



DEVAAYA NIWAS

THE MEANING FOR DEVAAYA NIWAS

Devaya (देवाय) means "for the divine," "towards prosperity," or "blessed by God."

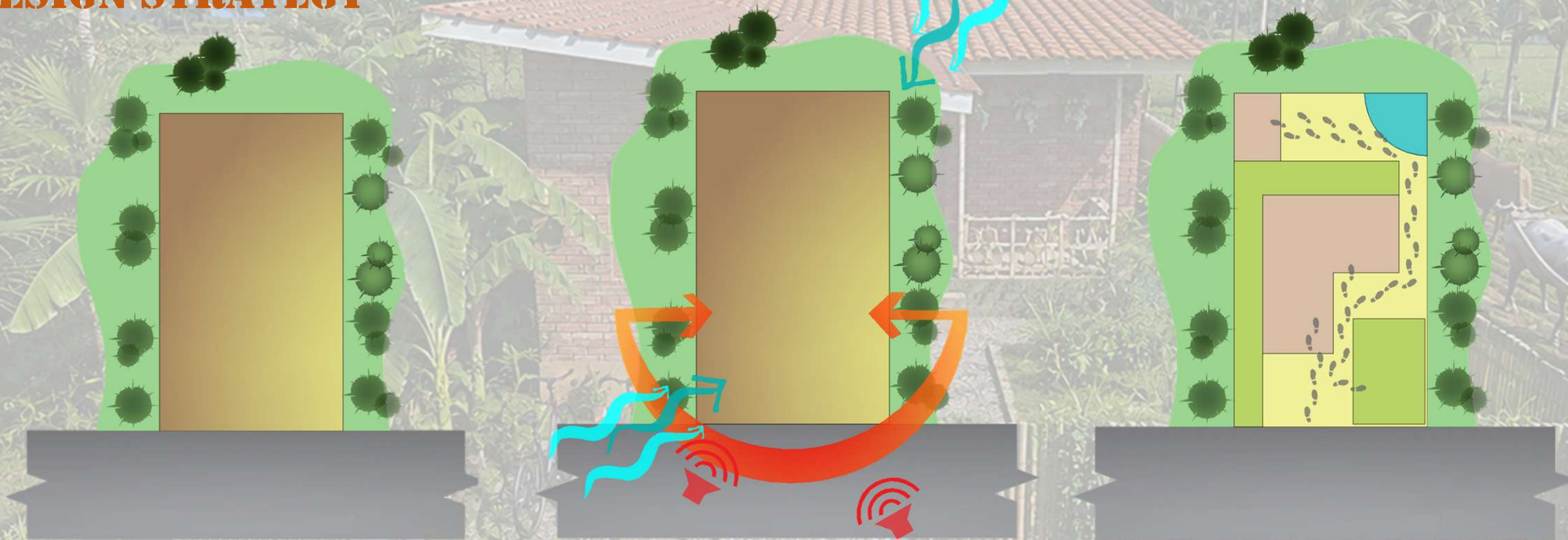
Niwas (निवास) means "home," "residence," or "dwelling." Devaaya Niwas can be translated as: "A Blessed Home"

•Devaaya Niwas is a conceptual low-cost housing design focused on providing **affordable, sustainable, and climate-responsive homes** for people whose income is below the median household income. Low-cost housing primarily depends on three key parameters:

- Income level
- Size of dwelling unit
- Affordability

The aim is to create dignified living spaces that are not only economical but also environmentally responsive and socially inclusive.

DESIGN STRATEGY



Key planning ideas include:

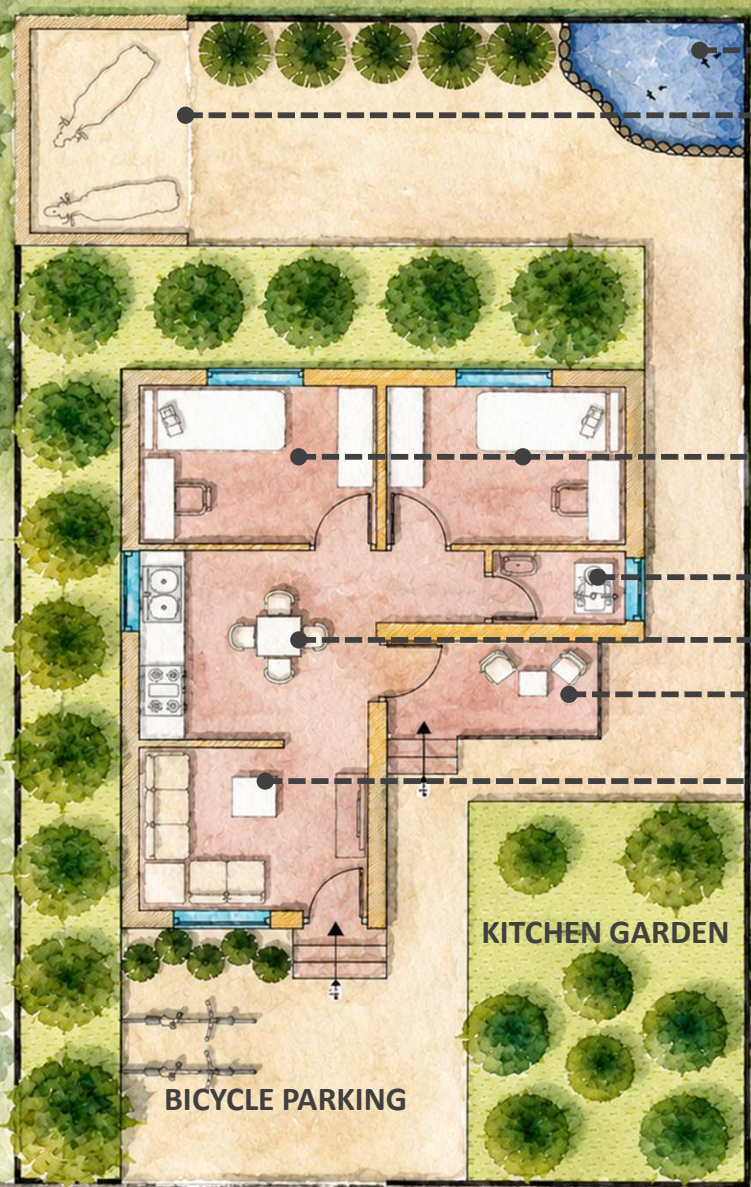
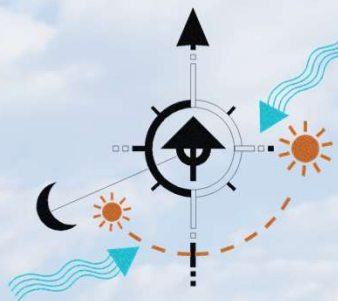
- L-shaped plan** to improve indoor–outdoor connectivity
- Open planning system** for better ventilation and flexibility
- South-facing orientation** to maximize natural sunlight and reduce energy consumption

This concept ensures better daylight access, improved airflow, and reduced dependency on artificial lighting and cooling systems

Space Planning & Functional Zones

- South wing (semi-public zone):** Living room acts as the primary social space. The kitchen is placed as a transition between semi-public and private areas.
- A **Projected Verandah** provides secondary access and connects the kitchen to an outdoor.
- North wing (private zone):** Contains two bedrooms oriented north to maintain thermal comfort. The placement takes advantage of nearby water bodies and trees for **passive cooling**.

PLANING LAYOUT



POND

COW SHED

BEDROOM (2)

BATHROOM

DINING/ KITCHEN

PROJECTED BALCONY

LIVING ROOM

KITCHEN GARDEN

BICYCLE PARKING



BUILDING MATERIAL USED

The project promotes local and sustainable materials, reducing construction cost and environmental impact:

- Stabilized soil blocks for load-bearing walls
- Bamboo for doors and windows

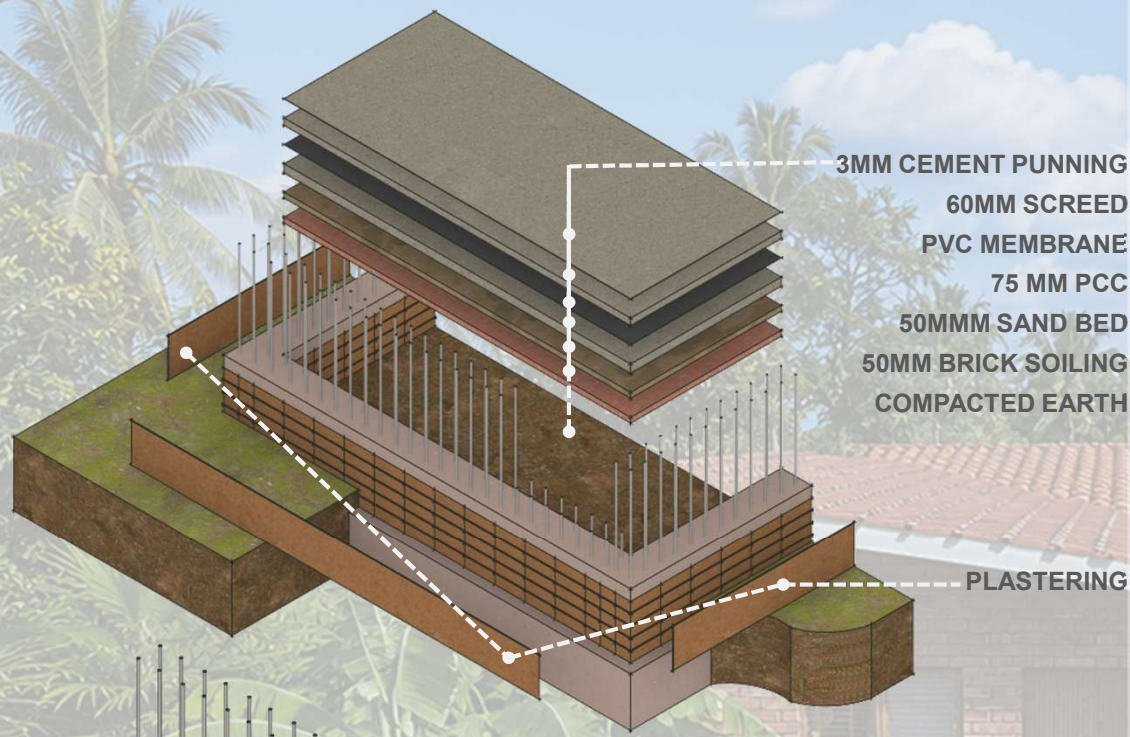
For roofing:

- Clay roof tiles are used to maintain thermal comfort in both hot and cold climates, ensuring natural insulation.

SUSTAINABILITY FEATURES

- Passive cooling through natural landscape
- Maximum daylight through south orientation
- Use of local materials reduces carbon footprint
- Energy-efficient layout reduces operational cost

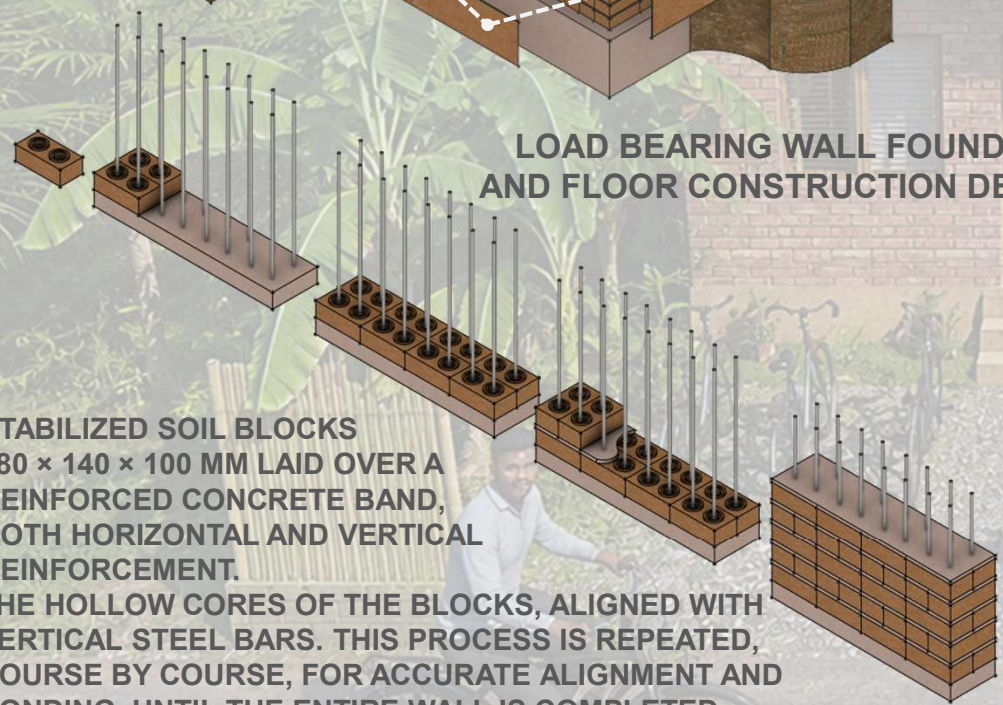
CONSTRUCTION TECHNIQUES



- 3MM CEMENT PUNNING
- 60MM SCREED
- PVC MEMBRANE
- 75 MM PCC
- 50MMM SAND BED
- 50MM BRICK SOILING
- COMPACTED EARTH

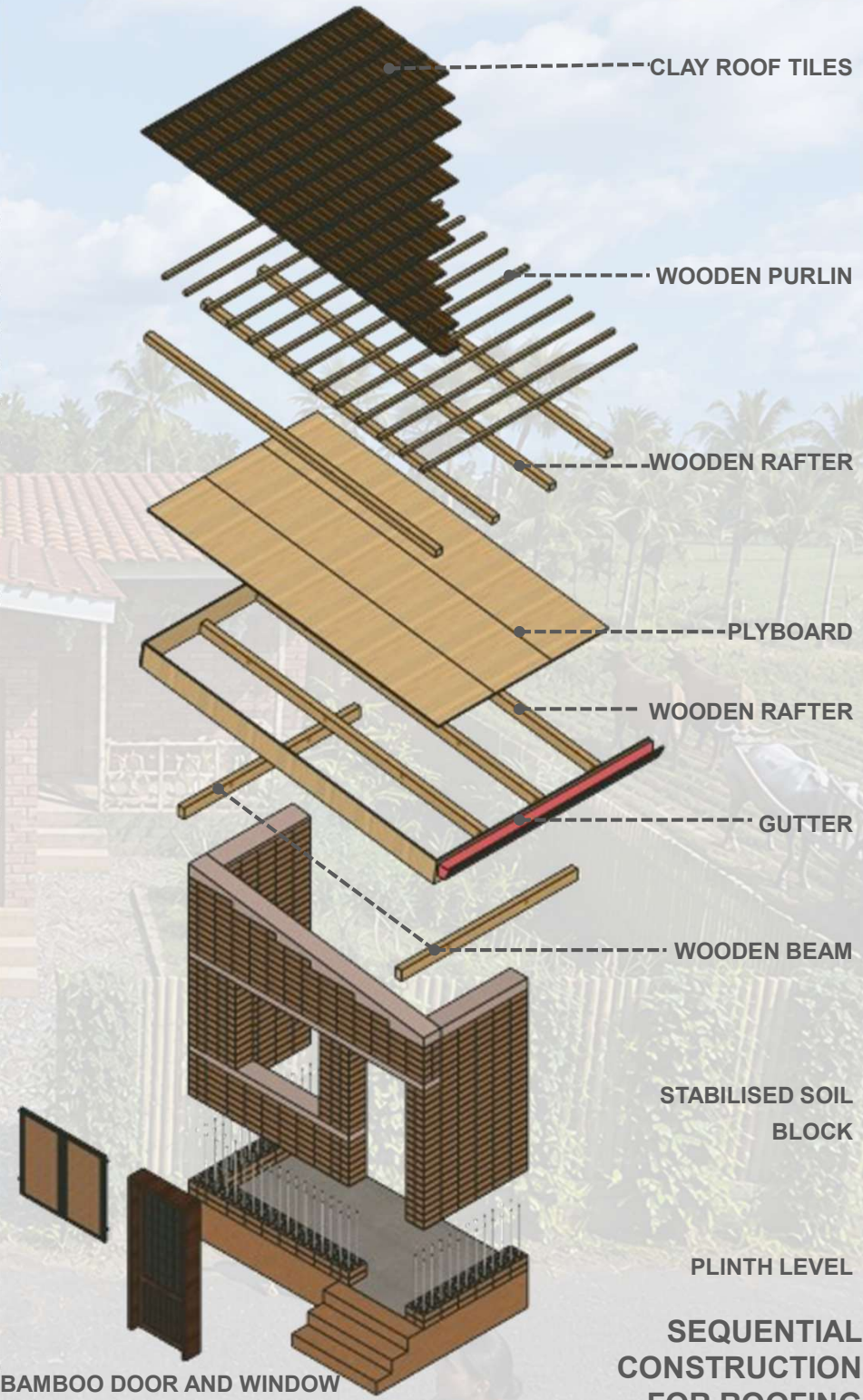
PLASTERING

LOAD BEARING WALL FOUNDATION AND FLOOR CONSTRUCTION DETAILS



STABILIZED SOIL BLOCKS
 280 × 140 × 100 MM LAID OVER A REINFORCED CONCRETE BAND, BOTH HORIZONTAL AND VERTICAL REINFORCEMENT. THE HOLLOW CORES OF THE BLOCKS, ALIGNED WITH VERTICAL STEEL BARS. THIS PROCESS IS REPEATED, COURSE BY COURSE, FOR ACCURATE ALIGNMENT AND BONDING, UNTIL THE ENTIRE WALL IS COMPLETED.

SEQUENTIAL CONSTRUCTION OF A STABILIZED SOIL BLOCK WALL



CLAY ROOF TILES

WOODEN PURLIN

WOODEN RAFTER

PLYBOARD

WOODEN RAFTER

GUTTER

WOODEN BEAM

STABILISED SOIL BLOCK

PLINTH LEVEL

SEQUENTIAL CONSTRUCTION FOR ROOFING

BAMBOO DOOR AND WINDOW

BUILDING FACADE



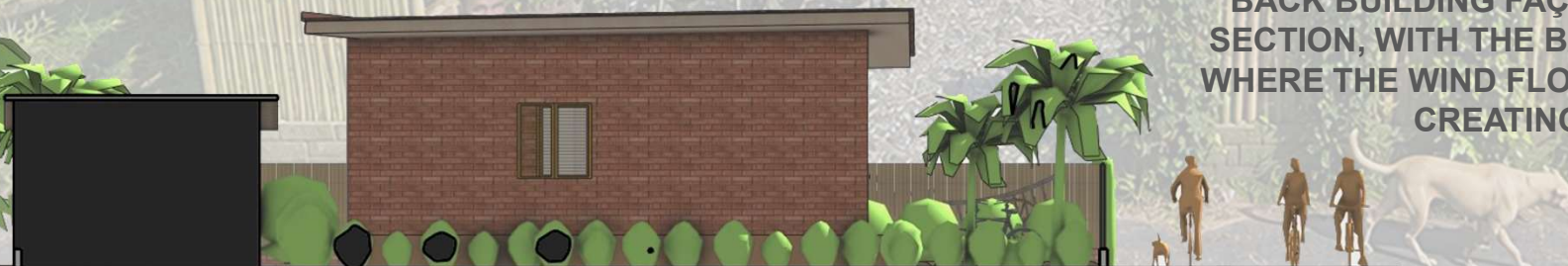
SIDE BUILDING FAÇADE, SHOWING KITCHEN GARDEN, PROJECTED BALCONY, COWSHED.



FRONT BUILDING FAÇADE, SHOWING FRONT ENTRANCE LEADS TO THE LIVING ROOM, BICYCLE PARKING



BACK BUILDING FAÇADE, SHOWING COW SHED SECTION, WITH THE BACK WING FENESTRATION, WHERE THE WIND FLOWS INSIDE THE BEDROOM, CREATING A COOL INDOOR SPACES.



SIDE BUILDING FAÇADE, FENESTRATION OF SIDE WALL, FENESTRATION OF KITCHEN AREA.