



KATTADA TIMES ANNUAL REPORT  
FOR  
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# Introduction



Nivasa is an Architectural NGO. We enable humane and dignified housing conditions for the urban and rural poor, through **DESIGN**.

We use a **'Design-Based Thinking Approach'** to solve the housing problem for the BPL population.

## So, What is Design Based Thinking Approach?

**Design Based Thinking is a methodology:** A design mindset is not just focusing on problems; it is focusing on solutions and on actions oriented towards creating a preferred future. Design Based Thinking draws upon logic, imagination, intuition, and systemic reasoning to explore possibilities of what could be—and more importantly, to create desired outcomes that benefit the end user. It is an approach that uses the designer's methods to match people's needs with what is technologically feasible. Henceforth, coming forward with a powerful and highly meaningful solution. Design is mistaken to be a veneer; tokenism, facadism. But, in reality, What essentially design is, is about how the solution actually works.

The DBTA framework we use is a **four step** process to:

Research - Ideate - Design and then lastly to help - Implement.

## **REDEVELOPMENT OF VILLAGES**

*Supporting redevelopment of villages in a holistic manner where we contribute to design and help in execution of infrastructure and housing needs.*

## Kottamedu Village, Kancheepuram District, TN

### The Progress so far:

This project is In partnership with The Banyan, funded by HCL Foundation. We have done the strategic design thinking and approach for the project, given design solutions, conducted awareness and training on block making and construction aspects to the home owners, The Banyan, project deliverers etc. The Banyan takes care of government related issues, community handling and project/construction management. We have as well conducted awareness and training programs in block making. People have divided themselves into groups to make blocks. Block making for the next set of houses is currently in progress. In addition, procuring soil in Chennai has become a very challenging task.

Six houses have been completed by the people and eight more are coming up. We are designing smaller houses for families that cannot contribute labour or money towards their housing. The Banyan has approached us with the requirement of about ten more houses for a near by village with their part having been to work on panchayat approvals etc. Since, the soil is hard to source in this region, we are presently looking at other ways of cost effective delivery, involving the people in the making of their homes.

### The Kottamedu story in pictures....



## Kottamedu Village, Kancheepuram District, TN



# Kottamedu Village, Kancheepuram District, TN

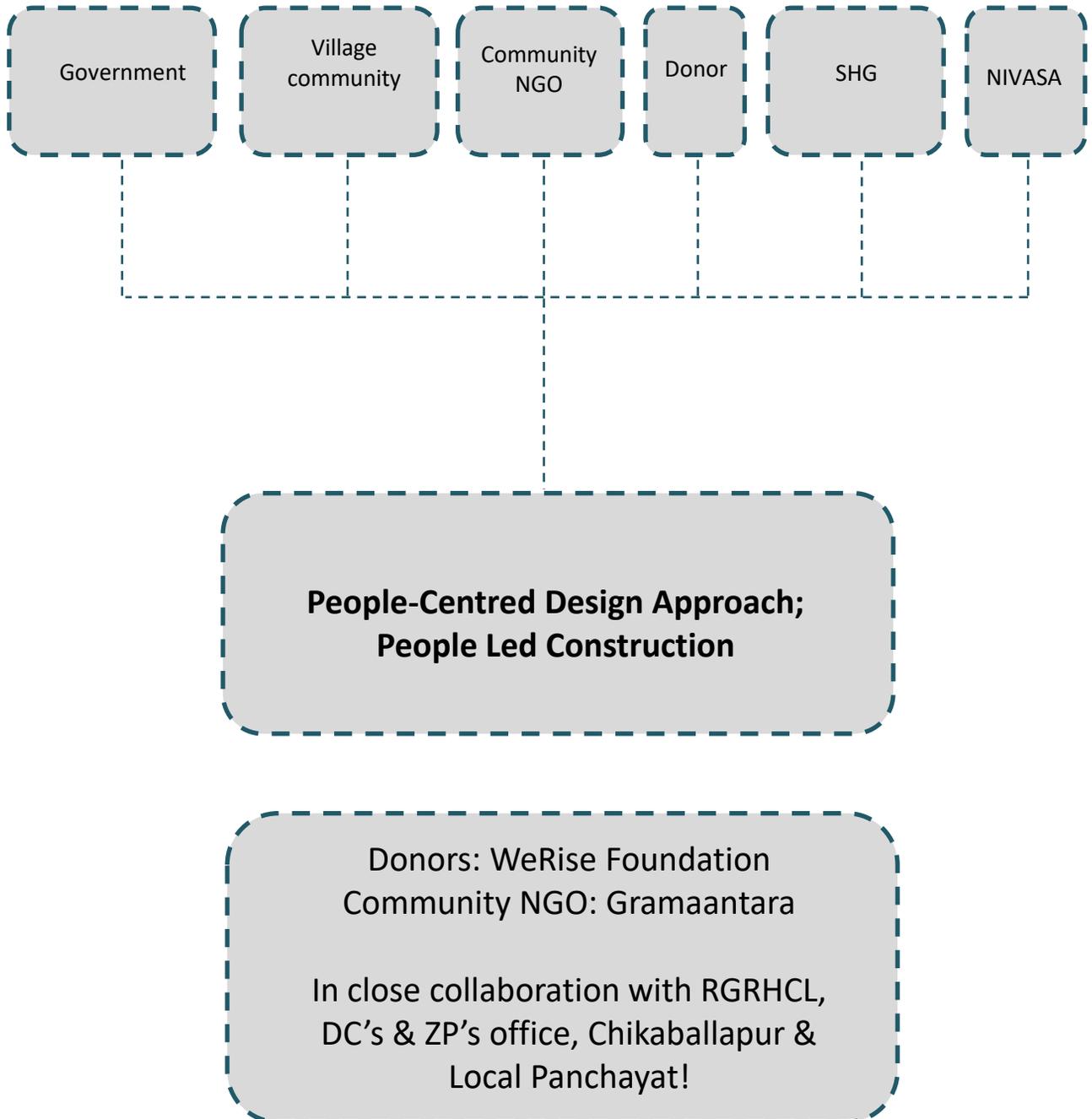


# Kottamedu Village, Kancheepuram District, TN



## Udagirinallappanahalli, Chikkaballapur District

### The Design Approach



## Udagirinallappanahalli, Chikkaballapur District

In this project, we are working towards People-led construction delivery. Funded by WeRise foundation, this is a unique, scalable model of development, where the government funding for housing is topped by the end user and the donor. Gramaanatara is our partner for community and government interface. We have trained the people in block making, where the soil has been sourced from nearby lakes with permission from the government. We are trying to get them to own the construction process- from quantification , scheduling and buying of materials to the construction process itself. What is very meaningful is that a group of ten families are able to build a 400 plus sq ft home, without borrowing a single rupee! Each family has contributed Rs 4000 per month to a cumulative Rs 35,000 per home; thus paying forward for the construction. A huge community building exercise, tough challenge indeed. We have completed four homes, and people have completed block making for six... We are training them to lead the construction process for the other five homes.

Volunteers from corporates and colleges have contributed time and again in painting, block making, creating a play ground, building kattes, tree planting etc

In terms of design, we offered them three choices within the same cost. The community is very happy!



# Udagirinallappanahalli, Chikkaballapur District

## The participatory Approach: Roles & Responsibilities

### The Government:

- Ensures Khatha copies for all end users.
- Ensures timely release of housing funds.
- Procures Permission to procure soil from the nearby lakes .
- Ensures electricity and water for the construction.
- Helps resolve community conflicts and other community related issues.
- Ensures Khata copy and fund release for Community centre.
- Implements all other government schemes applicable to the village.
- Actively supports other stakeholders.

### The Village community:

- Contributes NREGA funds towards construction of their houses.
- Takes lead on community led construction.
- Provides resources: Labour for block making, labour for construction, vehicles for transportation
- Mobilizes extra funds, if needed by forming self help groups.
- Manages material procurement, management, construction.
- Attends awareness, training programmes.
- Ensures adherence to decided design and construction techniques.

### The community NGO:

- Interface between donors & Nivasa and the community and government; coordinate on all communication between various stakeholders and troubleshoot, if issues arise.
- Assists Nivasa in construction process at all stages.
- Assesses needs in the village (other than housing). Assesses human resources and talent in the community to involve in different responsibilities.
- Assigns key responsible people from community to lead activities in different areas in the village e.g. school, Anganwadi, water resources, waste management, greening, agriculture, etc.
- Selects community worker locally and train to represent Gramaantara in the village and to coordinate between different activities of Gramaantara in the village.
- Coordinates & arranges sessions for community with relevant resources persons, employees.
- Holds periodic reviews with all stakeholders to gauge progress of project.

## Udagirinallappanahalli, Chikkaballapur District

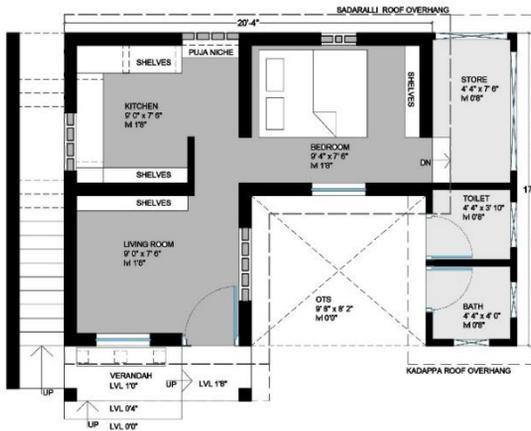
### A sustainable approach:

- The total cost of a house = Design + Material + Labour
- Architecture in India serves today only the financial elite. The cost of design and design thinking, very much needed for the poor is unaffordable by them. In this village development model, the donor pays for the architect which enables the poor to get professional inputs at no extra expense to his account.
- Local resources are used to advantage.
- The village community brings in unskilled labour component.
- The house cost thus arrived at will be funded in large by the government, a bit by the end user, with further help from a bank/MFI; with a top up amount from the donor.
- The cost of a house thus derived is minimal value for maximum impact.
- Further, the construction delivery model after conducting awareness and training to the community, will be driven by them after a few houses are built.

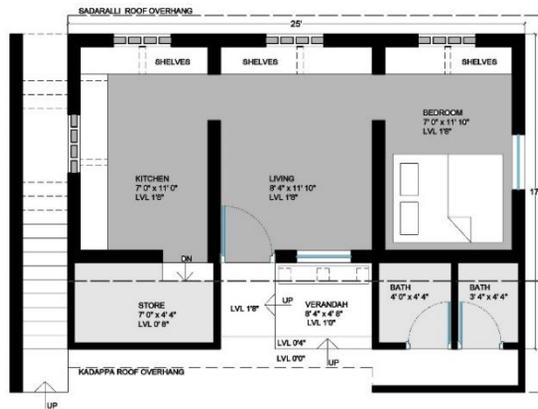
## Our Ten Commandments

- **Strike a balance between: Aspirations-Possibilities-Demands.**
- **Use the local resources to advantage – local human resource, local material, local machinery.**
- **Encourage co-operative movement.**
- **Avoid ‘cartel’ technologies and technologies which rely heavily on outside resources.**
- **Develop Technologies that satisfy ‘Reduce – Re-use & Re-cycle’**
- **Develop Technologies that generate and sustain employment, upgrade skill-sets, open up new skill sets.**
- **Avoid ‘thrusting’ of new technologies.**
- **Adopt culturally sensitive technologies.**
- **Develop technologies keeping in mind that every technology has a ‘spatial’ and ‘temporal’ acceptability.**
- **Never show case ‘green points’ of opulent buildings to promote technology – it is an insult to economically weaker sections.**

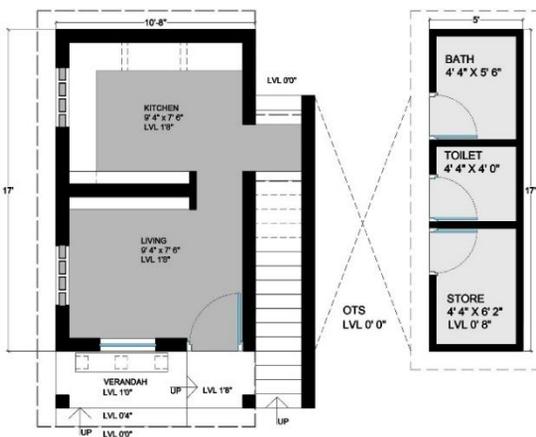
# Udagirinallappannahalli, Chikkaballapur District



**Plan – Option 01**



**Plan – Option 02**



**Plan – Option 03**





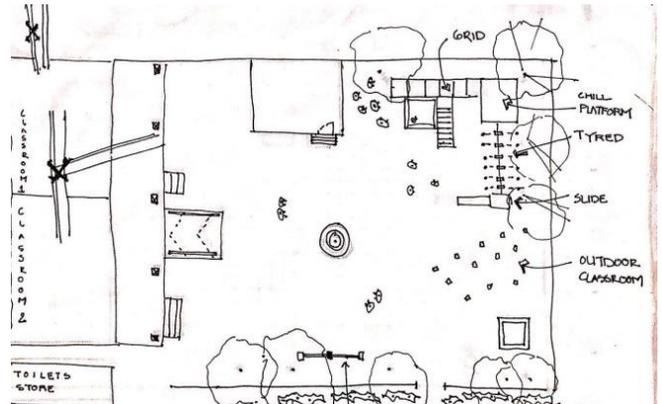
## Udagirinallappanahalli, Chikkaballapur District



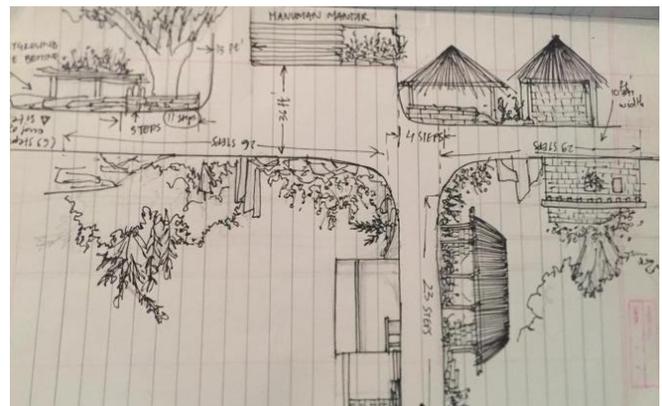
# Udagirinallappanahalli, Chikkaballapur District

## Activities by and with volunteers:

We had a group of students from Hiray college of architecture come and design a play area for the government school in the village using locally available materials



Conceptual design of the playground

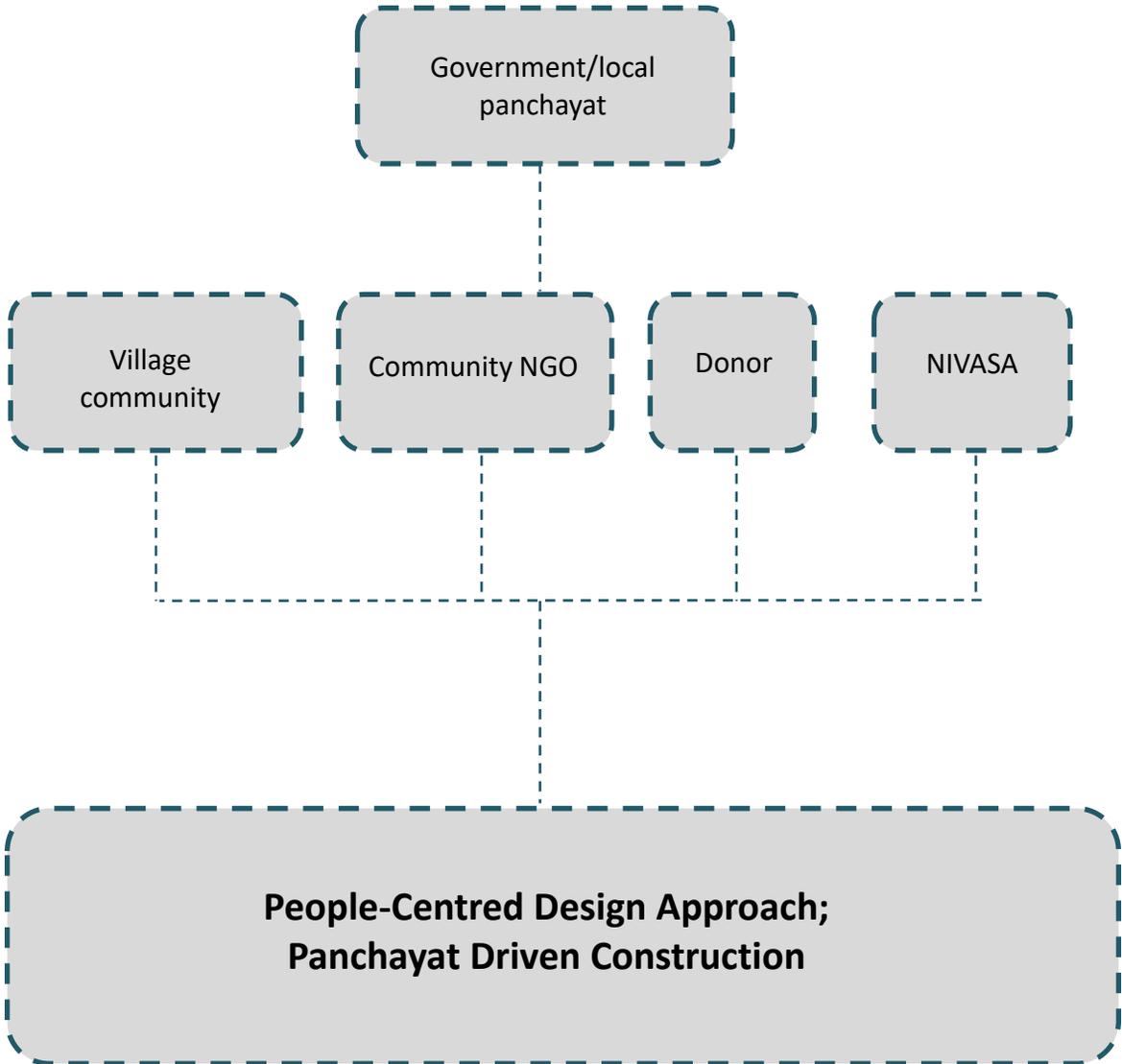


Conceptual design of a community node



# Namgondlu Panchayat, Gauribidanur District

## The Design Approach



# Namgondlu Panchayat, Gauribidanur District

In this project, we are working towards a Panchayat-Driven model. The Panchayat identifies the end users applicable for BPL housing funding across the villages and enables us to meet them to ascertain their needs. We have studied the local villages and have developed a few options that can be applied to varying plot conditions, Vaastu and financial needs. We have devised a RCC panel and beam roofing system that can be a cost effective option for RCC roofing.

Further, funded by WeRise foundation, this is a unique, scalable model of development, where not only the government funding for housing is topped by the end user and the donor; the designs are as well applicable across the villages and hence scalable. Gramaanatara is our partner for community and government interface.

We have put up a test structure as a pilot to test the acceptability of this system.

## Sustainability is defined as:

1. **Social Sustainability:** It is the ability of a social system to function at a defined level of social well being indefinitely.
2. **Economic Sustainability:** It is the ability to support a defined level of economic production indefinitely.
3. **Environmental Sustainability:** It is the ability to maintain rates of renewable resource harvest, pollution creation, and non-renewable resource depletion that can be continued indefinitely.

All these three must happen simultaneously !

Source: <http://www.thwink.org/sustain/glossary/ThreePillarsOfSustainability.htm>

This is translated into practice as:

### 1. Respect:

- a) Materials and Methods: If what is done locally works well, adopt/adapt that.
- b) People's wishes as much as possible.

### 2. Innovate:

- a) A coming together of Government, Villagers, NGOs, Construction professionals, Donors.
- b) Project Approach, Design solution, Construction techniques

**Thereby creating a Synergy:** Synergy is the creation of a whole that is greater than the simple sum of its parts.

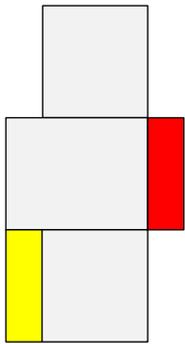
## This is an evolutionary approach to social innovation.

# Namgondlu Panchayat, Gauribidanur District

## The Design solution

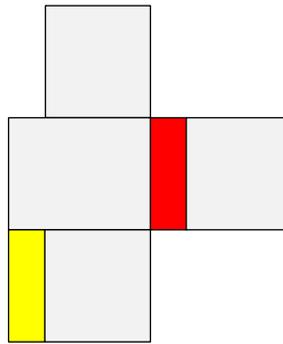
Concept: Modular flexibility

One BR: 300 Sq ft



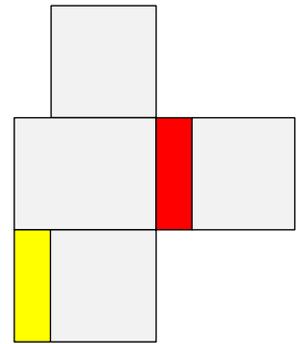
Plan

One BR: 400 Sq ft



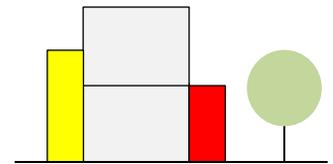
Plan

One/Two BR: G+1



Plan

- Kitchen/bedroom/living
- Foyer
- Staircase



Section



## PROJECT GRIHA

*Developing customized design solutions that consider local material, environment, socio-cultural sensitivities & economic activities, and dissemination of template to contractors, skilled workers and the larger community.*

## Project Griha

Project GRIHA's approach is to analyze the climate, culture, vernacular design, local material availability, current needs and usage patterns of people in various zones of Karnataka. Using this, a design template and palette will be developed for a core house module which will cater to the flexibility of growth, give people access to design, technology, technical knowhow, necessary construction materials and empower them to build their own home.

We are extending this to include Anganwadi designs that can be applicable across districts.

### Udupi Region:

Project Griha is well under way in Udupi. Supported by the DC and ITDP, Udupi, five houses are nearing completion at Halady with top-up funding by Swati Group. These are being done by an enthusiastic Koraga representative and contractor who is using dressed laterite for the walls. Three houses at Murroor with top up funding by Syndicate bank have been completed by a local Koraga contractor. One more has been completed by an Udupi contractor within ITDP funds for an octogenarian Koraga lady. Moreover, two more are yet to start at Kollur, funded by Image Labels. We were asked to wait till the elections got over.

### Training:

With the Nirmithi Kendra organizing a half day workshop, our team consisting of renowned Professor Dr KS Jagadish and our very own pro bono consultant Dr Raghunath conducted sessions on holistic approach to construction and methods of cost effective construction. We gave out soft copies of manuals prepared by us on cost effective techniques for local contractors etc.

Nirmithi Kendra Udupi has asked our team to conduct hands on training on other methodologies like block making, dome roof etc.

### Master Plan:

With the enthusiasm of the DC, we have got a layout for 21 Koragafamilies designed and approved for further execution at Padubidri. This is the first time we are intervening even before Khata copies are issued, and thereby we have managed to provide a green lung and kids play area within the constraints. We are looking forward to working with Nirmithi Kendra on this!



# Anganwadi in Udipi District

We have developed the Anganwadi design to the next level. Nirmithi Kendra has given the quotation for the same. We are in the process of fine tuning this and taking it to the next level- towards construction.

## Step 1:



Children's psychology



Cater to Children's senses



Children's Safety and security

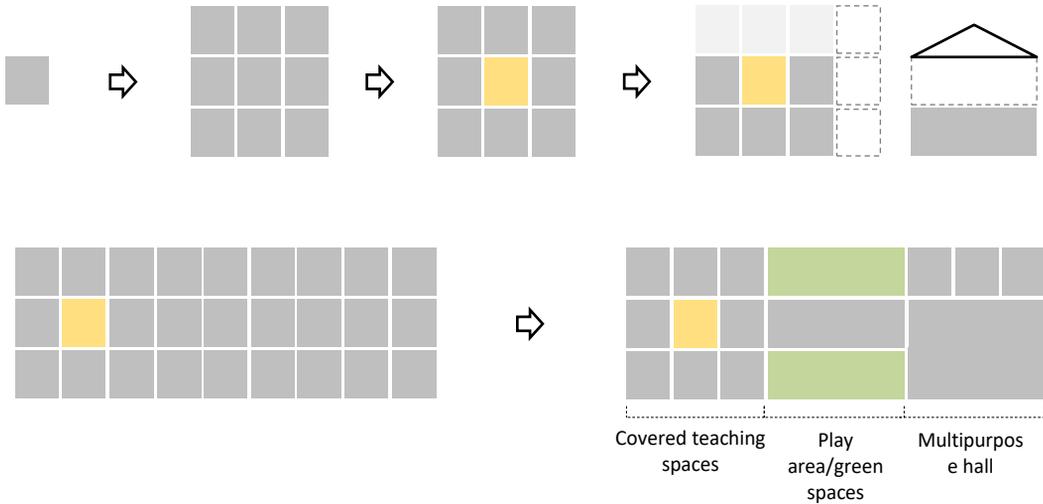


Children's Developmental needs

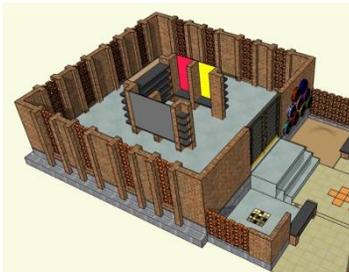


Future expansion

## Step 2:



## Step 3:



Design Development!

## PROJECT SUITCASE

*Developing a toolkit of housing components for the urban homeless as a step towards permanent housing solutions.*

## Girinagar, Bangalore

The Girinagar Suitcases were occupied for a period of 1.5 years. The Basavanagudi MLA had hand picked the most destitute families. He helped get the BBMP to build the toilet and bath for them. We sought the help of a veteran community worker to hand hold the people for a year. She worked to help the kids be put in schools, conduct summer classes, and to make the parents more responsible. The Suitcase can very well be in its journey to be adapted as transit housing for the slums towards their permanent house allotments. This is our wish!

We are working with Hasirudala to put up a few units for the pournakarmikas. They are working with the people and corporates for necessary permission. Amongst all the complications in our projects, we have safe guarded the donation from Rajan Family Charitable Trust to put up 3 more units. This is a strategy to introduce the possibility of temporary humane and dignified living, where we offer to put up a few, and the rest are supported by the government or crowd sourced etc. We need to put up a few hundred to bring up this need to visibility, and for scalable action by the Slum Development Board.



# CONSTRUCTION LABOUR COMMUNITIES

*Encouraging humane and dignified living conditions for  
construction labourers.*

# Construction Labour Communities

Our pilot has been a success at RMZ Ecoworld, and later on at RMZ Azure. The contractor and developer team are now owning the change in labourers' living conditions, and also realizing and enjoying the tangible and intangible benefits too!



**Before**

**After**

## Highlights

We have a new Advisory Board! Here are the profiles of our prestigious team!

### Professor KS Jagadish:

Dr. KS Jagadish has a PhD from the famous IISc, Bangalore and a postdoctoral degree from Karlsruhe University, Germany. A recipient of Amulya Reddy and Vimala Reddy lecture award for excellence in research from Indian Institute of Science, he is an expert at alternate building technology in rural development, masonry vaults & domes, prefabricated roofing systems and much more.

### Mr. AN Venugopal:

Mr. A.N. Venugopal has an extensive experience of over 35 years mainly in Real estate Industry in Project development of Commercial, Residential, Hospitality and Mixed use projects in India. During his initial career years, he had handled Industrial and Educational projects in India and abroad. He has successfully completed LEED certified projects in India. He has been instrumental in aggregating partnerships with business, government and philanthropic communities. Before taking over as the President of RMZ Foundation, he was the Managing Director, Development Management at RMZ Corp and member of the Executive Committee responsible for enhancing the shareholders' value in the Real Estate development. Currently, Mr. Venugopal spearheads Sustainability, Skill Development, Social Welfare, Urban Development and the Art initiatives at RMZ Foundation. As a passionate leader, he also serves on the boards of various NGOs in India and also members of -World Economic Forum Steering Committee - Future of Urban Development & Services in India.

### Mr. Manjunath Hebbar:

Hebbar is a serial entrepreneur with over three decades of experience in global technology businesses and social enterprises. Presently, he is the founder & Chief Executive of Buoyanci— a strategy consulting and professional services firm that works with corporate boards and business leaders and helps them incubate, develop and expand new businesses & services. He also leads Entirely. He is therefore a social enterprise offering tech-enabled professional services in finance & GRC, CRM, and Digital Business Support Services. He trains and employs hitherto unemployed women from marginal families and helps them get closer to their self-reliance goals.

### Ms. Nivedita Banerjee:

Nivedita, the Director of Women's Empowerment, Social Enterprise and Design and Founder member at Samaj Pragati Sahayog (SPS) is one of India's largest grass-roots initiatives for water and livelihood security, working with its partners on a million acres of land across 72 of India's most backward districts, mainly in the central Indian Adivasi belt. Ms Nivedita is also the architect of all the buildings of SPS campuses, and is a member of the 12th Plan Working Group on Minor Irrigation and Watershed Management.

### Mr. Umesh Malhotra:

Umesh is the co-founder of Hippocampus and currently the CEO at Hippocampus Learning Centres. A graduate of one of India's leading engineering institutes, IIT Madras, he began his career in Infosys and went on to create and sell an IT company. As a serial entrepreneur, his entrepreneurship experiences range from IT services to restaurants to social enterprises. Umesh Malhotra was elected as an Ashoka Fellow in 2008.

## Highlights and previews

- Nivasa core team has increased to a seven member full time staff, and three part time!
- Nivasa corpus funds have increased to fifty five lakhs towards our goal of raising Rs 3.5 Crores.
- The Banyan has approached us to provide design thinking for a housing solution for their “Home Again” project, for rehabilitating the mentally challenged into society. The pilot is likely to be at Tiruchirapalli, Tamil Nadu!
- We have been approached by our NGO partner for CLC, APSA (Association for Promoting Social Action), Bengaluru, to partner with them for a district wise Anaganwadi design solution at Karwar!
- Chitradurga and part of Davenegere has plenty of soil and lime availability. Village Mushtur has five families producing lime in traditional kilns that are not very efficient. Our team with Professor KS Jagadish & Professor Raghunath are coming up with an energy efficient design. We are targeting to put up a few prototypes in the region, thanks to a long standing individual donor & NIVASA supporter. This will be our Project Griha Chitradurga entry....
- Lodha Developers, Mumbai and Sobha Developers have approached us regarding CLC projects. We are hoping that they will take this meaningfully forward. The potential is huge to impact thousands of workers at every project site!
- We have completed our study of Davengere area as part of Griha Davengere, and are arriving at design solutions.
- We have successfully requested Chikballapur ZP office to fund our internal travels for Griha Chikballapur study, which we have just started!

# THANK YOU!