



Incremental Housing India

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Yerawada slum in Pune



City: Pune, India

Project : To improve the living conditions of people who live in slums

Place located:

- Yerawada slum, Pune city, Bombay India
- 4000 families

Cost: 4500e/ house

Organizations involved :

- Filipe Balestra and Sara Göransson as head –architects
- a team of international architects, urban planners, landscape architects and graphic designers
- SPARC and NGOs organisations



Project area:
Netaji Nagar



«The project's main idea is to develop a strategy in order to turn informal slums into permanent urban districts through a process of gradual improvement to existing dwellings instead of demolition rebuilding».



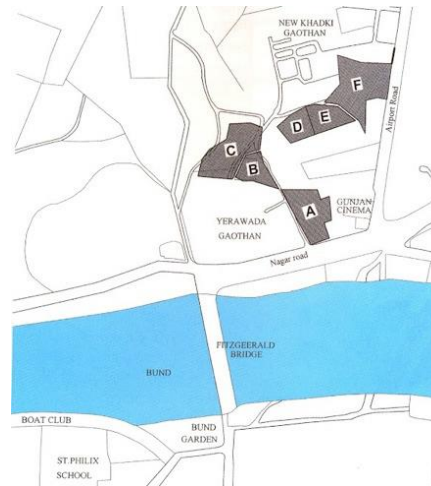
House exterior,
after the project



House exterior,
before the project

- effort to set up a strategy which uses the existing urban formations as starting point for development.

- Aim : to offer better living conditions, to people who live in those slums



Principles of strategy :

- preserve the existing social networks
- Neighbours remain neighbours, local remains local.



Local people are involved in the project

- the communities are asked to engage with the construction
- each family can customize its own house
- the strategy strengthens the informal and aims to accelerate the legalization of the homes of the urban poor
- individual houses are demolished and rebuilt, allowing the resident to continue filling in the building as his/her family or business grows

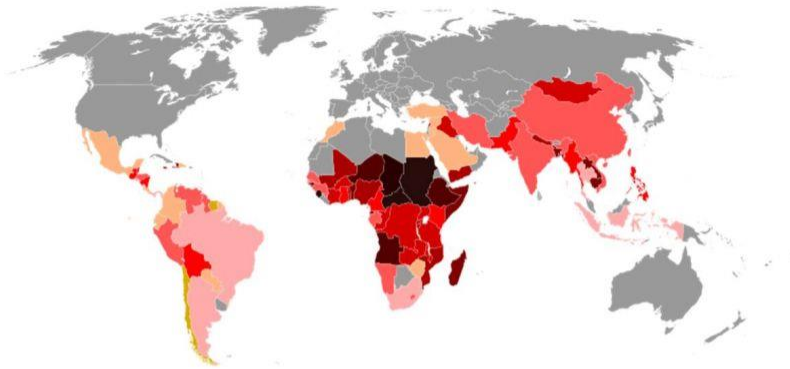


- For the improving of those house, materials were used from the precedent constructions

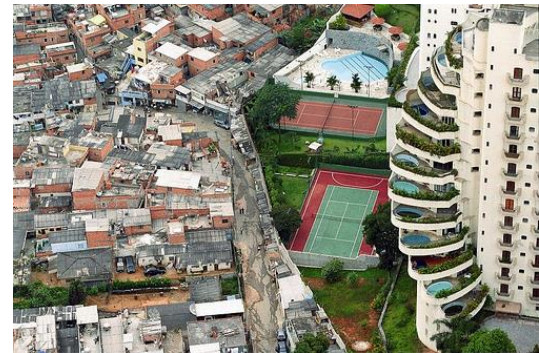
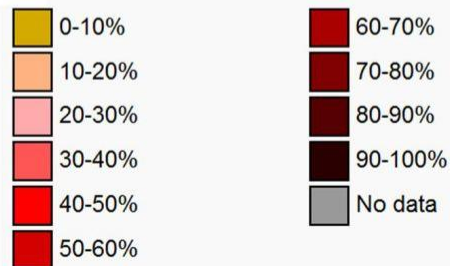


Inner slum houses

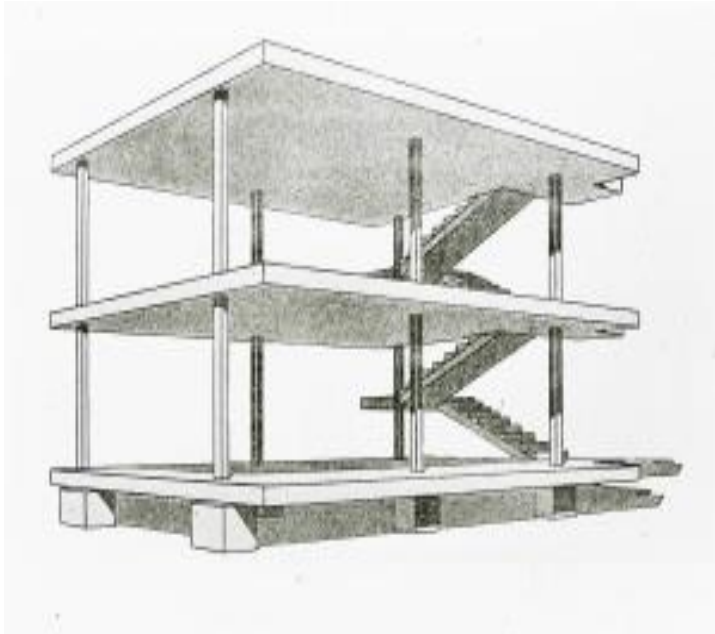
- the Incremental Housing Strategy, can be implementable anywhere.
- Filipe, Sara and SPARC is now spreading the word to implement the strategy in other countries with similar needs: Brazil, Kenya, South Africa, The Philippine
- 1/3 of the world's urban population is now living in slums



Nations by percentage of urban population living in slums.

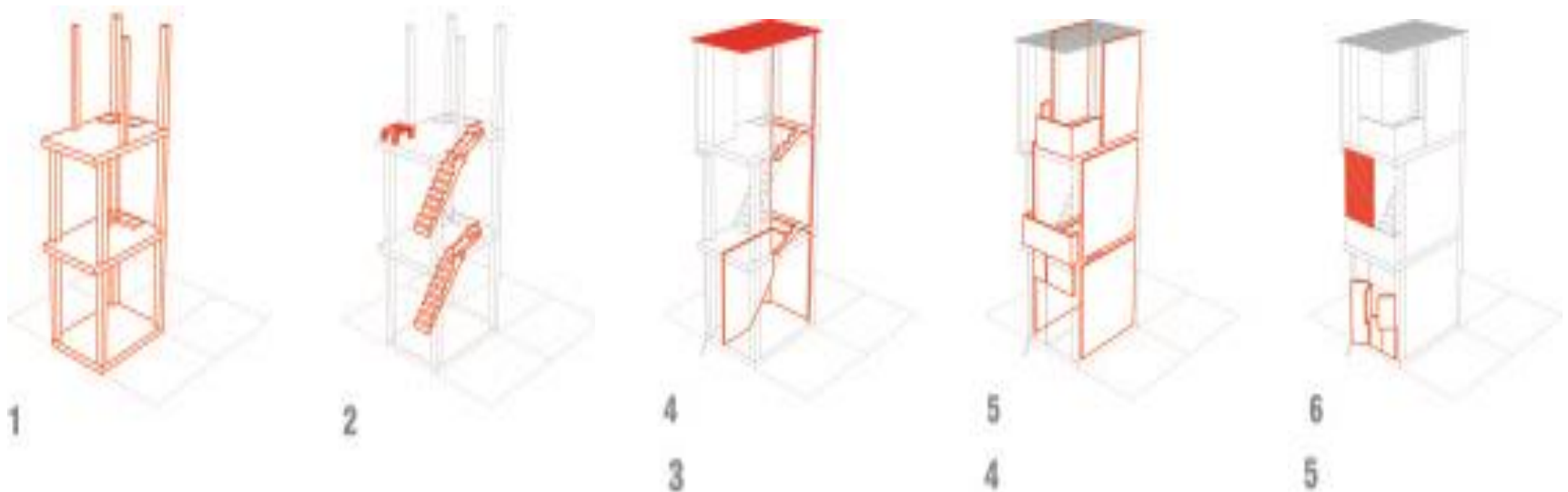


Inspiration from Le Corbusier's Maison Domino



- Prototypical building system that employs structural columns and slabs
- Universal and basic foundation for a housing model
- Engaging with economy and existing construction industry
- Housing capable of being developed incrementally.

Core House Model



1- The multi-level structure of a skeleton free-standing concrete pillar and rigid floor

2- Floors are connected by concrete stairs and in some cases ladders can be used up the front to open up the interior for more flexible use

3- Using reclaimed material from the previous kachha house or items such as cheap bamboo mats or tarpaulin

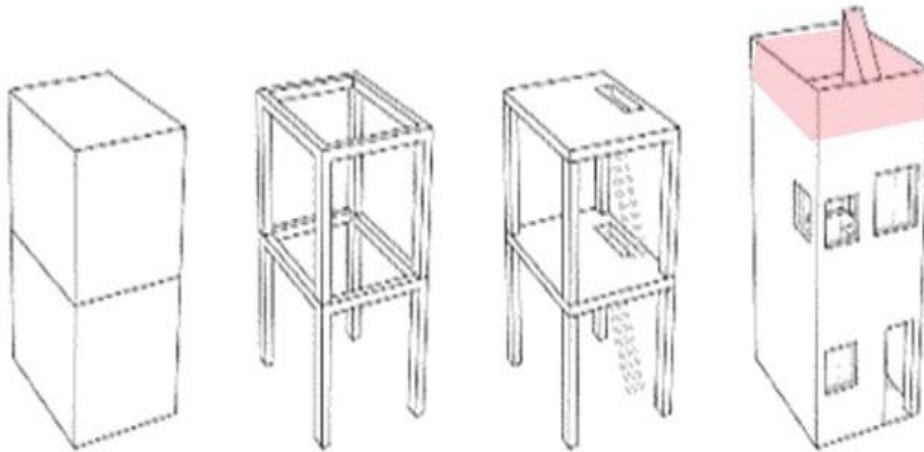
4- The house is consolidated with more walls for increased privacy triggered

5- Alternative infilling can be used can offer partial segregation and better air circulation. Stairs enable the first floor and second floor to be separated from the ground floor for use as a shop or room rental

The three house typologies developed

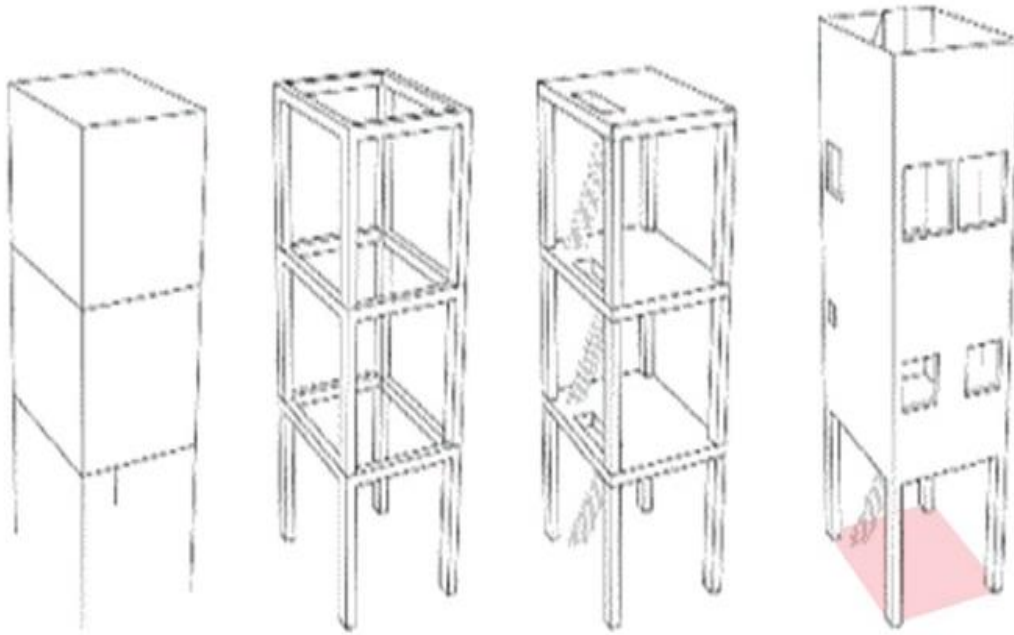


HOUSE A



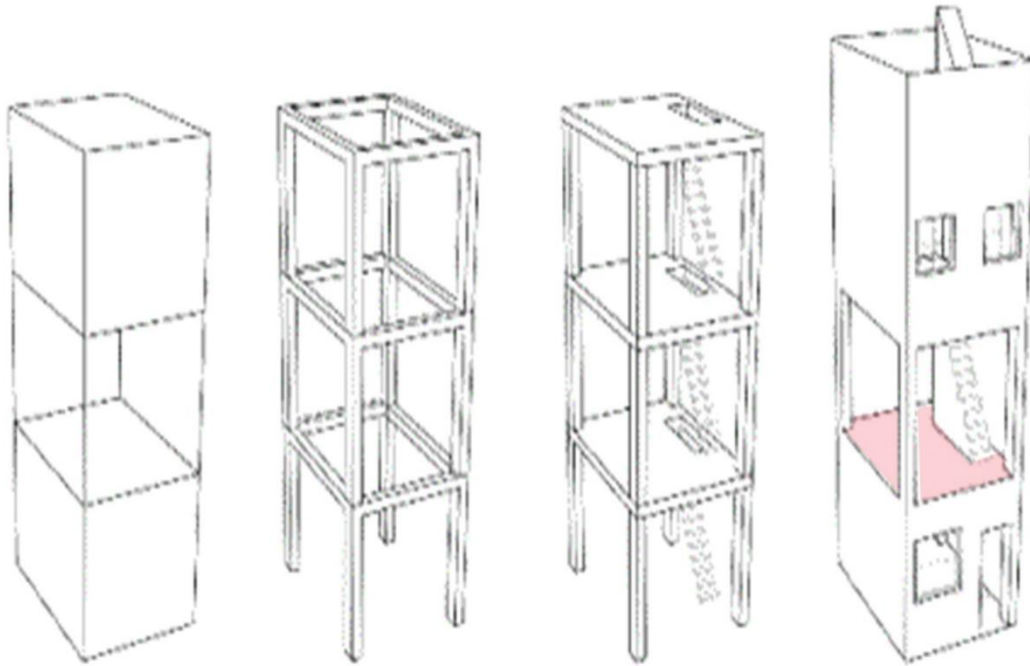
- Two story home
- Structured like a 3 story home to ensure safety in future vertical extension

HOUSE B



- Incrementable ground floor
- Left open for either parking or for the family to turn it into a shop

HOUSE C



- Incrementable middle floor
- For hanging clothes or to be used like a living room.

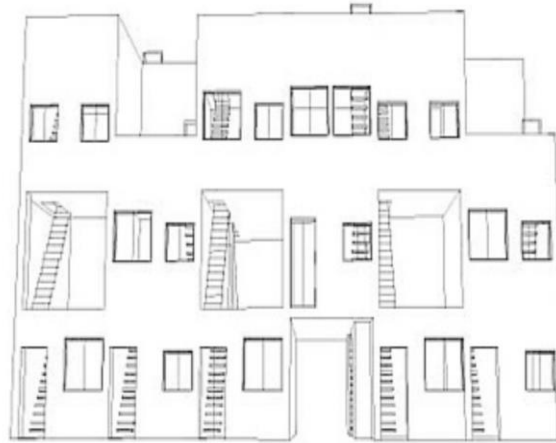
Adding footprints



TYPE 1

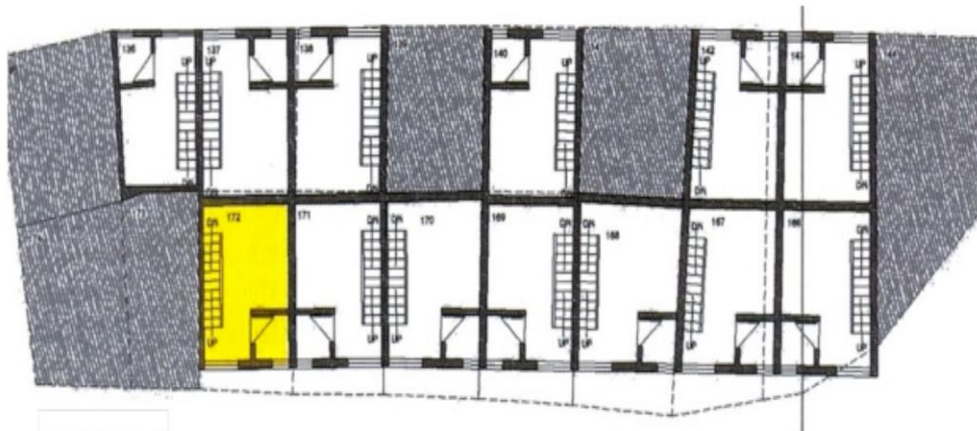


sharing structure

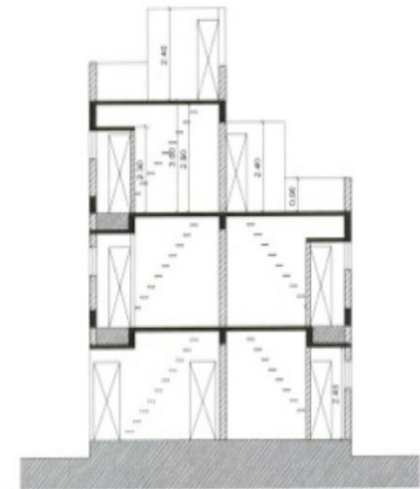


mixed cluster A + B + C

- Private stairs
- Private toilet
- Private kitchen
- Private veranda



typical floor plan



section




TYPE 2



typical floor plan



model

-  Small public square
-  Stairs
-  Houses

- Common stairs
- Veranda
- Individual toilet
- Individual kitchen
- Small public squares

The crux of the scheme is that no two houses have the same design



12.5 mq rectangle test



constructing models



temporary model



temporary structure after demolition



kid amid mounds of brick and concrete



construction commenced on site