Located in Cigondewah, the edge of Bandung, there are estimated 740 families living inside kampung RW2 and RW12, around than 50% of which are known as migrant families from rural areas. 66% of the families earns less than Rp. 6,750,000 per month, which equals to 450 euros. Many people there make a living in the textile factory Kahatex across the road, or work with the textile leftovers from Katatex.

The living condition inside Cigondewah is not optimistic that many people live in the informal housing which only meets the basic need of living. The housing shortage needs to be compromised urgently.

My project focuses on the possibility of improving the housing shortage problem through the cooperation between the factory Kahatex and villagers in RW2 and RW 12. Bio-based material from the nearby forest would be made into a prefab modular construction system to achieve the target of rapid construction, working together with the textile waste from Kahatex to reduce the solid waste as well as the material cost. Meanwhile the labor from Cigondewah would be employed and trained to participate the manufacture process; Kahatex and other investors involved can get their money back after a certain payback period and earn a long-term profit. As a tropical project, the climate issue would be very challenging that how to prevent the direct sunshine and how to make full use of the natural ventilation would be the primary concern.

Brief
Parallel Projection

Unit Plan 1
1:50

Unit Plan 2
1:50
Roof Detail 1:5

- 15mm Recycled Plastic Tiles
- 50 x 50mm Wood Purline
- 100mm Bamboo Tube

- 20mm Verge Wood Board
- 120 x 150mm Drainage Gutter
- 5mm Waterproof Layer

- 15mm Durable Plastic Panel
- 5mm Waterproof Layer
- 40mm Sound Insulation
- 20mm Wood Panel

Column Detail 1 1:5

- Ø100 Bamboo Beam
- 5mm Rubber Pad
- Ø120mm Bamboo Column
- Concrete Reinforcement

- Ø12mm Nylon Rope

Column Detail 2 1:5

- 300x300mm Recycled Brick Infill
- 10mm Rubber

Liang Guo
4593049
Floor Detail 1
1:5

- 5mm Joint Sealant
- 150 x 80mm Wood Frame
- 90 x 40mm Door Frame
  - 50mm Sound Insulation
  - 5mm Wood Surface
- 70mm Sound Insulation
- 15mm Plastic Panel

Floor Detail 2
1:5

- 15mm Flattened Bamboo
- 5mm Waterproof Layer
- 40mm Sound Insulation
- 30mm Wood Panel

Footing Detail
1:5

- Ø80mm PVC Pipe
- 5mm Sealant
- Ø120mm Bamboo Column
- 15mm Split Bamboo
- 500x800 Concrete Footing
- Compacted Fill
- 200mm Gravel Base