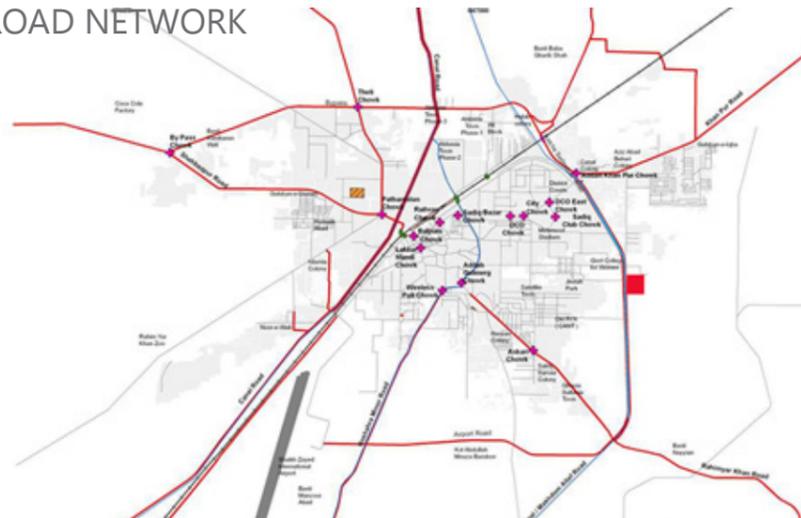


My selected site is in Rahim Yar Khan which lies in central region of Pakistan, it is situated in the alluvium plain between Indus River in the West and Cholistan in the East. It is at distance of 634 km from Karachi and 566 km from Lahore. This Rahim Yar Khan is divided into three main physical features i.e. (a) Riverine area; (b) Canal irrigated area and (c) Desert area which is called Cholistan. The Environment of the area has a great deal of impact on the people in terms of their living and working pattern. The Environment of Rahim Yar Khan is characterized exceedingly hot in the summer when the temperature ranges between 100o F to 120F with the frequent dust storms in June and July, while in winter it drops to between 40o F to 70o f. the rainfall is irregular and the average of rain is 165mm per annum. The reason of selecting Rahim Yar Khan as my area in central Pakistan because it is the agricultural hub of Pakistan and it produce a lot of natural materials whose by product can somehow be used as a building material to make it affordable and sustainable etc. secondly in near future Rahim Yar Khan can face the issues being generated by the rapid urbanization and low income group might not be able to build their houses in the city because of high property rates etc. Third reason is that sheikh of Dubai Mr Sheikh Khalifa Bin Zayed showed a keen interest in that area and owns his own property as well as funded a lot of projects there so if any of such housing gets succeed some more might get funded. In Rahim Yar Khan the area that I have selected is under developing area of RYK city and my site is connected to the canal road of Rahim Yar Khan which will help in solving a lot of problems.

CENTRAL REGION OF PAKISTAN: RAHIM YAR KHAN



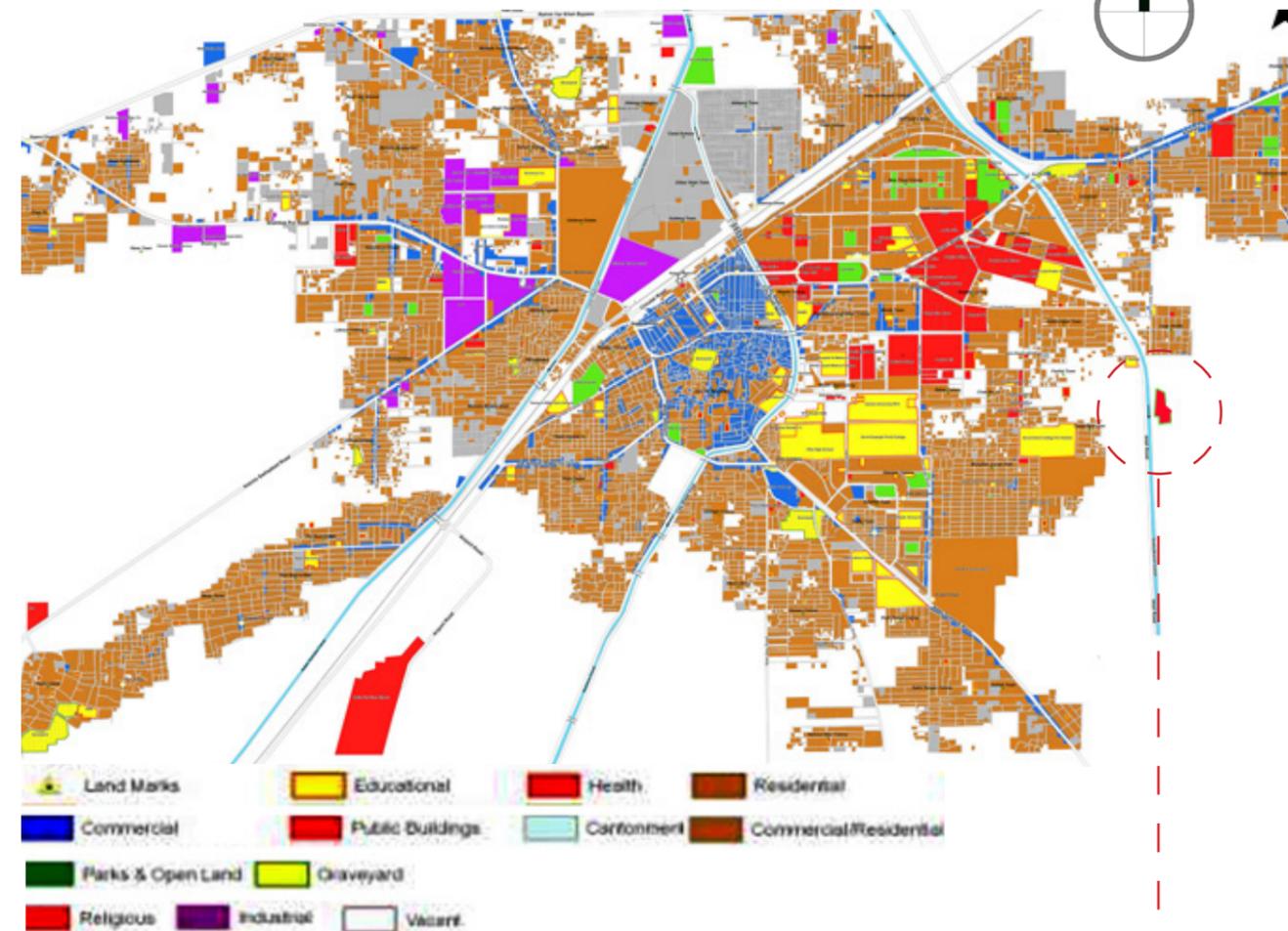
ROAD NETWORK



LANDMARKS



LANDUSE MAP - RAHIM YAR KHAN



SITE



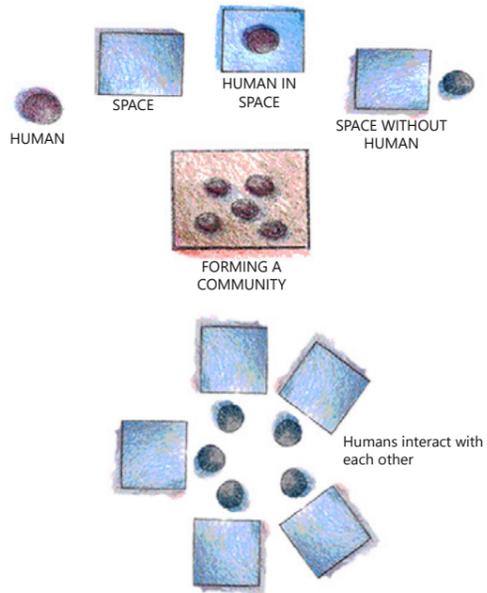
MASTER PLAN



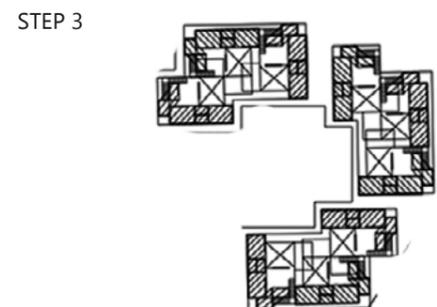
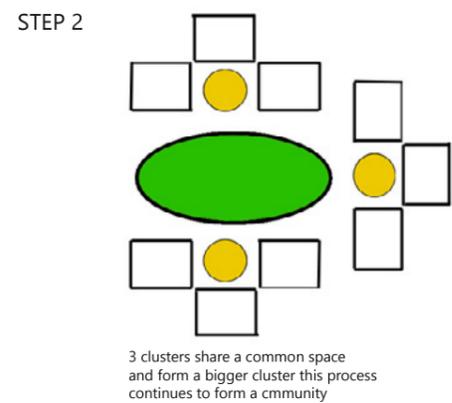
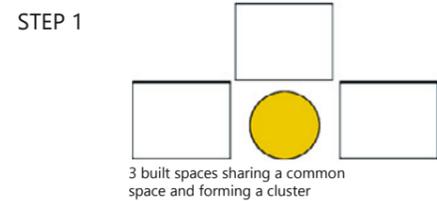
N  SCALE
1/64" = 1'-0"

SINGLE STORY HOUSE

TRANSLATION INTO DIAGRAM



CONCEPTUAL DIAGRAM



CONCEPT

The people have always been dependent on the other people and achieved whatever we have today is because of sharing ideas and helping each other out. Nothing could have been possible if a human would have isolated themselves. My design philosophy starts with the tagline "Together We Grow". Our society have values for our neighbors and we share our events with them. Neighbors are the people who complete your living. I want to design something which shall respond socially and allow the people to enhance the concept of neighborhood. This is going to be designed for low income group who is already challenged by a lot of problems but if they are living in a environment which tells them that they could move ahead by helping their neighbors. It is psychologically proven that you do what your space asks you to do. I actually want to transform the idea of neighborhood into architecture although the set of building are also called neighborhood but I want to design a architecture which gives you the feel of neighborhood, the connection of one's emotion to other through space.

PROGRAM

- Bed Room 1: 102 Sq.Ft
- Bed Room 2: 120 Sq.Ft (220 Sq.Ft)
- Living: 120 Sq.Ft
- Courtyard: 140 Sq.Ft
- Bathroom: 50 Sq.ft
- Kitchen: 37.5 Sq.Ft
- Store: 34 Sq.Ft

BUILD UP AREA

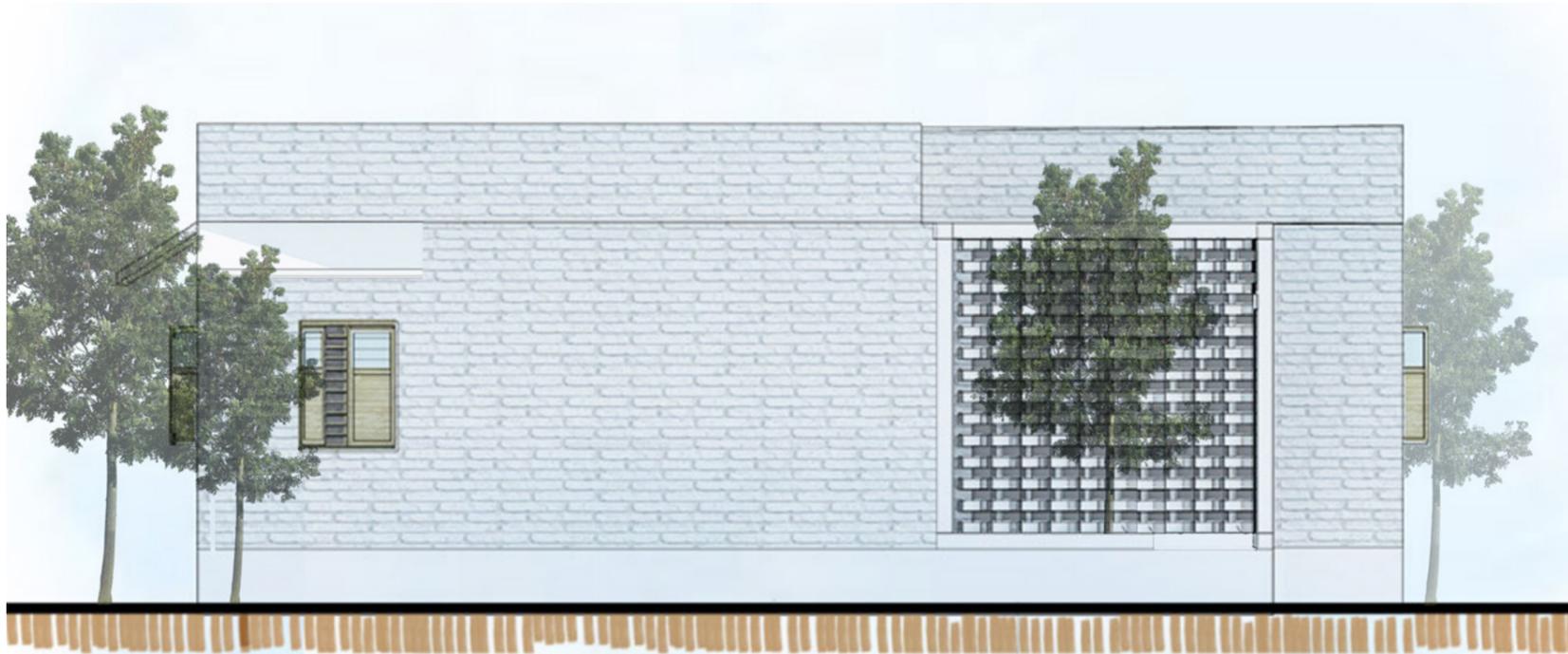
- Ground Floor: 435 Sq.Ft (40 Sqm)



GROUND FLOOR

SINGLE STORY HOUSE

ELEVATIONS



ELEVATION - LEFT



ELEVATION - REAR



ELEVATION - RIGHT



ELEVATION - FRONT

SINGLE STORY HOUSE

MATERIALS

While designing the residential units the main focus was on to the given requirements and for that something which had to play the most important role was the building material because it is a low cost housing project and at the same time it should be durable , sustainable , green etc . so my initial strategy for this project starts with the material study and the site where I can have such material in central region of Pakistan. I selected Rahim Yar Khan in the central region of Pakistan and the reason of selecting that site is because it is one of the agricultural hub of Pakistan where there are almost all the crops . and my plan was to use the local material as a building material as the region is agricultural so I decided to use the bi products of the crops in that region. My strategy was to use the bi product in a way that could sustain as well as work as the precedence for the people of that region so that they could use such things to make the houses their selves. I decided to use the bi product of sugar cane to make my building material and the reason for this was that the area was full of sugar cane and the sugar mills from where the bi product of sugarcane (bagasse) can easily be found in very cheap rates .I am using bagasse of sugarcane with its ash which is available from the sugar. factories in the region in v big quantity ,lime stone powder and cement although it can be used with clay as well but using it with cement for the sake of durability. The bagasse of sugarcane itself has a bonding element which plays a good role in bonding ie its sugar. forming all these materials to make a brick which is called as green brick which is environment friendly, can bear the temperature conditions , sustainable, green and most importantly cost affective.

I am also using some other materials like jute, thatch, used wood etc.



SECTIONS



SECTION - A



SECTION - B

DOUBLE STORY HOUSE

PROGRAM

Bed Room : 102 Sq.Ft x 3
(306 Sq.Ft)
 Living: 120 Sq.Ft
 Courtyard: 190 Sq.Ft
 Bathroom x 2: 95 Sq.ft
 Kitchen: 37.5 Sq.Ft

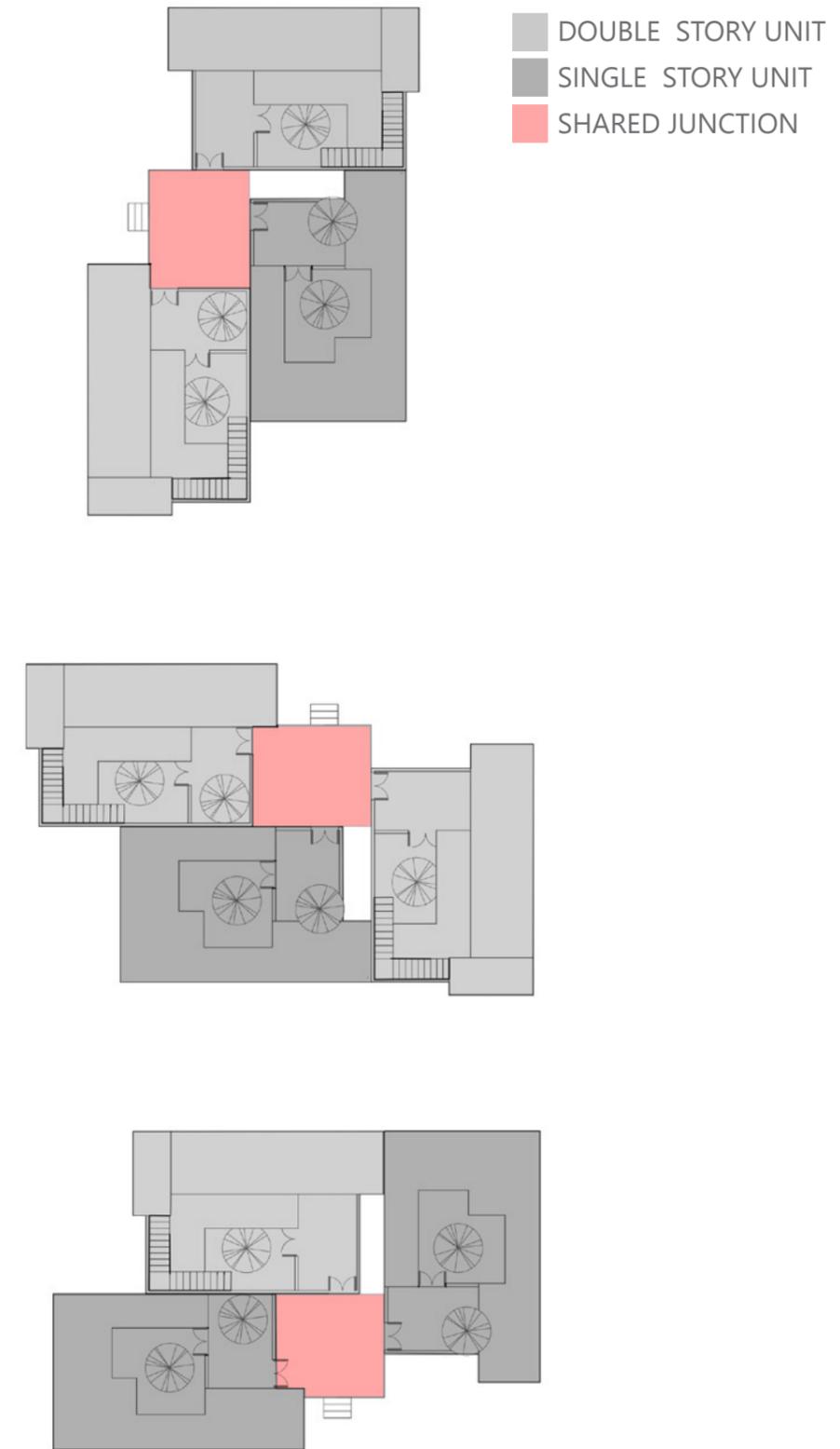
BUILD UP AREA

Ground Floor: 450 Sq.Ft
 First Floor: 381 Sq.ft
 Total: 831 Sq.Ft
 (77.2m)



GROUND FLOOR

CLUSTER TYPOLOGY



DOUBLE STORY HOUSE



FIRST FLOOR

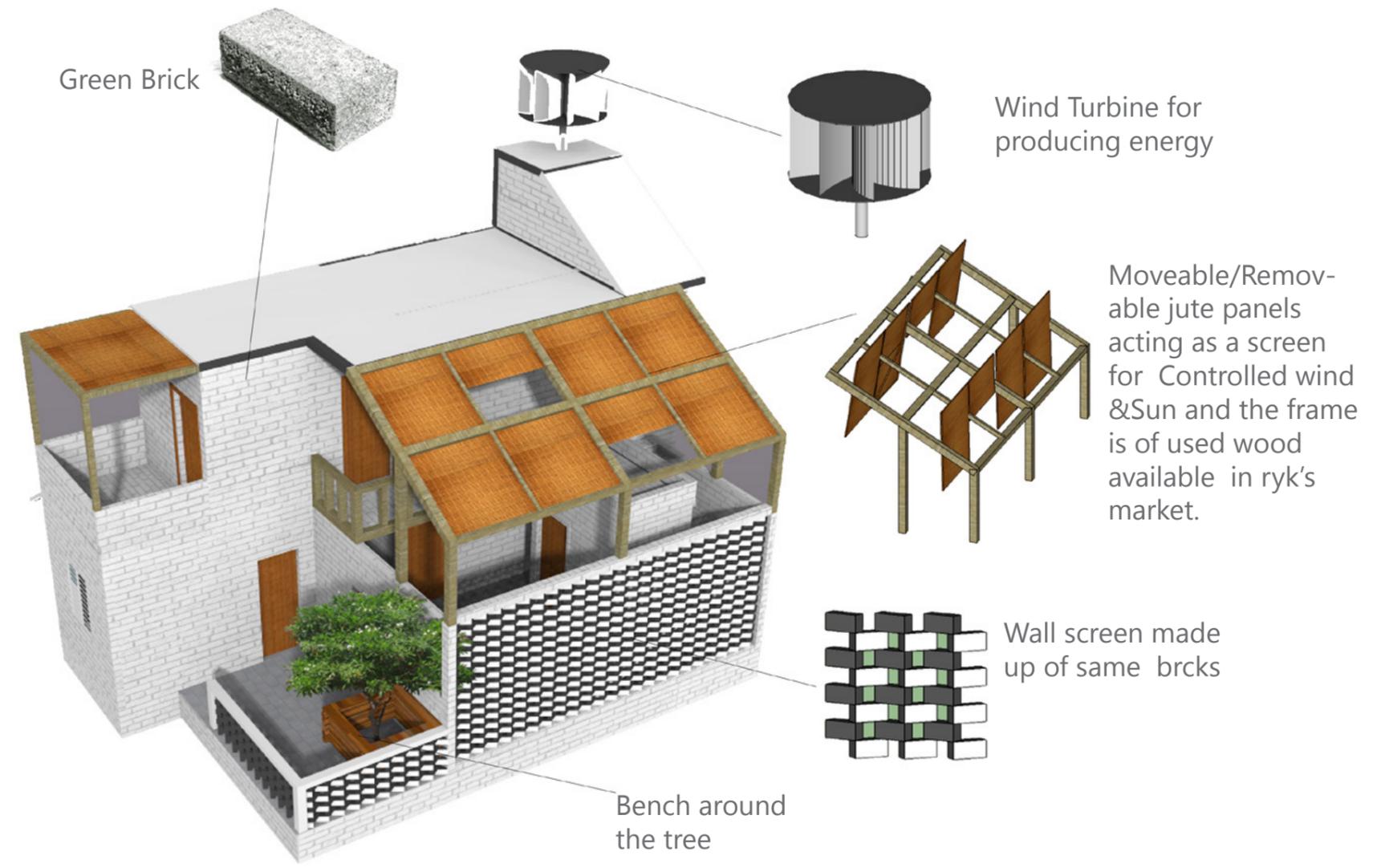
PROGRAM

- Bed Room : 102 Sq.Ft x 3 (306 Sq.Ft)
- Living: 120 Sq.Ft
- Courtyard: 190 Sq.Ft
- Bathroom x 2: 95 Sq.ft
- Kitchen: 37.5 Sq.Ft

BUILD UP AREA

- Ground Floor: 450 Sq.Ft
- First Floor: 381 Sq.ft
- Total: 831 Sq.Ft (77.2m)

Talking about the design as I have mentioned earlier that my concept is derived from neighborhood and I am talking about reviving the concept of neighborhood through architecture , this is what I have tried to transform in my master planning and residential units as well . I have designed a cluster of three units which is based on one single unit, two double units or vice versa and they are forming a bigger cluster combining with other clusters. In a cluster of three units there is a junction which is acting as a reception for the units so it will be acting as the active meeting space. My focus while designing was to design something like social responsible architecture. I am designing for the lower income group so I designed my master plan and units on the concept of help and forming each other or it can also be summarized as " Together We Grow". My single and double units are together and complementing each other. The people in that are have that essence that they respect their neighbors and if they are given a this elements through their architecture it might be something great in bringing them closer.



SECTIONS

INTERNAL SPACES HAVE BEEN DESIGNED IN A WAY THAT THEY CAN HAVE THE FULL OF BENEFITS OF THE NATURAL ELEMENTS LIKE WIND , SUN ETC. THE TILT JUT PANEL ROOF WHICH CAN BE SEEN HERE IN THE SECTION IS PLAYING THE MAJOR PART IN THE DESIGN IT IS ADJUSTABLE ELEMENT ACCORDING TO THE REQUIREMENT OF THE USER PLUS IT WILL GENERATE THE COOL ENVIRONMENT IN THE SUMMER BY CAPTURING THE DEW OF THE MORNINGS.



SECTION - A



SECTION - B

DOUBLE STORY HOUSE

ELEVATIONS



ELEVATION - FRONT



ELEVATION - LEFT



ELEVATION - REAR



ELEVATION - RIGHT



VIEW OF MASTER PLAN



FORMATION OF SINGLE STORY UNITS WITH DOUBLE STORY



CLUSTERS FORMING COMMUNITY SPACE



JUNCTION CONNECTING THE UNITS