Housing in informal urban settlements in Odisha

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BINUCOM Building Inclusive Urban Communities

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Informal Settlements in Indian Cities - Impulses for Innovation in Architecture and Urban Planning Education
Coimbatore

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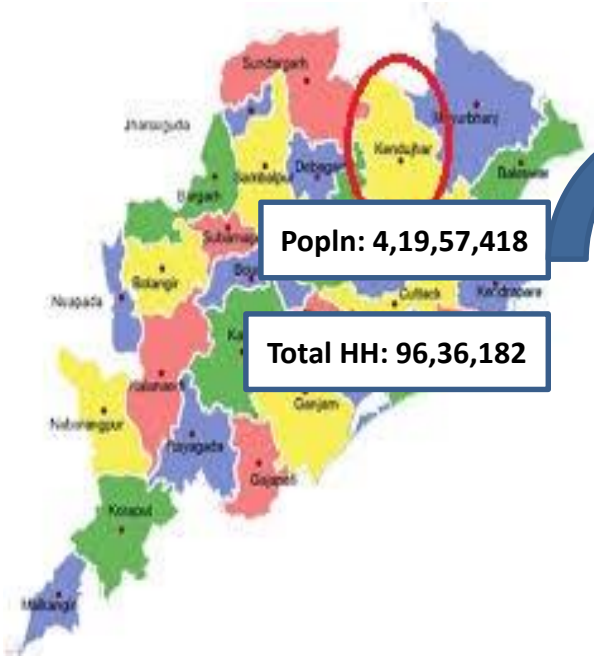
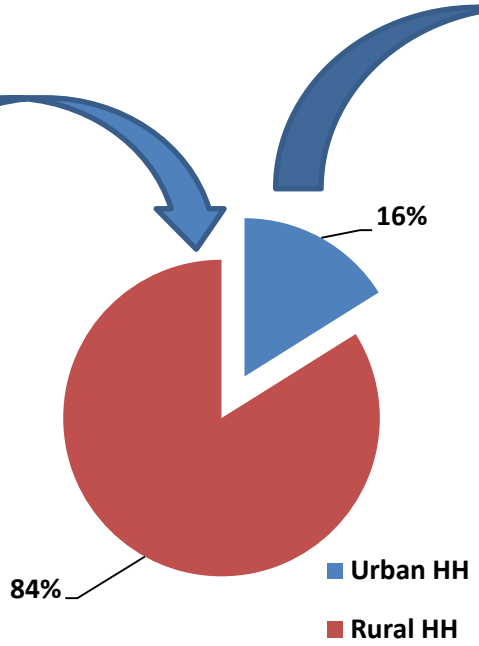
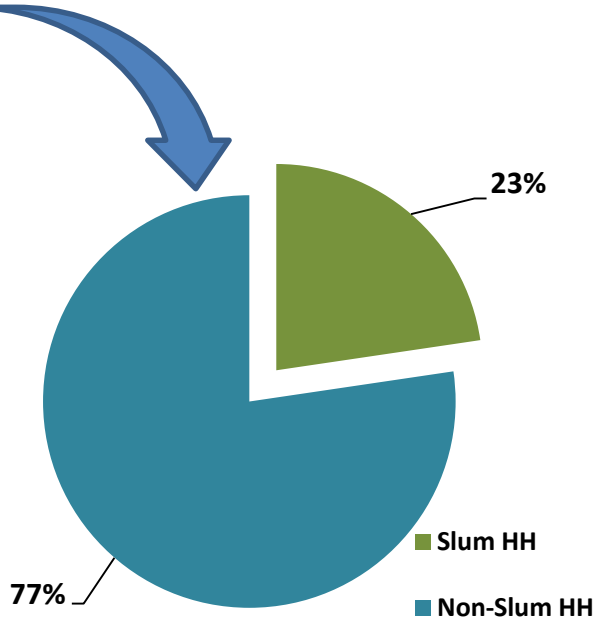
Odisha: State profile







State Population	4 Crore
Total HH in Odisha	96 Lakhs
Rural HH	81 Lakhs
Urban HH	15.5 Lakhs
Slum HH	3.5 Lakhs
Non-slum HH	12 Lakhs

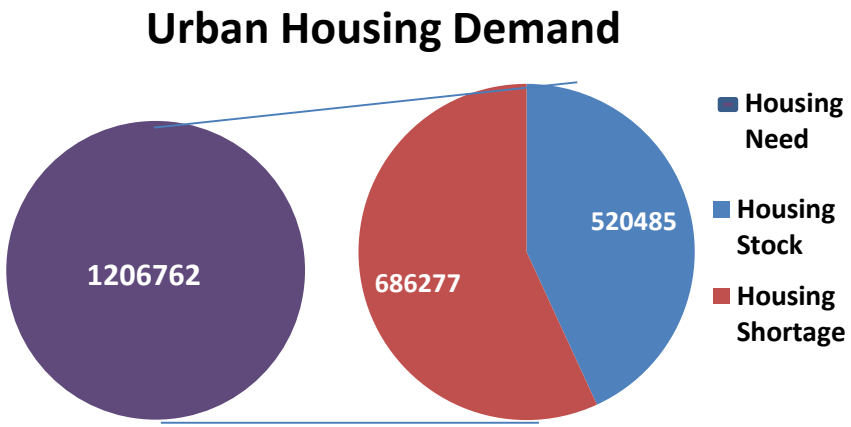
There are around 400 slums spread across 110 ULBs in Odisha

Source: Census 2011

Housing Shortage in Odisha

Housing shortage calculated based on Socio-Economic Caste Census (SECC) survey data (2011) reveals:

- **Total Urban HH: 12 lakhs**
- **The annual growth rate for Urban HH in Odisha is 2.11%**



Urban housing projects in Odisha in recent past

- IHSDP/ BSUP/ RAY
- Mostly individual houses on own land
- Others where slums are tenable, in-situ redevelopment has taken place, which are G+3/ G+4 structures.
- In some cases, relocation projects with G+3/ G+4 structures

Major findings in on-going projects

- The basic objective of these schemes have been to strive for holistic slum development with a healthy and enabling urban environment by providing adequate shelter and basic infrastructure facilities to the slum dwellers.
- However, progress has been quite slow. About 73% DUs are completed in IHSDP and about 45% in RAY. The primary reasons for this include:

INDIVIDUAL HOUSES:

- Some of the beneficiaries are extremely poor and are not able to invest in housing.
- In many cases, beneficiaries have attempted far larger houses and are still struggling to complete the house constructions.
- Sometimes, contractors have left the works prior to completion as there has been escalation in prices of material and labour over the years.
- Most houses either do not have toilets, or are not utilized.
- Designs of the houses where contractors have been involved are culturally not-sensitive to the way of living.

GROUP HOUSING PROJECTS:

- The process for land clearance and making provisions for transit accommodations have been extremely slow.
- Works have been assigned to different agencies.
- Quality of construction works varies depending on the agency involved, mostly poor.
- Process of ensuring beneficiary contribution is a challenge.

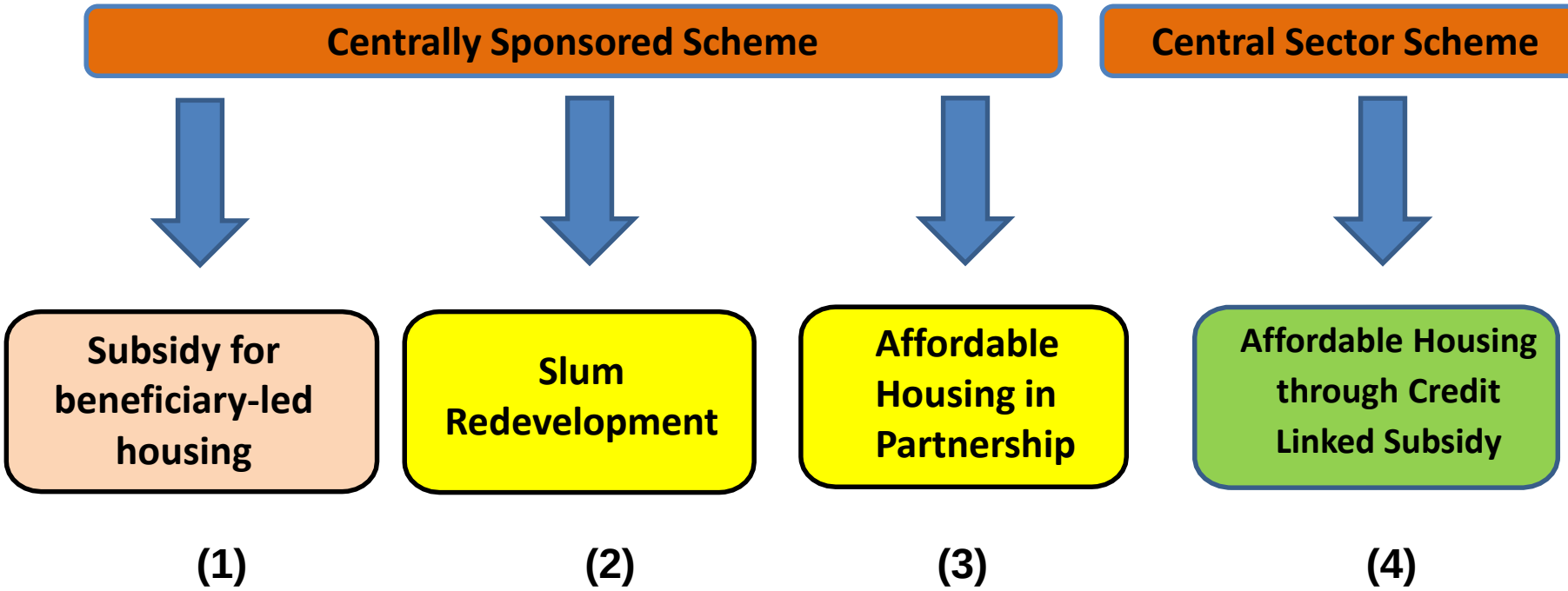
Owner-driven vs Contractor driven

Owner-driven individual houses	Contractor-driven individual houses
Beneficiary participation ensured right from designing the house	Beneficiary generally forced to adopt a model design developed
Quality of construction varies depending on mason	Quality of construction varies depending on contractor
Speed of construction is generally very slow	Speed of construction is generally fast
Extremely challenging for the ULB to motivate the beneficiary and complete the construction work in a time-bound manner	Relatively easier for the ULB to organize review meetings with contractors and hasten the pace of works.

Houses under IHSDP

Houses under RAY

Housing For All: Verticals under PMAY



Beneficiary can take advantage under one component only

Housing For All: Options and links with State policy

For individuals of EWS category for new house or enhancement

Cities to prepare a separate integrated project for such beneficiaries

Central Assistance: Rs.1.5 lakh & State assistance: Rs. 0.5 lakh

(1)

Beneficiary can avail this with model 6 of the State policy

"In-situ" using land as a resource with private participation

Extra FSI/FAR and TDR if required

GoI grant Rs. 1 lakh per house

(2)

Beneficiary can avail this with model 4 of the State policy

With private sector or public sector including Parastatal agencies

Central Assistance of Rs. 1.5 lakh per EWS house in projects where 35% houses for EWS category.

(3)

Beneficiary can avail this with model 3 of the State policy

Subsidy for EWS and LIG for new house or incremental housing

Upfront subsidy @ 6.5% for EWS and LIG for loans upto Rs. 6 lakh, calculated at NPV basis

(4)

Beneficiary can avail this from Centre directly

BENEFICIARY LED CONSTRUCTION of individual houses

Design and preparation of DPR

- **Eligible beneficiaries**
  - ☞ **EWS families (with annual income less than Rs. 1.80 lakh) living in slums and non-slums having RoR of land**
  - ☞ **Do not own any *pucca* house anywhere in the country**
  - ☞ **Have not received any grant or assistance from govt. for housing**
- **Verifications of beneficiaries need to be conducted on the above lines.**
- **Size of DU proposed to be within 23 to 30 sqm. carpet area.**
- **A total of 23,843 DUs have been sanctioned under BLC across 40 ULBs**

Implementation stage

- **The cost of construction of a house will be around Rs. 3 lakhs, out of which government support will be Rs. 2 lakhs.**

- **A minimum balance in bank account of beneficiary is mandatory to avail the work orders.**

  [This is to ensure that the beneficiary is able to reach plinth level prior to receiving the 1st instalment]

- **Subsequently, installments will be released as reimbursements on completion of each stage** ***[supported by pictures with geo-tagged references].***

Fund flow under BLC

Sl. No.	Stages of construction of Dwelling Units	Support amount from government as reimbursement
Issuance of Work Order: Beneficiary to have a min. amount in bank account so that s/he can build the house upto plinth level		
1	Construction of foundation upto plinth level	Rs. 75,000/-
2	Construction of superstructure upto roof level	Rs. 55,000/-
3	Completion of roof slab casting	Rs. 35,000/-
4	Completion of works including ph and sanitation, etc.	Rs. 35,000/-

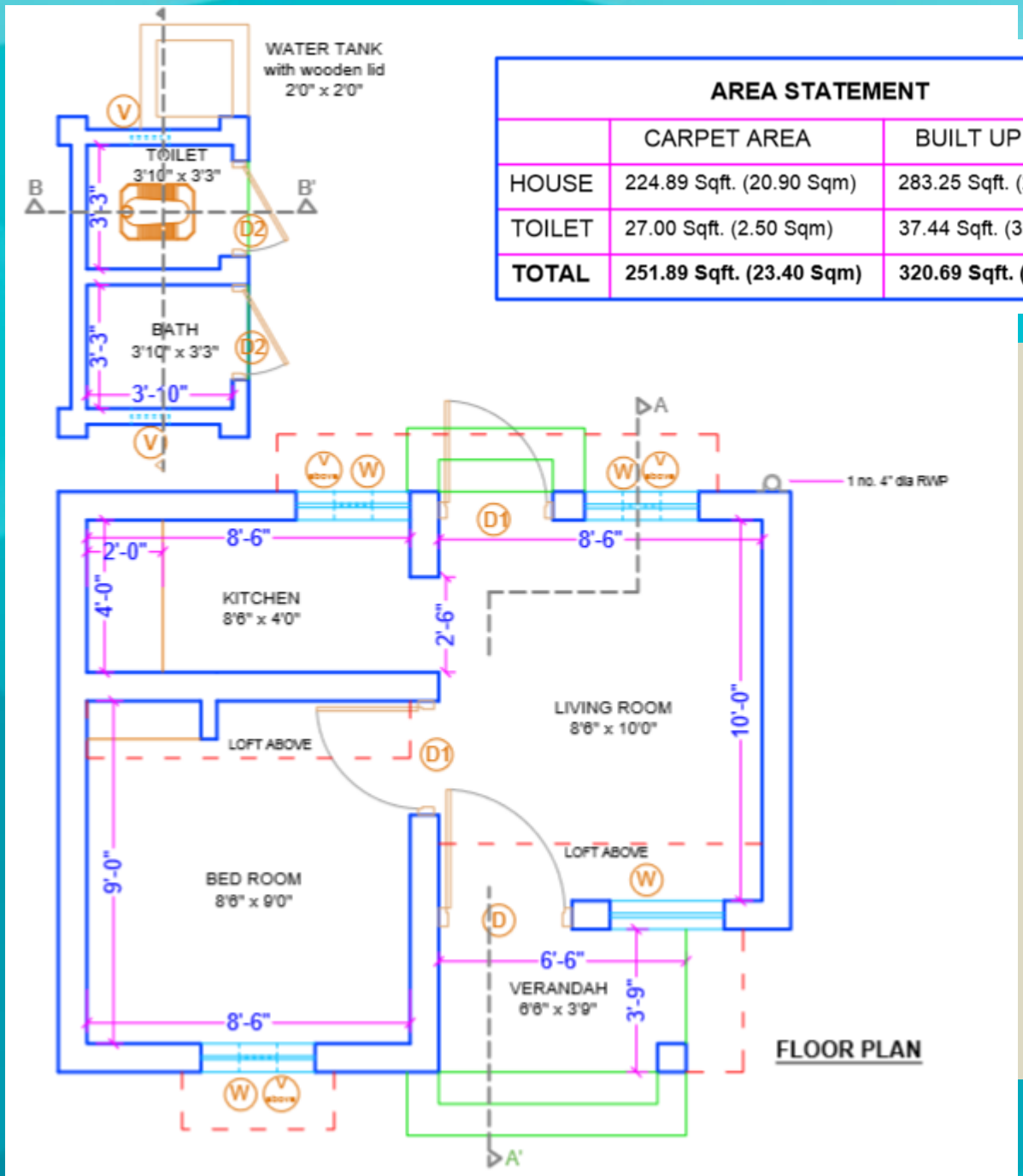
Implementation stage (cont'd)

- Construction to be completed within 6 to 12 months from issuance of work orders.
- Provisions for basic services and public amenities need to be an integral part of the project to be taken care of by the ULB.
- Social consultations periodically with beneficiaries.
- The beneficiary can engage an agency/ contractor for undertaking construction of the house.
- The ULB may facilitate formation of a *Basti/ Sahi/ Pada* Works Committee for procurement of building materials in bulk and effective monitoring of works, also ensuring behaviour change for toilet usage.

House Designs

- House designs to be developed in coherence with local and cultural way of living, vernacular architecture and climate.
- Design should promote use of local building materials and appropriate (cost-effective, green and disaster-resilient) technologies.
- Houses should be preferably load-bearing structures.
- Provisions for roof-top rain-water harvesting.

House Design Sample 1

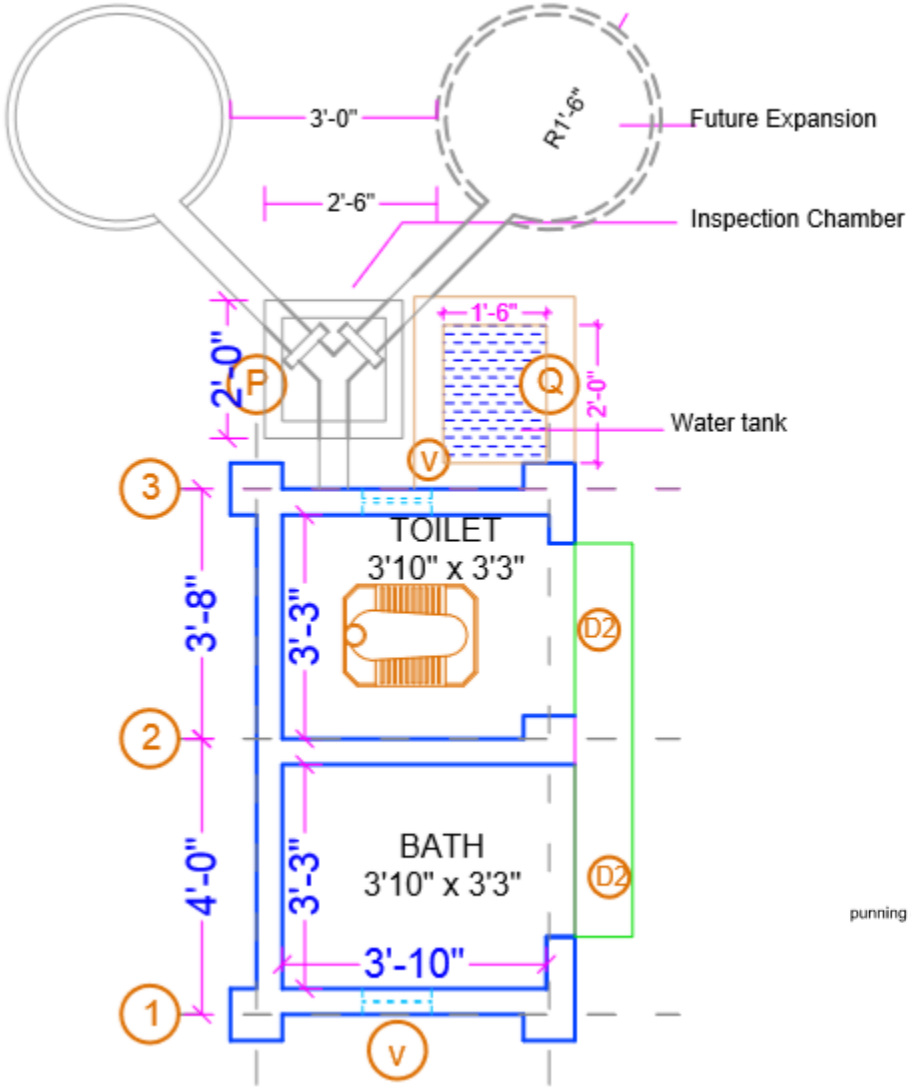


AREA STATEMENT		
	CARPET AREA	BUILT UP AREA
HOUSE	224.89 Sqft. (20.90 Sqm)	283.25 Sqft. (26.30 Sqm)
TOILET	27.00 Sqft. (2.50 Sqm)	37.44 Sqft. (3.50 Sqm)
TOTAL	**251.89 Sqft. (23.40 Sqm)**	**320.69 Sqft. (29.80 Sqm)**

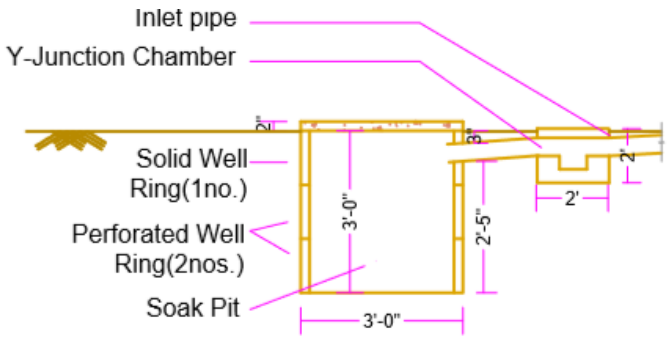
- **Min carpet area: 23.4 carpet area**
- **Toilet & Bath separated from the house**
- **Estimated cost around Rs. 2.88 lakhs using conventional technologies; around Rs. 2.64 lakhs using cost-effective technologies**

House Design Sample 1 (cont'd)

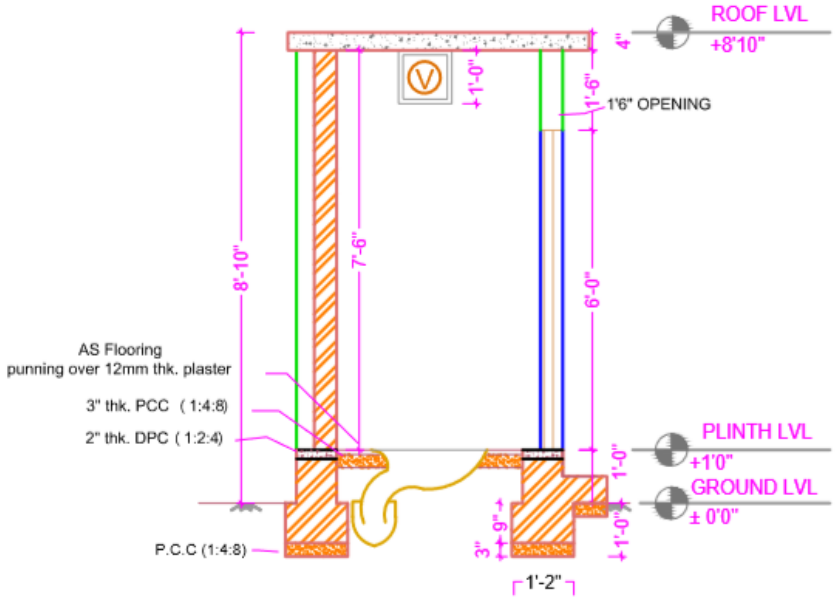
Toilet Details



PLAN OF TOILET
(Showing Inspection chamber & soak pit)



SECTION
(Showing Inspection chamber & soak pit)



SECTION
(through toilet)

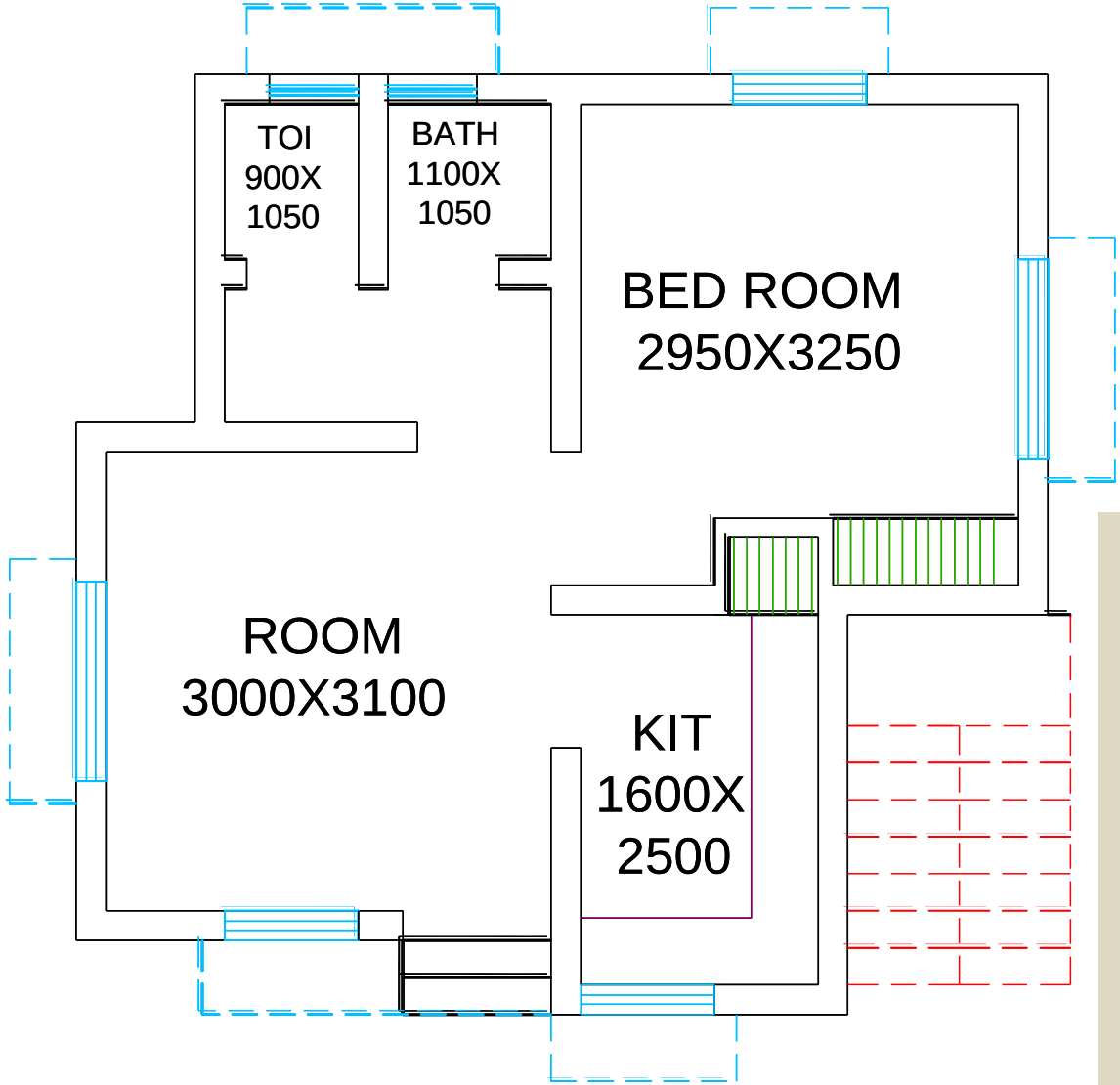
House Design Sample 1 (cont'd)

DWELLING UNIT

House Design Sample 1 (cont'd)

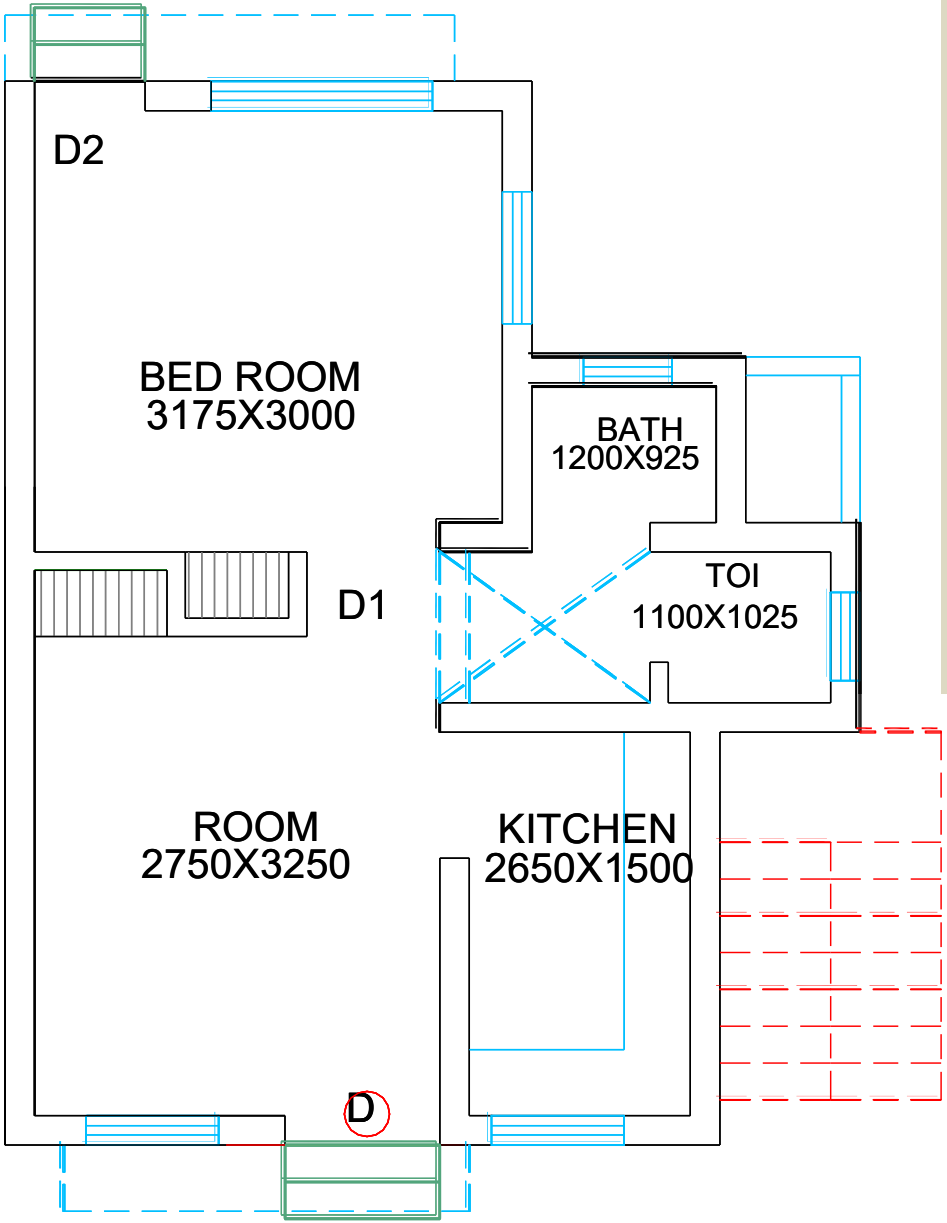
DWELLING UNIT WITH STAIR FOR FUTURE VERTICAL EXPANSION

House Design Sample 2



- Toilet & Bath within the house but physically segregated.
- Built-in cabinets
- Scope for future vertical expansion

House Design Sample 3



CARPET AREA 27.4 SQM.

- Toilet & Bath within the house but physically segregated.
- Built-in cabinets
- Clubbing of DUs possible along common wall
- Scope for future vertical expansion

Major challenges in PMAY-BLC

- Most beneficiaries possess joint *patta* (the RoR of land), many have sale deeds, etc.
- The estimated cost of construction of a house is around Rs. 3 lakhs, out of which government support will be Rs. 2 lakhs. Some beneficiaries were found to be extremely poor and may be struggling to complete house constructions as in IHSDP. Alternate house designs of 23sqm carpet area (min as per PMAY guidelines) using conventional as well as alternate cost-effective technologies (using local building materials) so that the beneficiary contribution can be minimized.

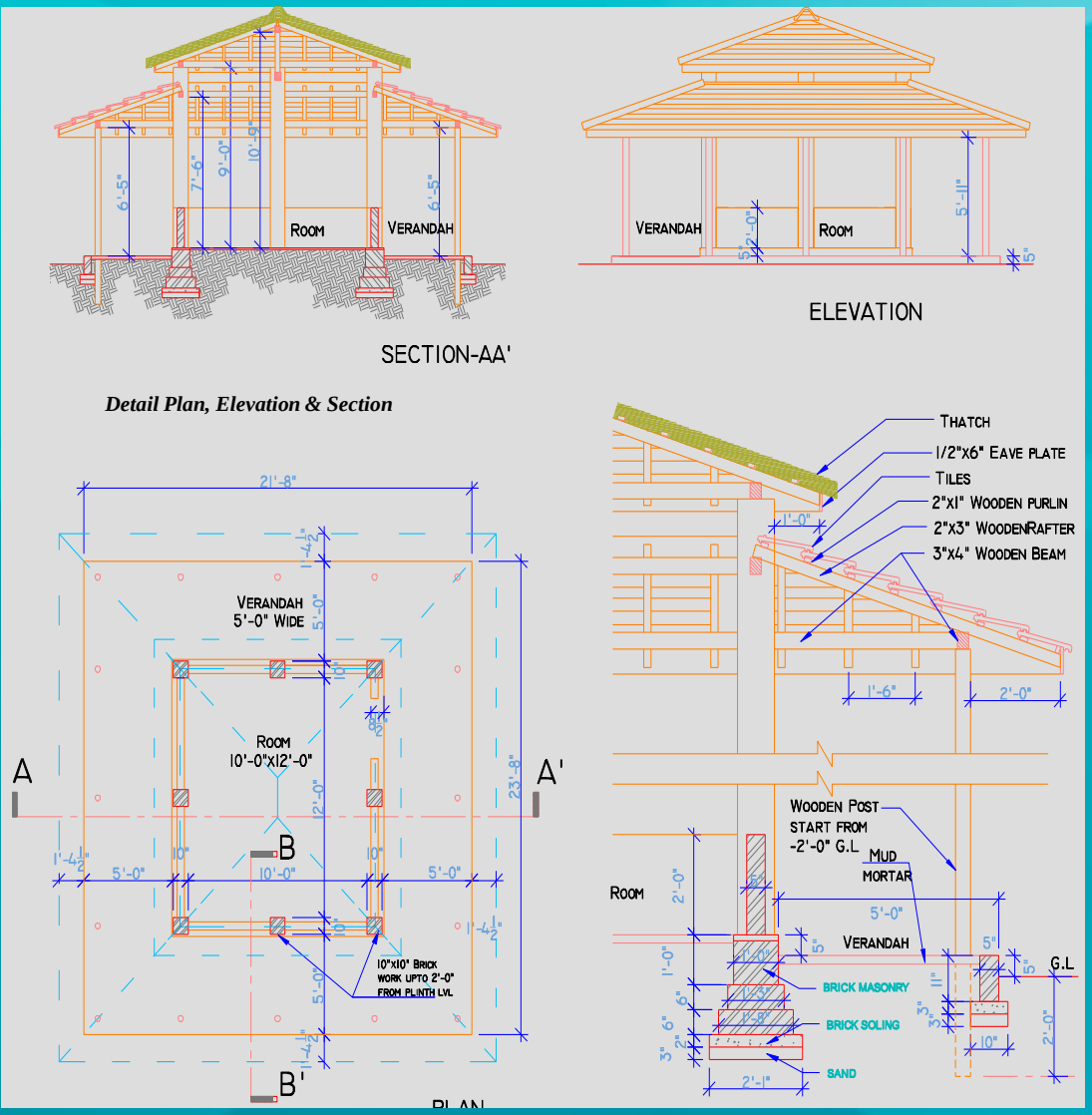
Housing for the ultra-poor

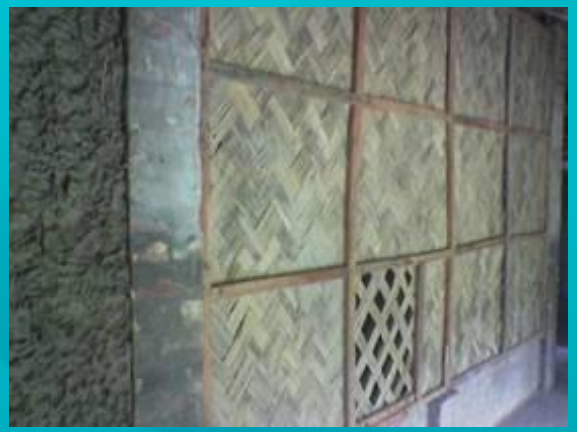
- The ultra-poor mostly dwell in kutcha dwelling units without basic services.
- Most of them have livelihood and health as more important priorities than dwelling in a “pucca” house.
- Within the Housing for All policy, provisions for supporting a more durable kutcha house or a semi-pucca house may be thought of.

A

MODEL VILLAGE PROGRAMME

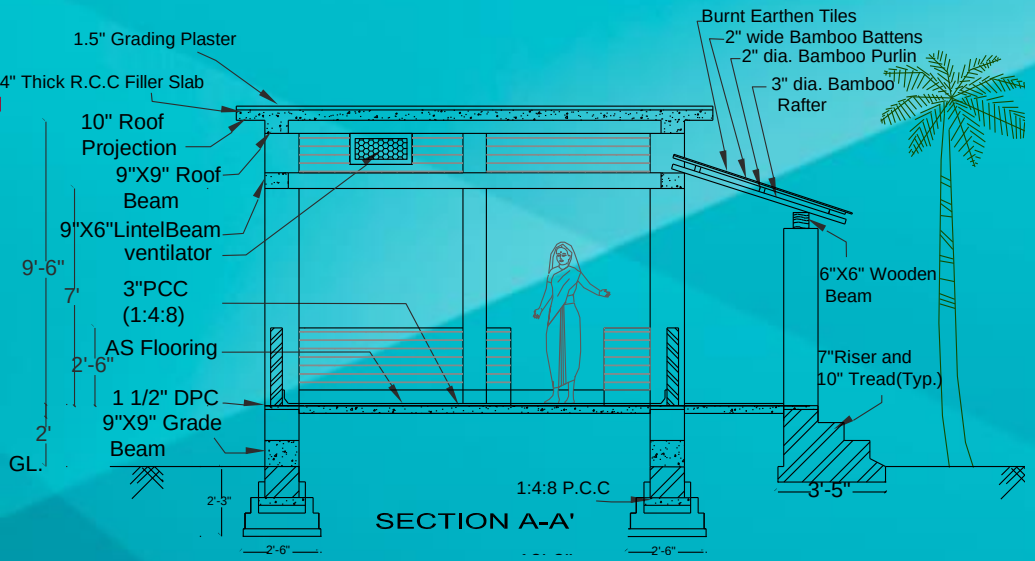
Blending of Vernacular Architecture and Disaster-resilient Technologies for the Flood affected victims in the eco-fragile Sunderban archipelago of West Bengal

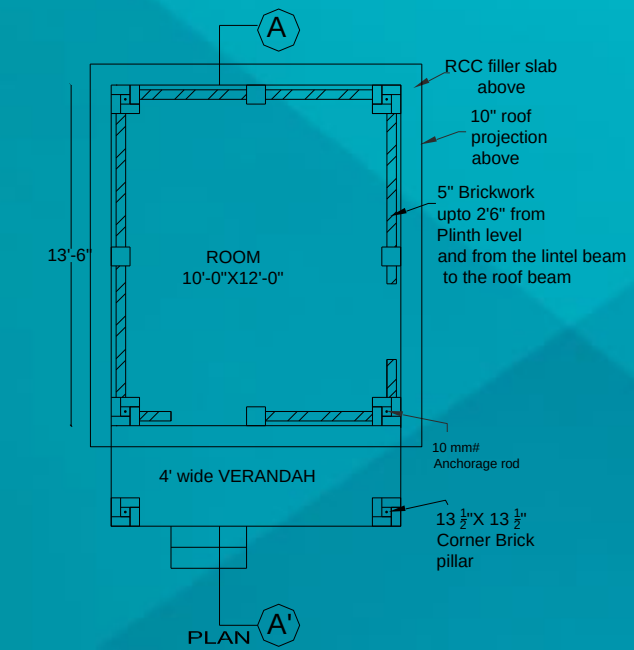




B POST-TSUNAMI RECONSTRUCTION PROGRAMME

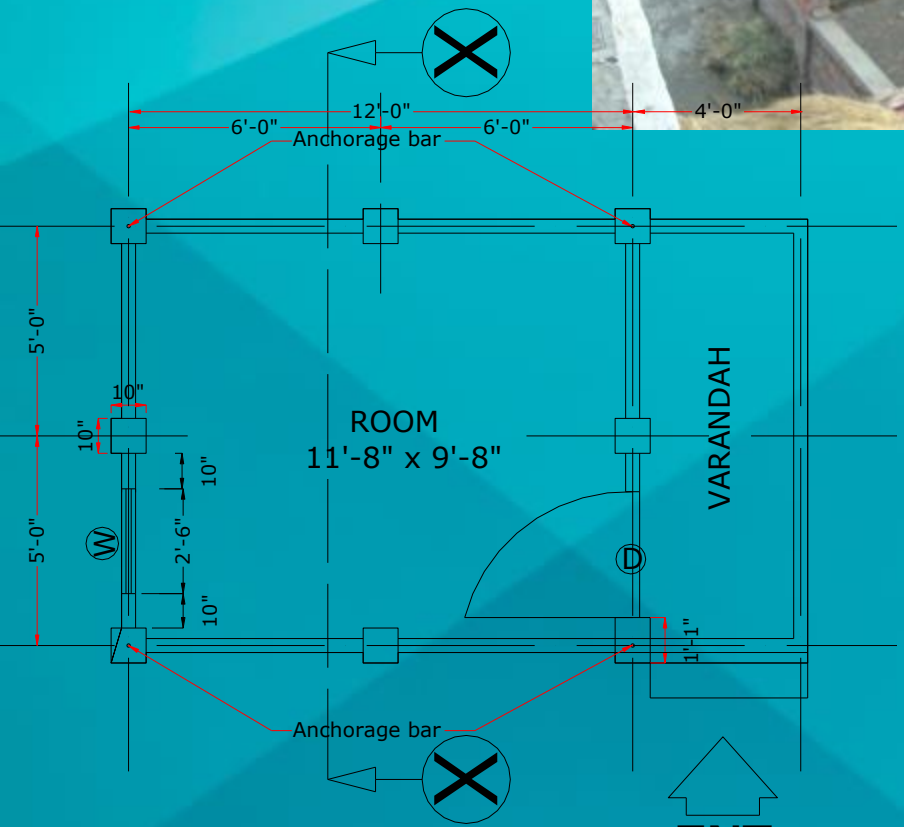
Safe Shelters for Dalit communities using a highly participatory approach in Cuddalore and Nagapattinam districts, Tamil Nadu





C POST-FLOODS RECONSTRUCTION PROGRAMME in Bihar and UP

Interim Safe Shelters for Flood-affected communities in Gaighat block of Muzaffarpur district - Bihar and Shivpur block of Bahraich district - Uttar Pradesh



Thank You