A241
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 healthcare centers, to get lower cost of medical services.
- Future goal:
- Farmers have to pay less medical expenses

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 who 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 spaces, semi-public space, and public space division.

SITE & TIME
Future site:
In 2027 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 a limited 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 cannot enjoy better medical services or must pay more money to get it. In order to create a better future for vulnerable groups in rural areas, we propose to build a new healthcare system.

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Feasibility:
Farmers have more free time, they can build a lot of traditional construction skills, and local materials are abundant and inexpensive. These three points are the main factors for farmers to build small healthcare centers. Certainly, behind it is the government’s reasonable policy and professional guidance.
LOCAL MATERIAL

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

SUSTAINABLE ARCHITECTURE

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

SITE PLAN

The first floor of Bamboo Healthcare Center includes 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 climate.

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.

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

Stone wall
Straw roof
Bamboo frame
Bamboo wall
Brick floor

Natural ventilation
Solar radiation
Double roof
Effective insulation
Rain

Function layout

Widened
Lengthened
Diversity combination