LESTHO_MASERU

A PLACE WHERE ART IS PROMOTED THROUGH ANNUAL ARTS AND CULTURAL FESTIVELS. THE ICONIC IDENTITY OF THE CITY IS BASOTHO HATS WHICH IS LOCAL ART OF MASERU CAN BE SEEN IN THEIR ARCHITECTURE AS WELL AS LIVINGS. PEOPLE OF MASTERU DO PARAGLIDINGS,BIRD WATCHING, PONY TREKING,TROUT FISHING, MOUNTAIN-ERRING. THEY PREFER TO SIT OUTDOOR SPACES WHERE THEY CAN ENJOY OUTDOOR VIEWS OF MOUNTAIN.

RISE IN THE CITY

RISE IN THE CITY
LOW INCOME HOUSING
LESTHO, MASERU

Concept of design is to embrace an urban living structures that maintain the idea of neighborhood livings. Each house maintains the attributes of people and livings according to Maseru culture. By studying the city, it came to know that the People of Maseru love outdoor spaces and views that surrounds them.

The architectural identity of Maseru is the prominence seen throughout the road, a woven hat structure that you can see while entering the city. My concept is to generate these hat shapes in the low-income housings, which do not detach them from the society hence make it a part of city.

A future extension volume is left in each house proposal for organic growth of house which depends on personal attribute and behavior of users. The material use in the building is AAC CONCRETE BLOCKS which consume less cost then brick.

Reference: https://www.youtube.com/watch?v=cHX40vZKHxc&list=PLuwIyFOzBVGinFrczLigHp-DVNAHTsANe

Conecc Concrete Solutions Private Limited create a positive approach of adding contribution of themselves to the construction industry and promoting green building materials. From the beginning and commercial manufacture, there focus was to care and preserve the environment. These reliable producer of blocks and cover were experimented in the area of Northern and Western of Karnataka.

Another solution is to avoid mortar inside the wall and reduce the cost by adding a chemical named "SIKAFLEX CONSTUCTION" product of SIKA CONSTRUCTION CHEMICALS, AFRICA. SIKA is the company working on the reliability and quick work process of building process and construction. There contributions reduce the cost as well as time of the process. SIKAFLEX is an elastic joint resistant sealer which resists in the weather of harsh hot and tropical climates. It can be used in the interior as well but my suggestions would be only on exterior boundary wall.

Another option is to use brick wall to create boundary of building and the inner wall is partition of wood. These all are the materials that are used in Africa analyzed by the study.

CASE STUDIES

01 URBAN THINK TANK

The material that is being used in urban think tank's low housing project was AI which lower the cost with the intelligent making of solid outer structure. the share wall between 2 houses is one wall that divides the row houses inbetween and lower the cost of walls, just the roof and single slab will cost in house making.

APV BLOCKS

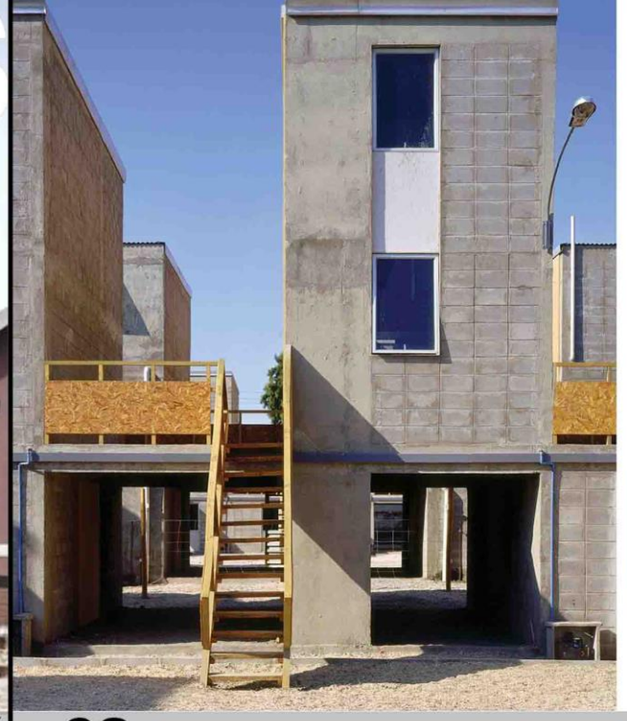
COMMON WALL

ALUMINUM FOIL

GLASS

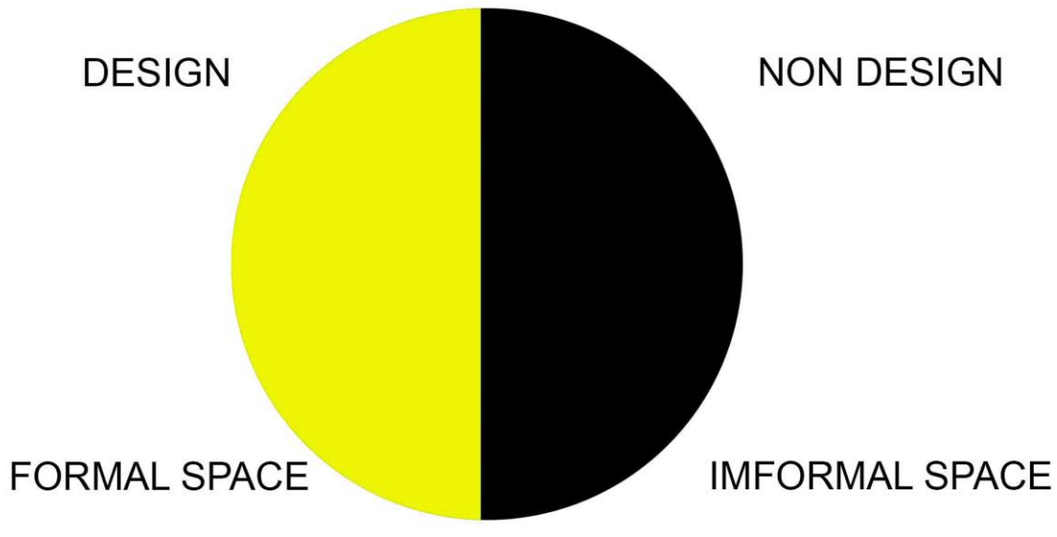
ALUMINUM FRAME

WOOD FRAME BASE STRUCTURE



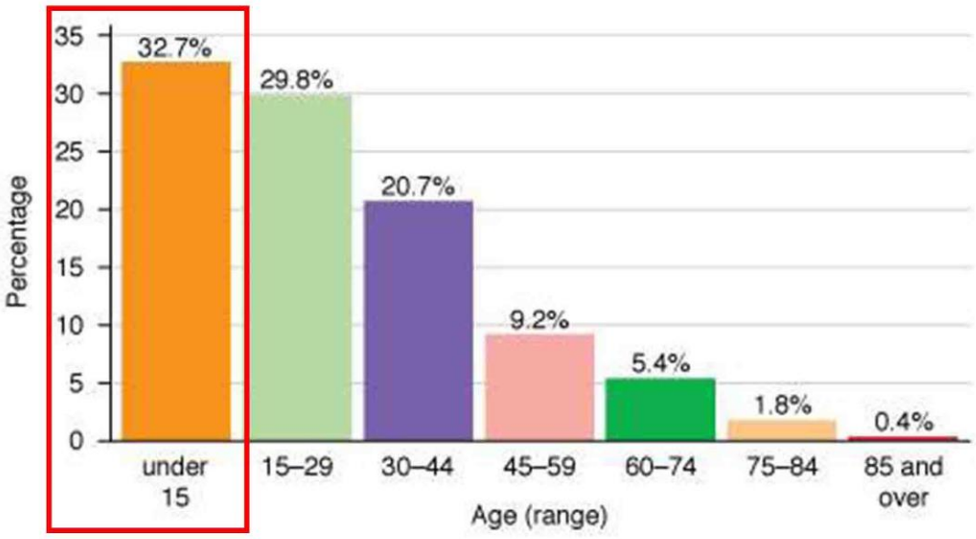
02 ALEJANDERO ARAVENA

The volumn given to the users in design v/s nondesign building by Alejandero was toward freedom of user space and architecture as well. It may be called as a common space or a space that utilized by the user of the house specifically.



The actual need of this is being judged through the site surveying, we have seen the duplex housing units and multi story tiny little houses that increases in no of floors by increase in the family. this volumn help this growth of house that may continous veritically that he shifted horizotally.

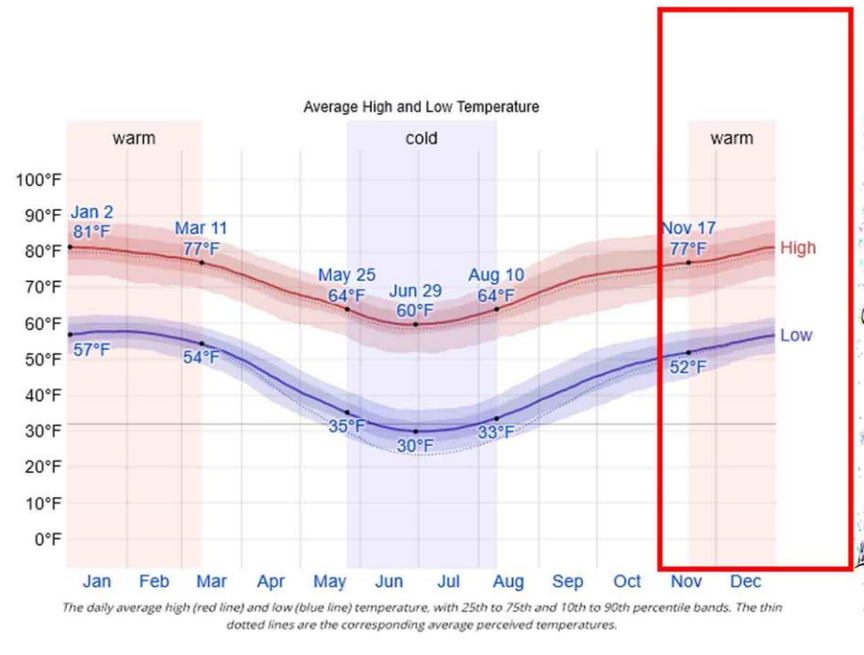
KNOW ABOUT MASERU SITE SURVEY



The percentage of age group live in Maseru is more of teenagers which is 32.7% in the breakdown of 2015. The activities and placements of house with programs have spaces for teenagers and toddlers. which adds the playfullness in space. Adding a playfulness and energy in living space doesnt mean to have some playing gaming zones but the arrangement of spaces and movements of up and down is arranged with regular non interrupted way which ultimately give room to the younger and older people hence it get amalgamated in a certain space where all of them are combined the multi use space.

Weather:

Most of the year The Maseru faced hot breeze which goes high toward 80 to 90*F. We use a manual solar heating way which perform a cross ventilation system with the circulation of wind from house toward outdoor and again back to inner space. this will create an enclosed outdoor space with the controlled ventilation loop that circulate the cold air and warm air inside the space.



The daily average high (red line) and low (blue line) temperature, with 25th to 75th and 10th to 90th percentile bands. The thin dotted lines are the corresponding average perceived temperatures.

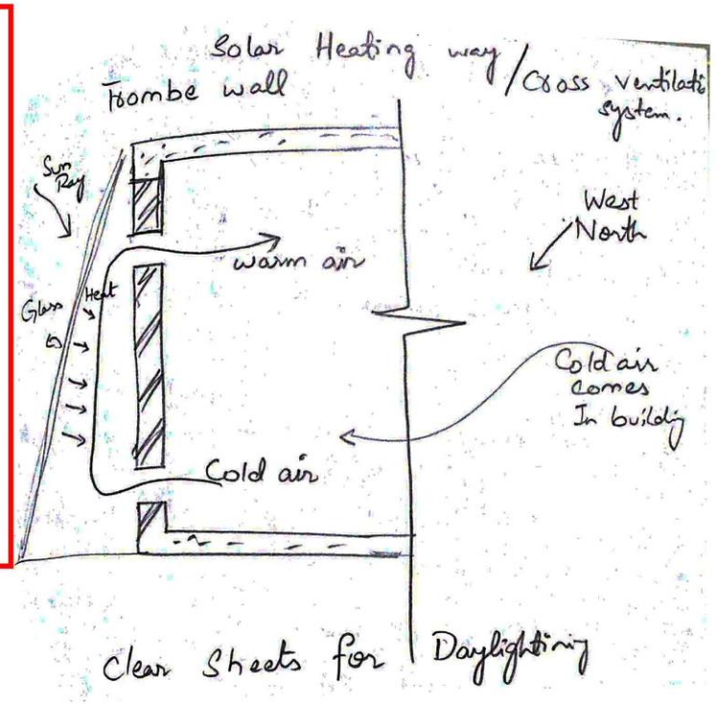
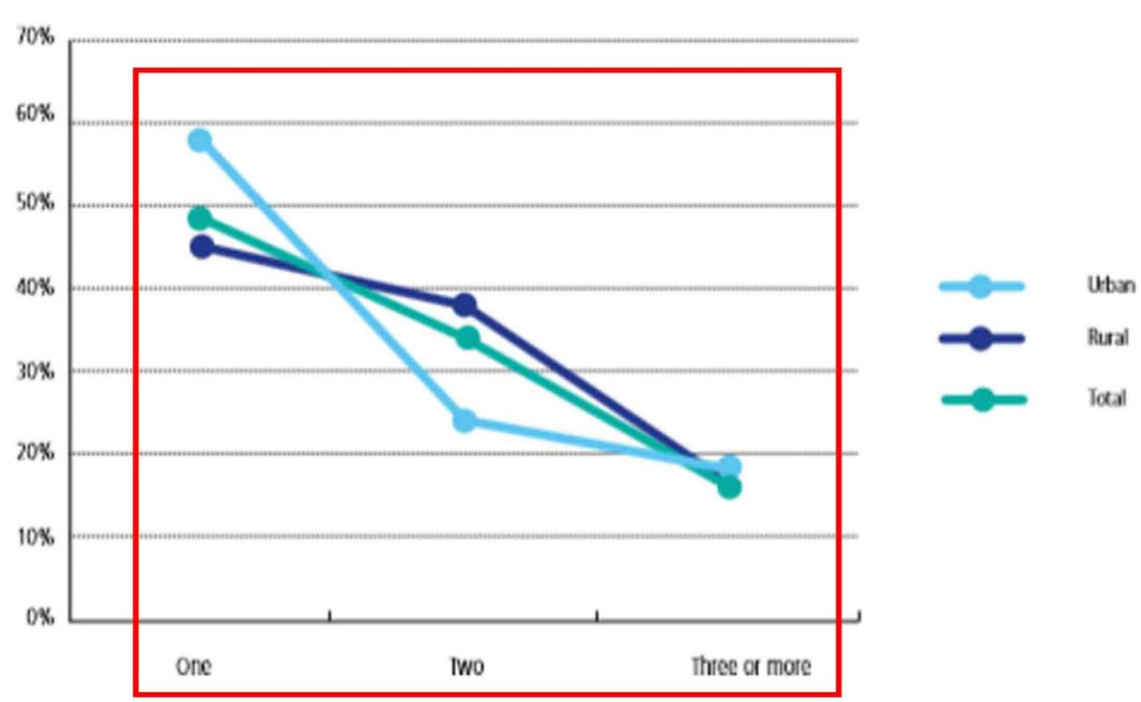


FIGURE 31 Rooms occupied for sleeping (valid percentages)



Source: *after LDHS[15] with missing values removed.*

MATERIALS IN MASERU

TABLE 12 Wall materials used (percentage frequencies)

	Maseru low income	Maseru Middle and high income	Leribe	Mohale's Hoek	Mokhotlong	Thaba-Tseka
Brick/ cement blocks	75.0	87.4	65.7	71.4	37.5	47.1
Mud-adobe	4.6	0.8	14.3	17.3	54.2	50.
Mortar	3.9	7.1	18.1	0.0	8.3	0.0
Other	16.4	4.7	1.9	11.2	0.0	2.9

Source: *Profile Sample Survey*

TABLE 13 Floor materials used (percentage frequencies)

	Maseru low income	Maseru Middle and high income	Towns in Leribe	Mohale's Hoek	Mokhotlong	Thaba-Tseka
Ceramic/vinyl tiles	39.7	71.1	52.8	35.4	22.9	14.7
Concrete	36.5	22.7	32.1	26.3	33.3	41.2
Carpet	17.3	5.5	0.0	10.1	2.1	0.0
Mud	6.4	0.8	15.1	28.3	41.7	44.1

Source: *Profile Sample Survey*

TABLE 14 Roof materials used (percentage frequencies)

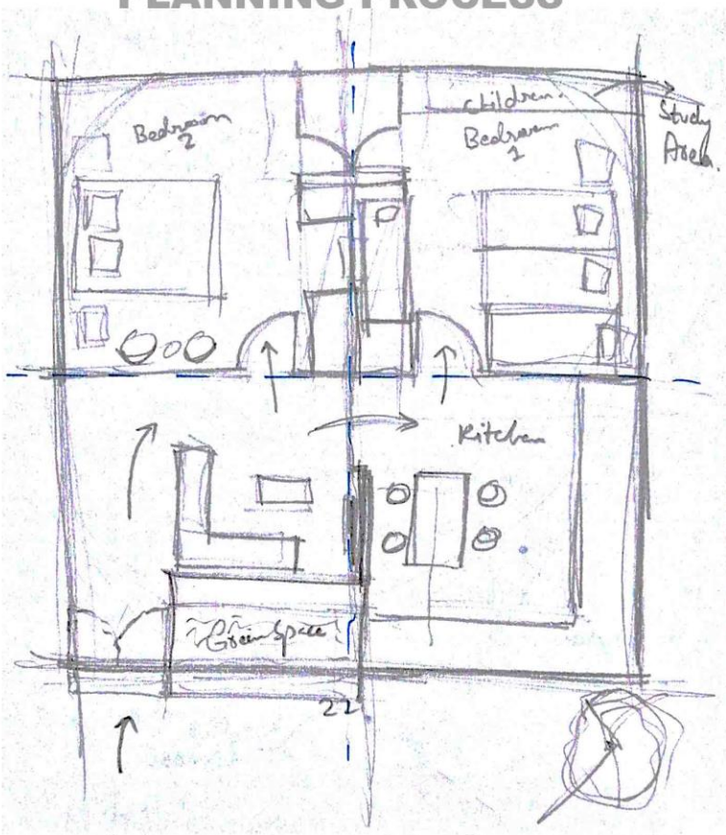
	Maseru low income	Maseru Middle and high income	Leribe	Mohale's Hoek	Mokhotlong	Thaba-Tseka
Corrugated iron	88.5	41.4	56.6	85.0	24.5	42.9
Tiles	7.1	54.7	34.0	9.0	24.5	8.6
Grass	3.2	2.3	9.4	6.0	51.0	48.6
Other	1.3	1.6	0.0	0.0	0.0	0.0

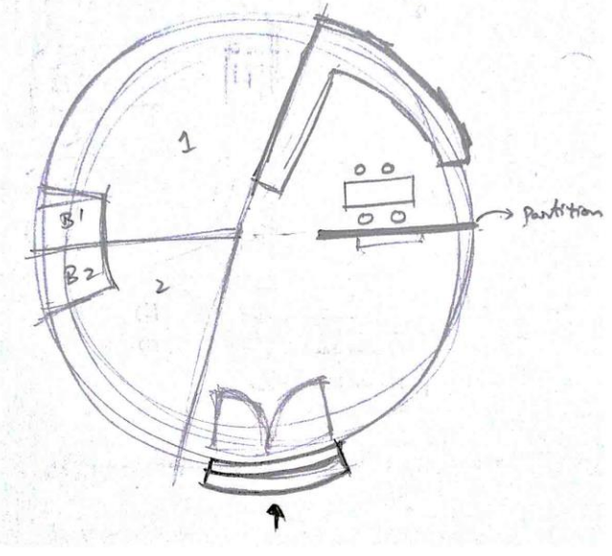
Source: *Profile Sample Survey*

Material:

Mud houses are common in Masteru where there is more mountain stone is another option for them. a few built corrugated iron shacks. Floor materials are mud, carpet and tiles which depends on income.

PLANNING PROCESS

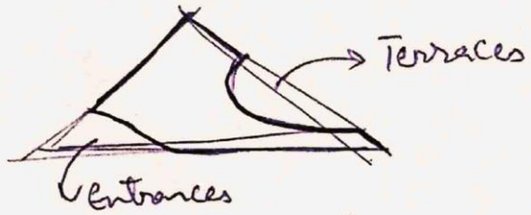


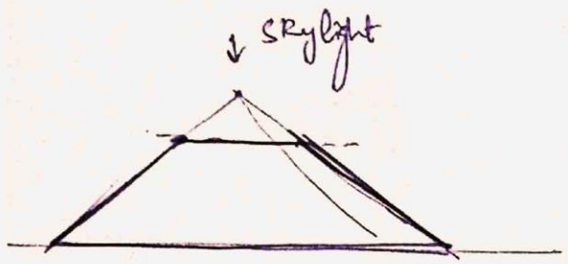


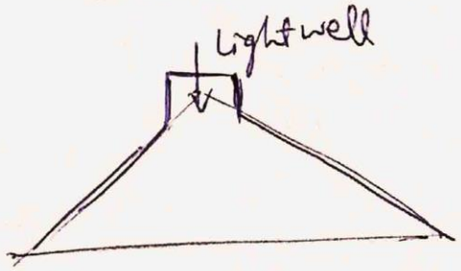
form

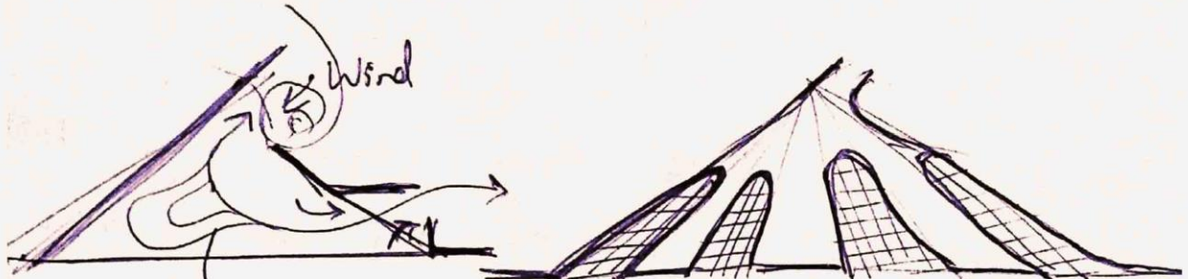
→ From Arch to culture of Mesex

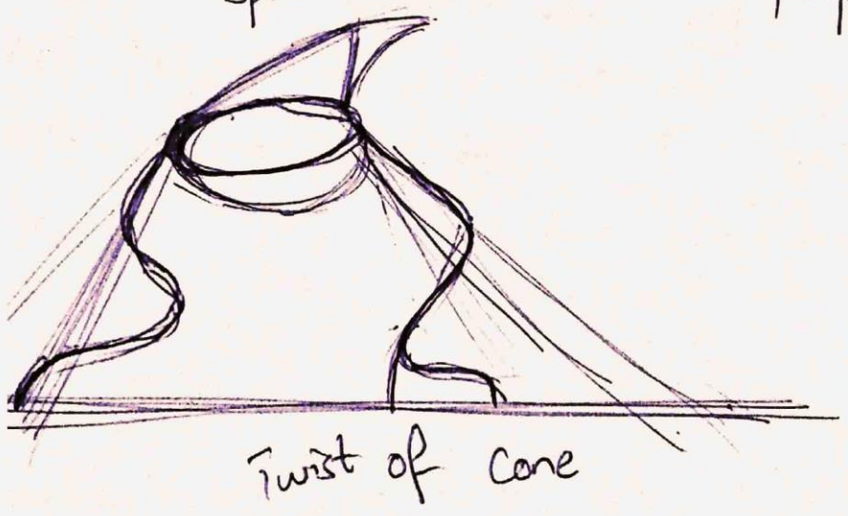
Conical Woven Hat



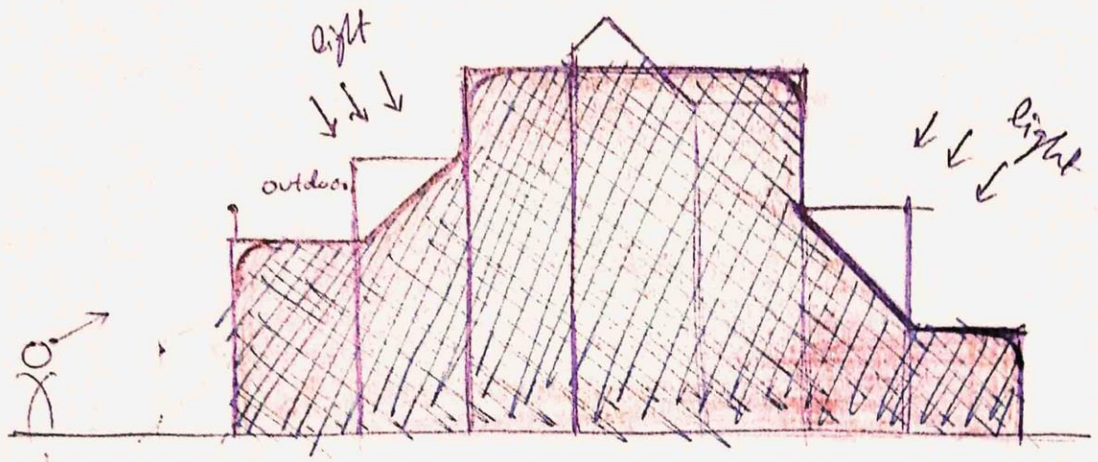




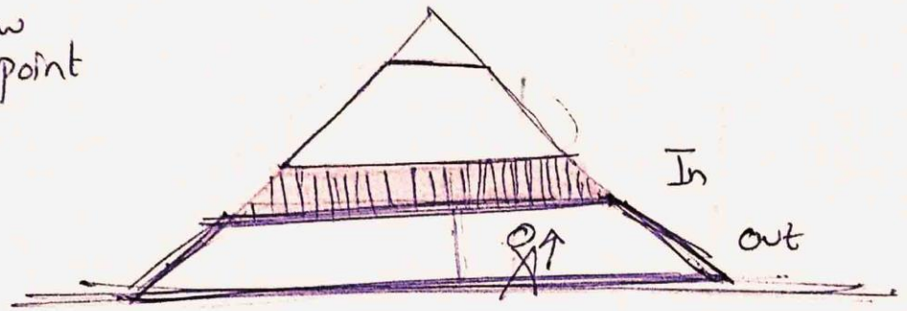


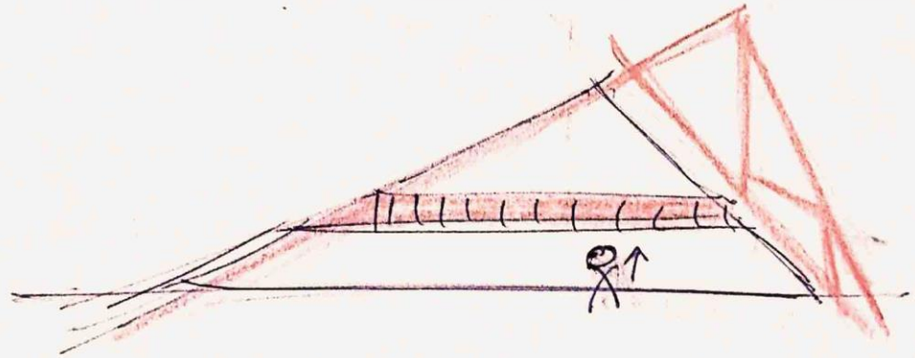


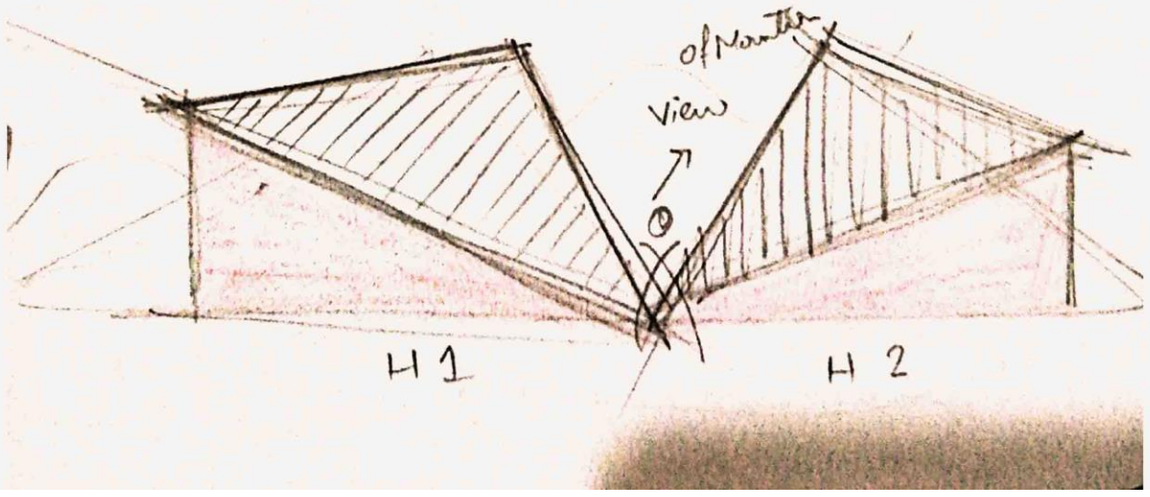
Twist of Cone



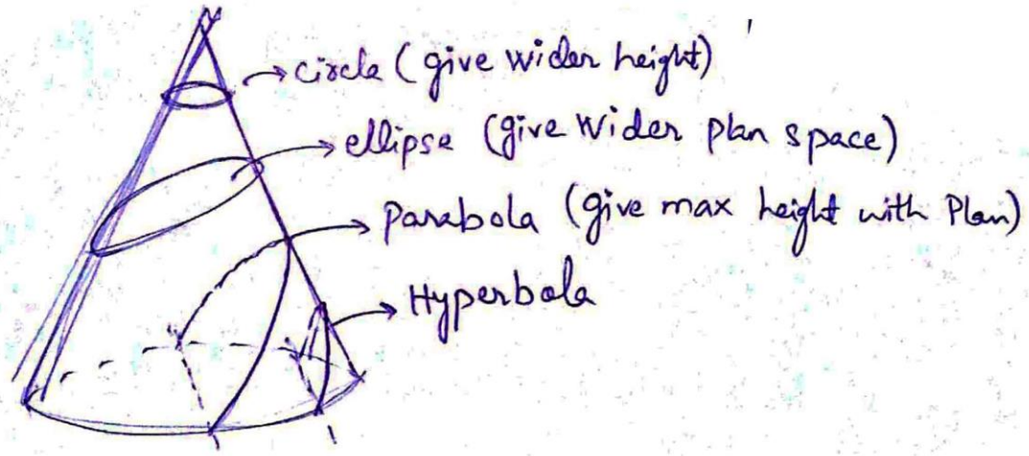
Person view from this point

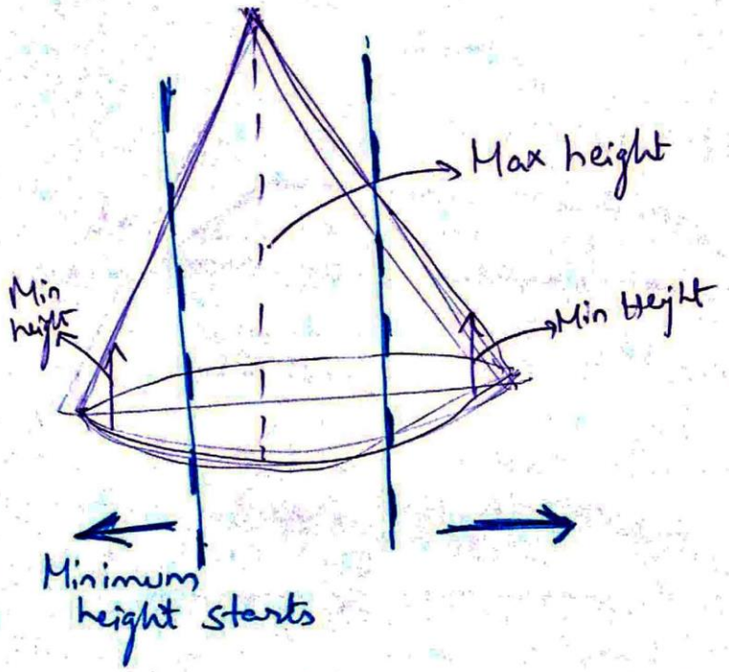


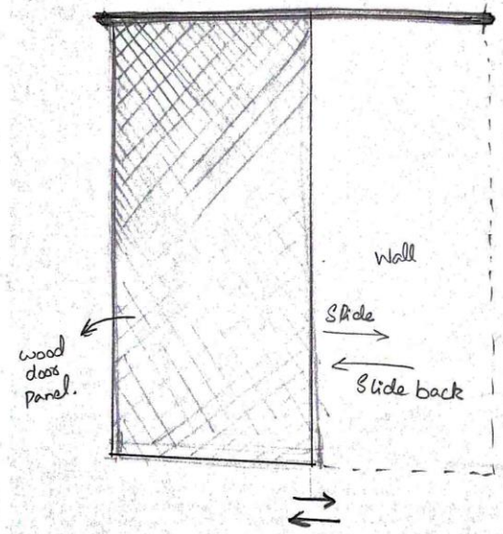


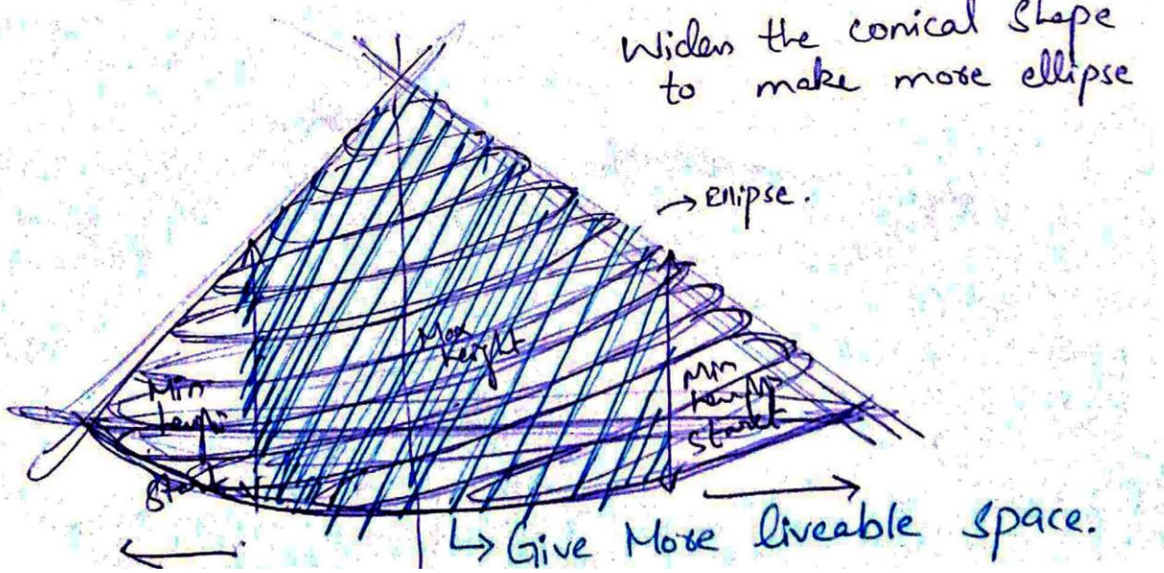


SPACE ANALYSIS OF CONICAL SHAPE

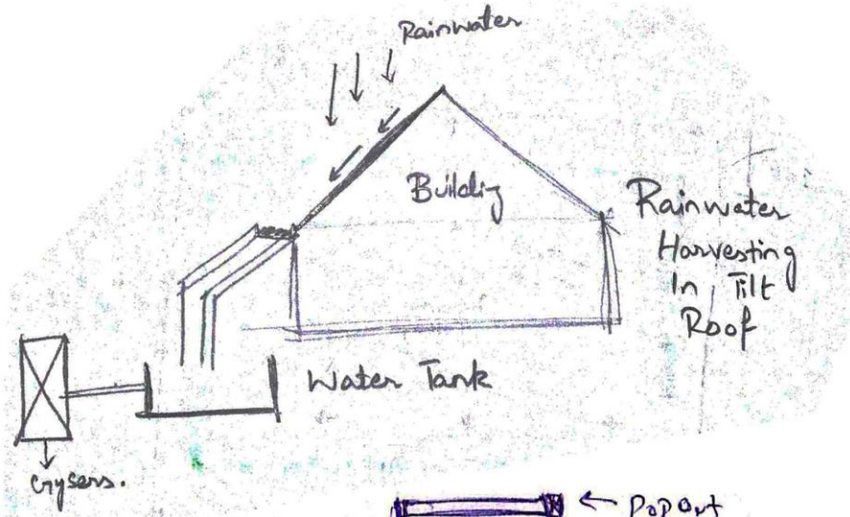


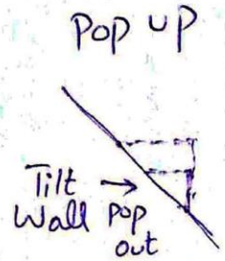


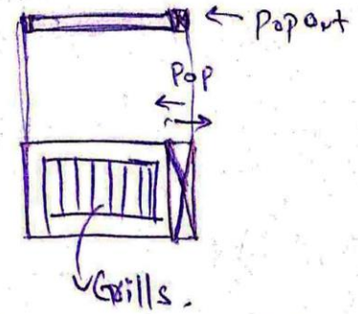


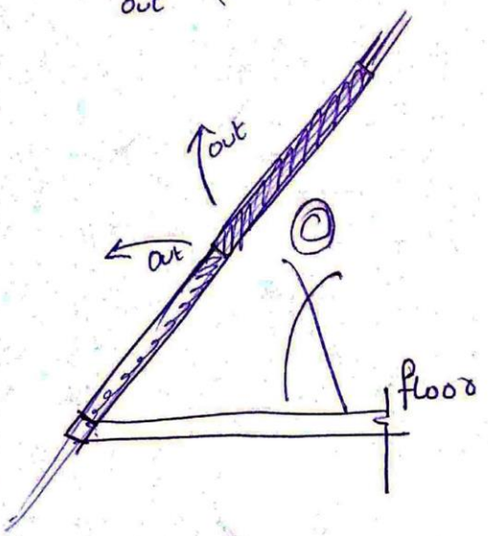


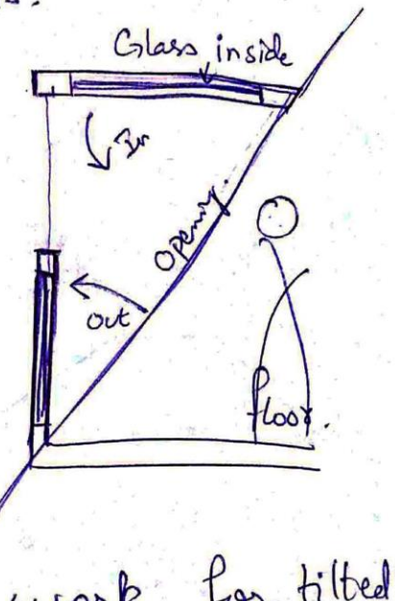
SUSTAINABILITY



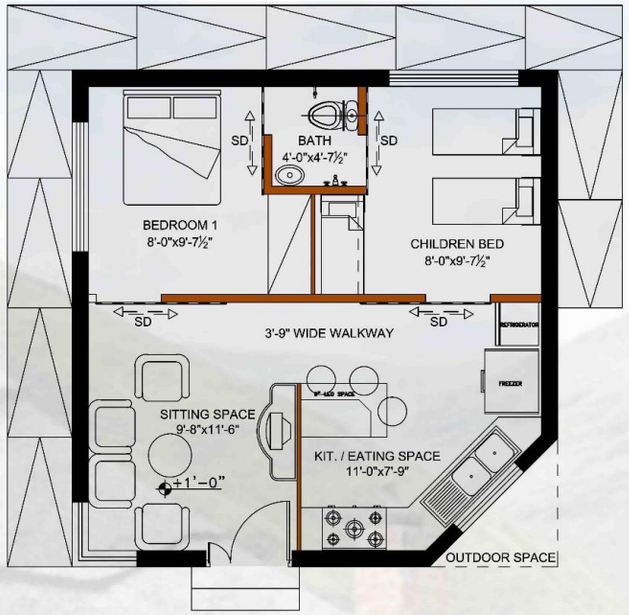




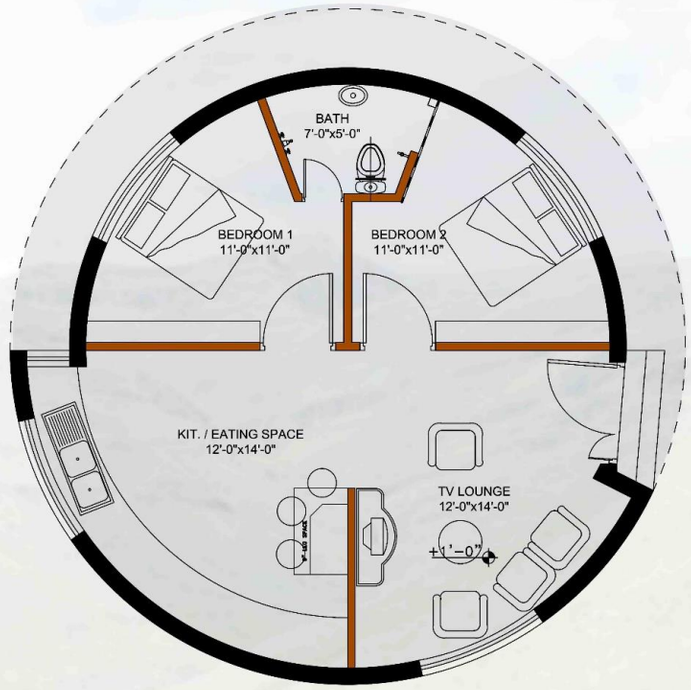




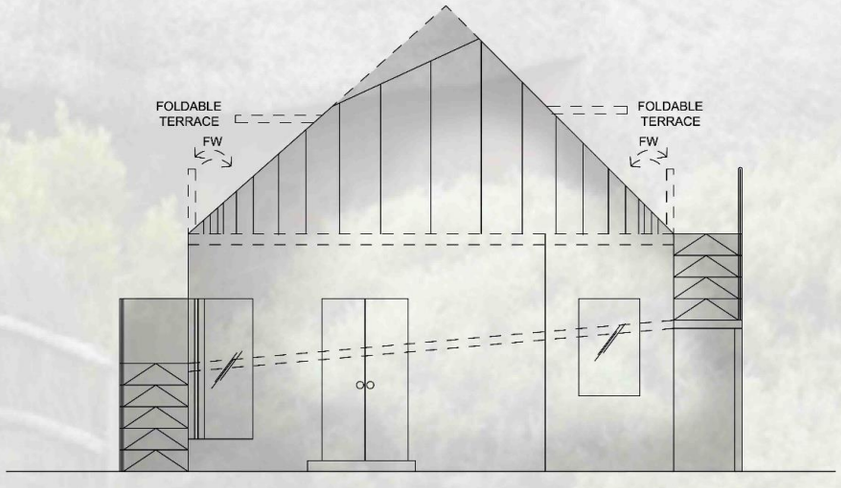
→ Stoructures that can work for tilted wall of 45° ~~of~~ or 60°, that can Save Space ~~with~~ by give terrace openings for ~~the~~ Residents. If the struct is close it act as a light source or used as solar Panels as well.



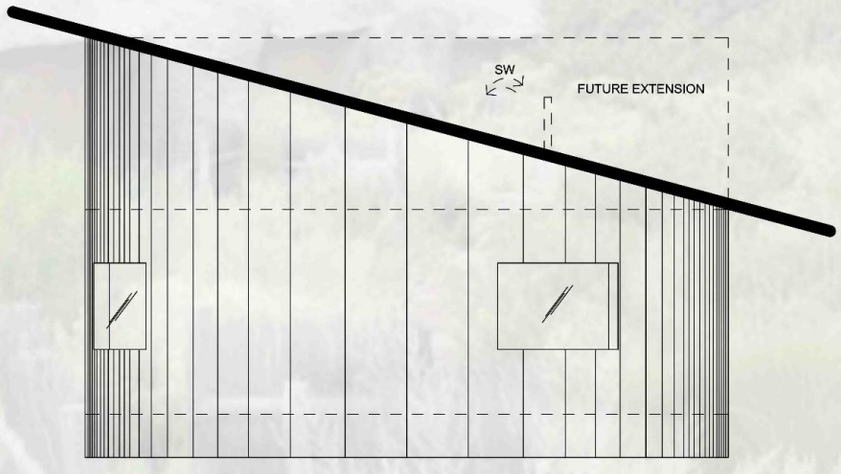
PROPOSAL 1



PROPOSAL 2



FACADE 1



FACADE 1