HOME SHANTI HOME

PROBLEM

People in slums face a major problem of housing affordability and comfortability.

Let's take an example of Dharavi, in summer living in slums here is very tough due to overheating of the closely packed room as there roof are not able to provide insulation properly.





- Mop roof is one such technology which provide insulation for the roof. But the cost for 1 m^2 is ₹4000.
- Using Paints for insulation



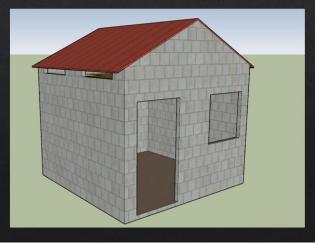




Solution

• HOME SHANTI HOME

We designed a home which is affordable and comfortable in extreme weather condition.



Components

· Plastic Brick

It is made up of plastic and ash from industries. It costs one third compared to conventional bricks and provide more strength and isolation.



· Bamboo and soil roof

We designed a sheet made up of bamboo and covering with mud. This mud is made up from soil and cigarette filters. This layer will act as isolation layer.



· Corrugated iron

It is a shade which is over bamboo roof. It helps in covering the roof and provides a shield against rain.



DESIGN

- In this design we basically aim to reduce the cost of home and insulate it properly to avoid overheating.
- First of all, we will use plastic bricks to build walls and then build a roof which is made up of bamboo and mud where mud contains soil and processed filters of cigarette butts which will help in holding the soil.
- Above the roof, we will put metal sheets which will prevent rain water and some part of heat.
- Due to the metal sheets the area above the roof can become so hot, to prevent this we made ventilators which help in air circulation leading to decreasing the temperature. This area can also be used as storage.
- This Design can serve the people with lower income level and can also replace conventional homes as it is cheaper by more than 50% and more efficient.