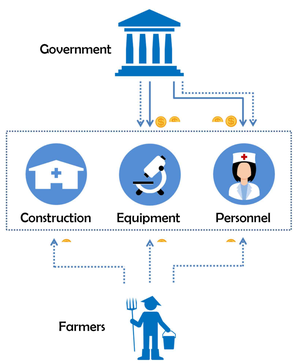
Current problems:
Farmers have to pay more medical expenses



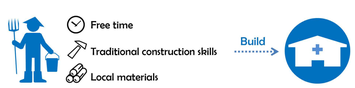
FUTURE

Implementation method (A new model): For some of the small healthcare centers in the rural areas, the government can omit construction costs, and increasing investment in equipment and personnel to improve the quality of medical services. At the same time, farmers can spend less money to build health centers, to get lower cost of medical services.

Future goal:
Farmers have to pay less medical expenses



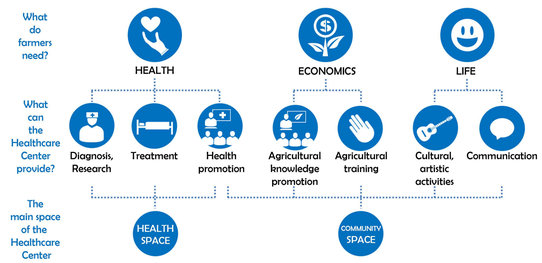
Feasibility:
Farmers have more free time, they master a lot of traditional construction skills, and local materials are abundant and inexpensive, these three points are the viable factors for farmers can build small healthcare center. Certainly, behind it is the government's reasonable policy and professional guidance.



HEALTH & COMMUNITY

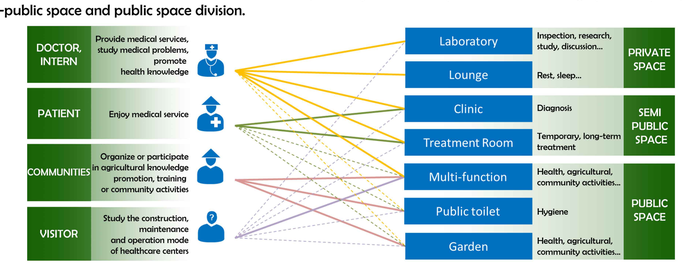
Healthcare facilities in the future should not be simply medical functions, it also needs to combine some other functions that farmers need. Farmers commonly need good health, stable agricultural economic income and a happy life. If the Healthcare Center can meet these needs, that may attract farmers and improve the level of community healthcare.

The Healthcare Center is also a Community Center



USER AND SPACE STRATEGY

Doctors and farmers are the protagonists
Doctors, patients and communities are the main users of Health Centers. Health activities and community activities can be carried out equally at the same time. But then, we may limit the scope of activities through private space, semi-public space and public space division.



BAMBOO HEALTHCARE CENTER 02

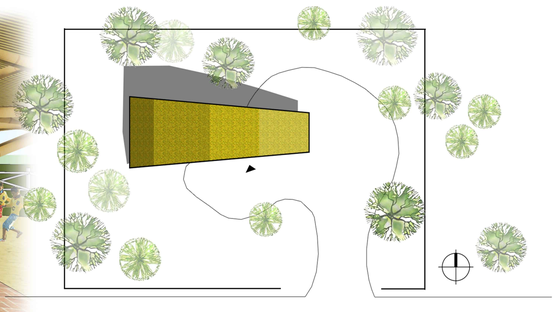
LOCAL MATERIAL

As a natural, ecological material, bamboo is very common in Vietnam. Whether in traditional or modern architecture, the use of bamboo frequency is relatively high. It is a very important as local building material in Vietnam. The benefits of using bamboo: short growth time, good structural performance, easy to take and operate, low price, harmless to nature etc. Farmers can use this material as the main for building healthcare centers, beside using straw, stone, and brick.

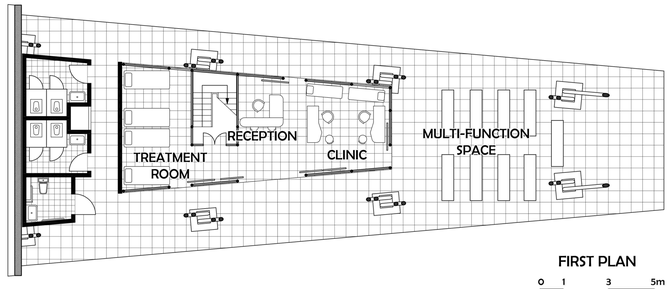






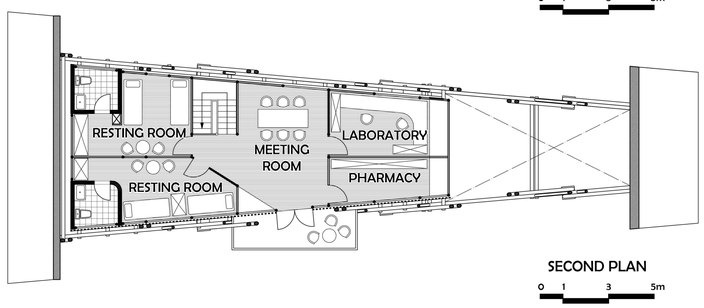


SITE PLAN



FIRST PLAN

0 1 3 5m



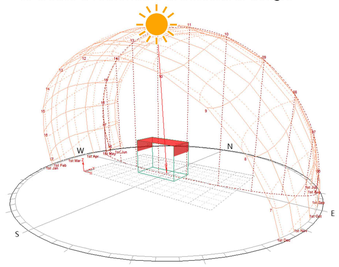
SECOND PLAN

0 1 3 5m

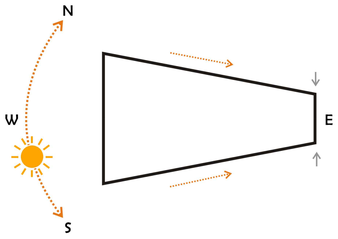
The first floor of Bamboo Healthcare Center including public and semi-public space, convenient for medical activities and community activities. The second floor including inspection, research, and resting space for doctors and interns. Transparent wall is conducive to ventilation, it is a common way to deal with hot and humid climates.

SUSTAINABLE ARCHITECTURE

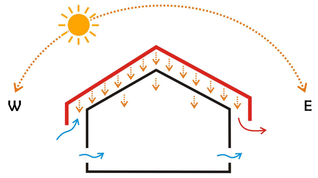
According to the local climate characteristics, local materials, traditional forms... to create a reasonable architectural design.



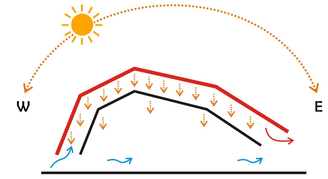
Insulation and ventilation are important work in summer in Central Vietnam



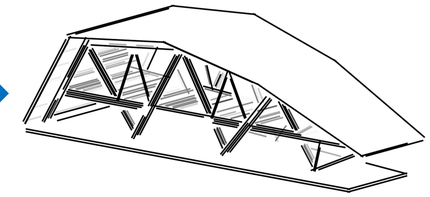
Reduce the impact of the West sun



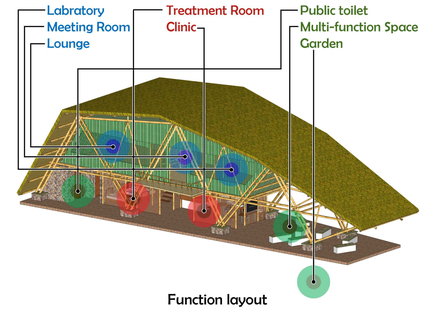
Double roof is an effective insulation method for buildings in Central Vietnam



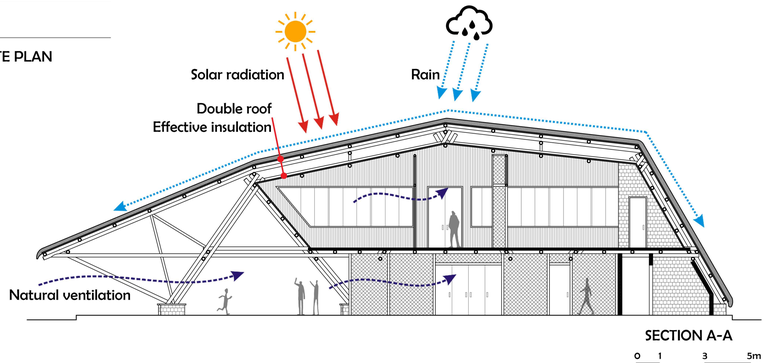
A natural, contains traditional forms, meet climatic conditions of building forms



Large straw roof, bamboo structure and enclosure are the basic elements of Health Center

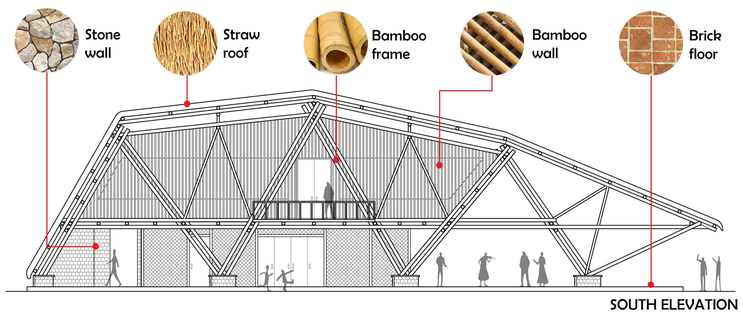


Function layout



SECTION A-A

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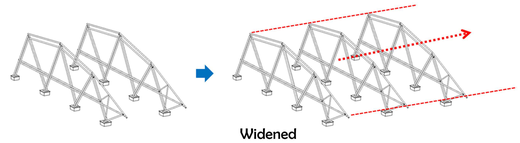


SOUTH ELEVATION

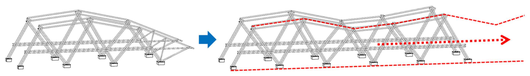
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VARIABILITY

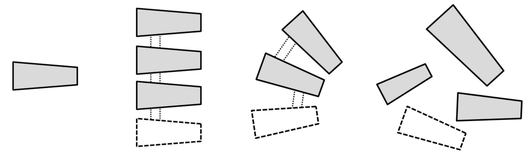
Facade structure is the basic unit of the building, it can be adjusted according to different conditions and requirements. Through the arrangement or extension of the facade structure to make a variety of changes. Different combination methods of building volume is also an important means to form diversity.



Widened



Lengthened



Diversity combination







