

**P5 PRESENTATION
EMMA VAN HELDEN**

**~~DISPLACEMENT~~ TRANSFORMATION
OF INNERCITY SETTLEMENTS IN ADDIS ABABA**

SOCIO-SPATIAL REDEVELOPMENT FOR THE INNER-CITY SETTLEMENT LIDETA



• Ethiopia



Inner-city





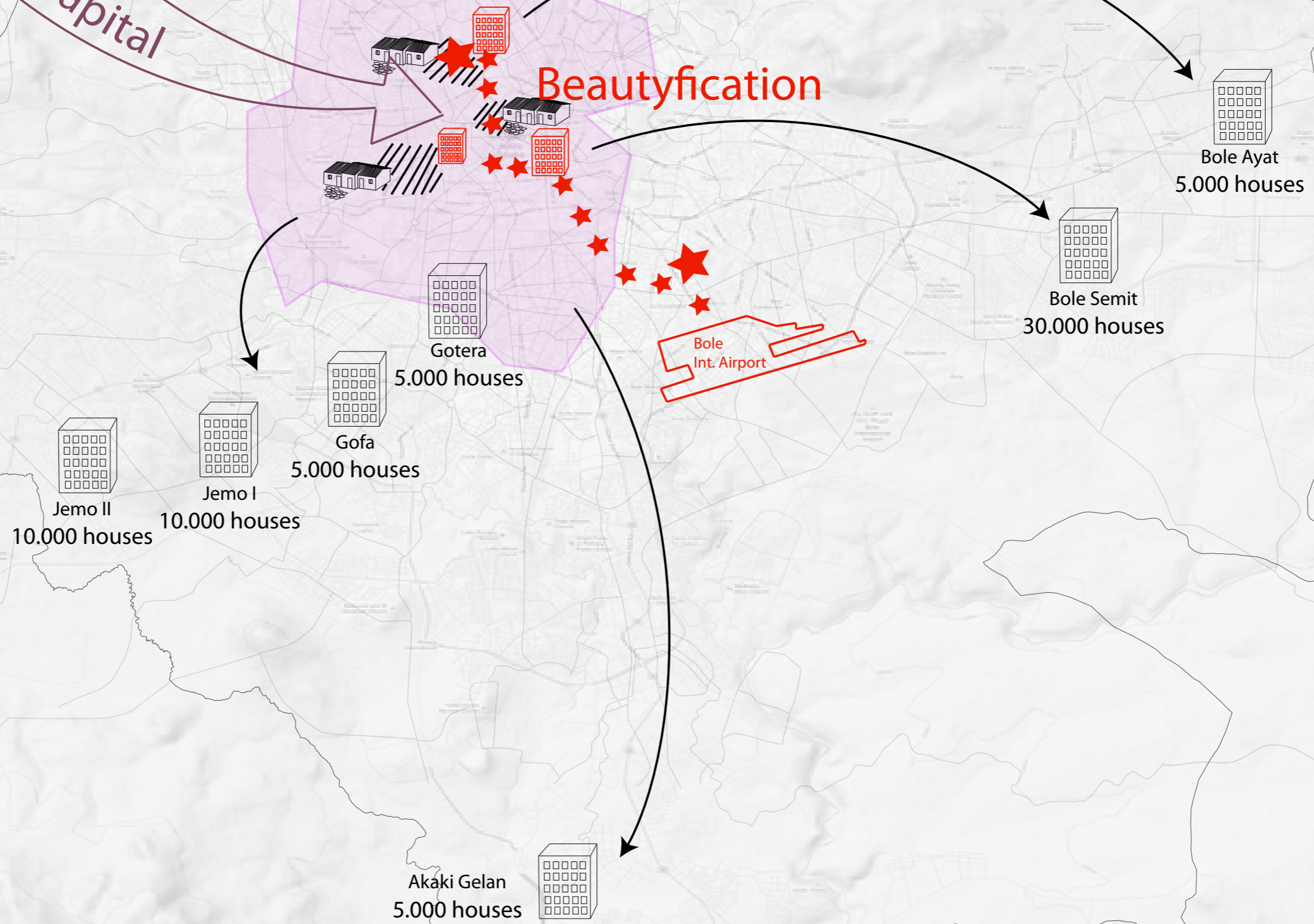


Research conclusions

Displacement

Multinational Capital

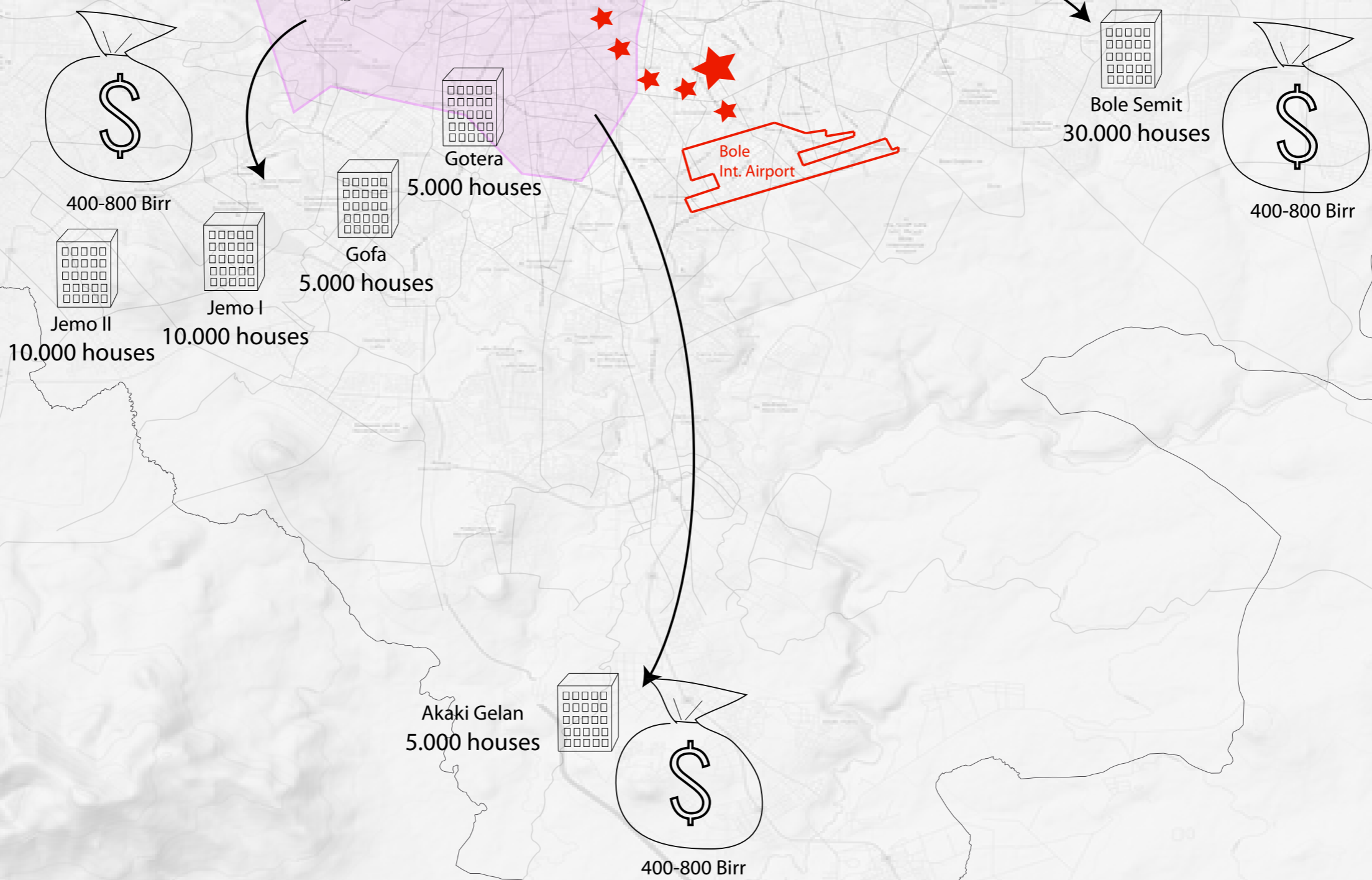
Beautyfication



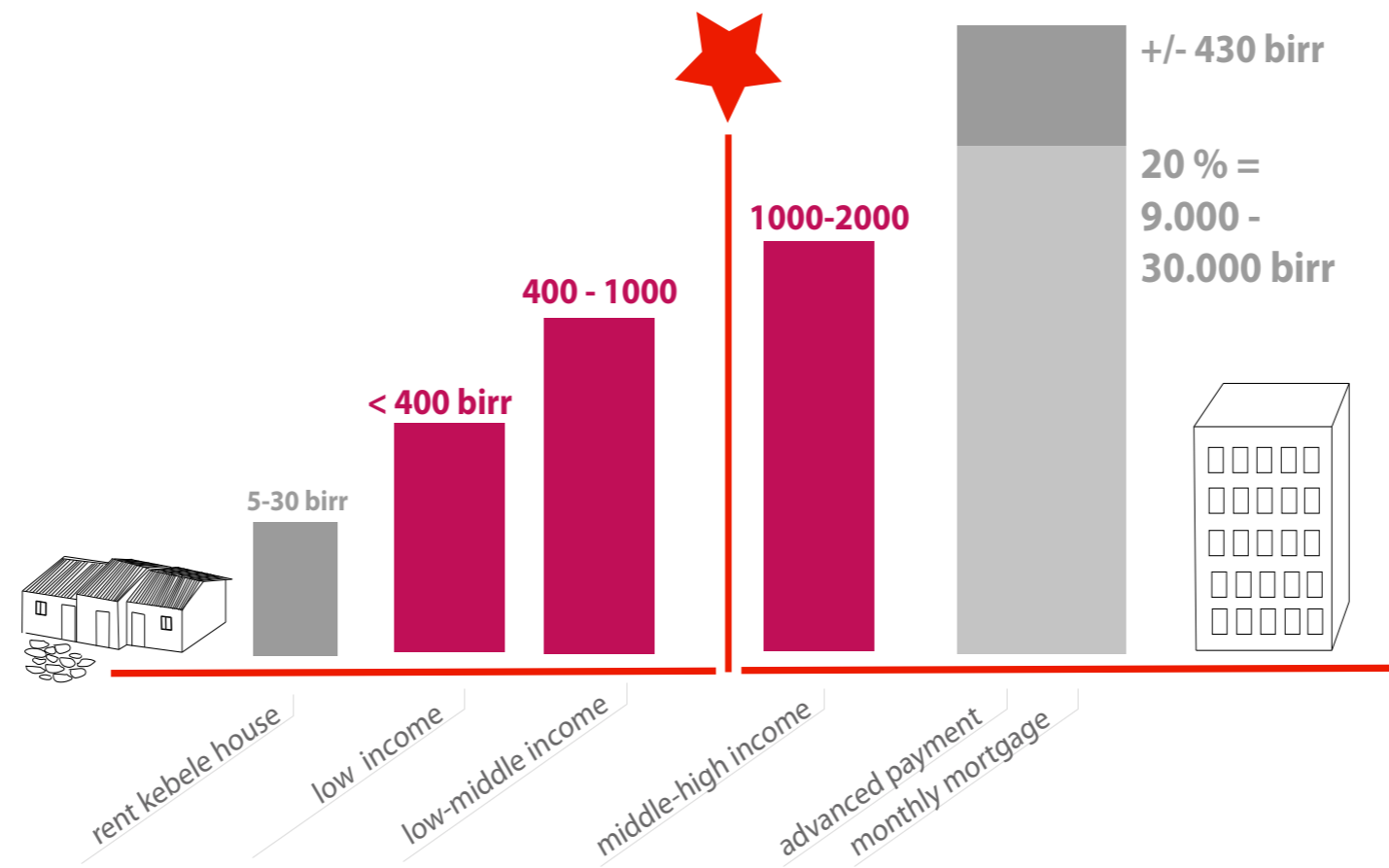
Affordable??

Multinational Capital

Beautyfication



Affordable??



Multinational Capital

Iddir

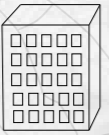
Equb

Beautyfication

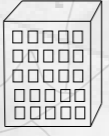
Bole Int. Airport



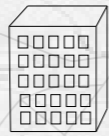
400-800 Birr



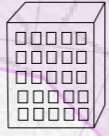
Jemo II
10.000 houses



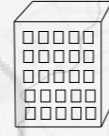
Jemo I
10.000 houses



Gofa
5.000 houses



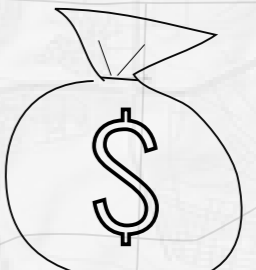
Gotera
5.000 houses



Akaki Gelan
5.000 houses



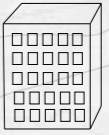
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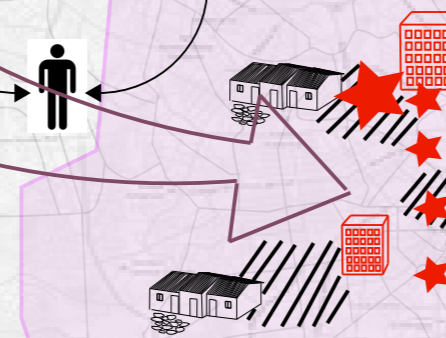
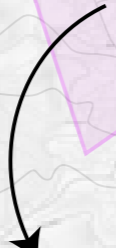
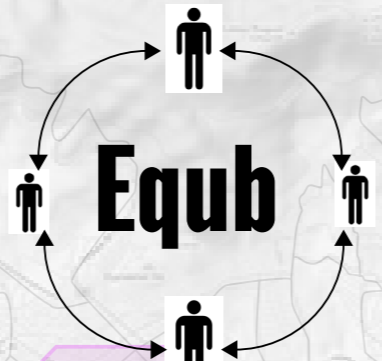
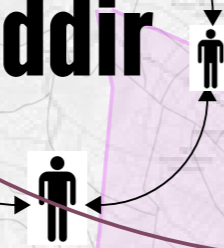
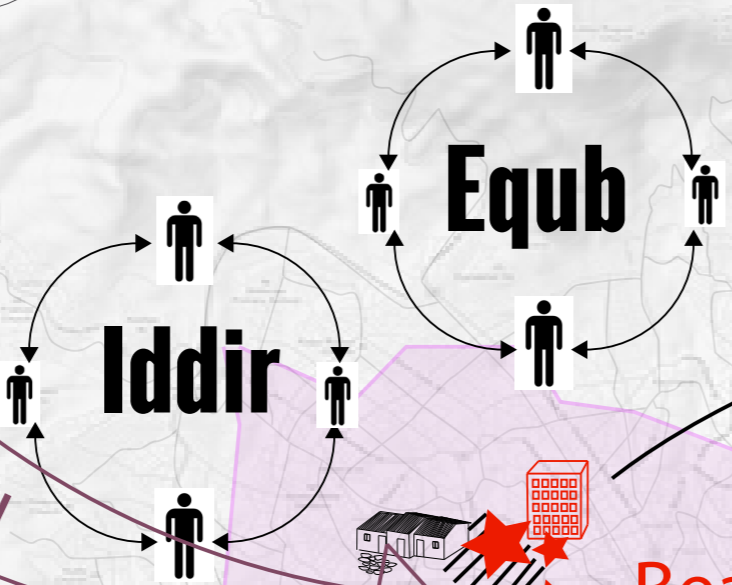
400-800 Birr



Bole Semit
30.000 houses



Bole Ayat
5.000 houses



Multinational Capital

Iddir

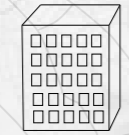
Equb

Beautyfication

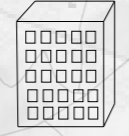
Bole Int. Airport



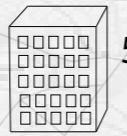
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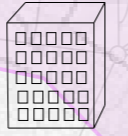
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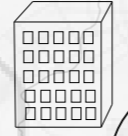
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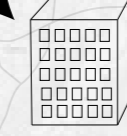
Akaki Gelan
5.000 houses



400-800 Birr



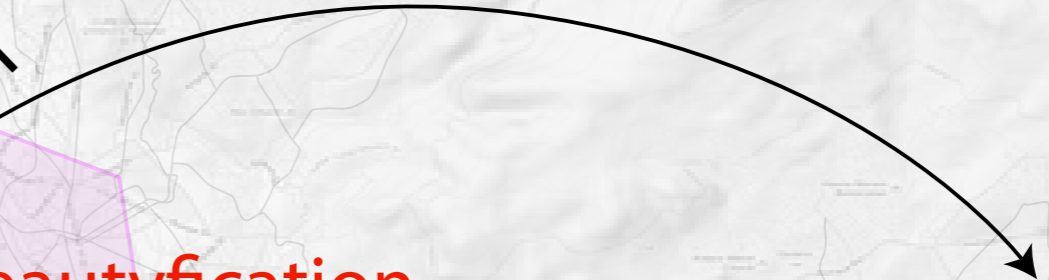
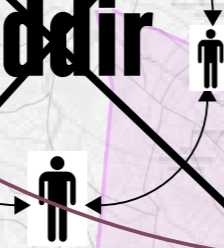
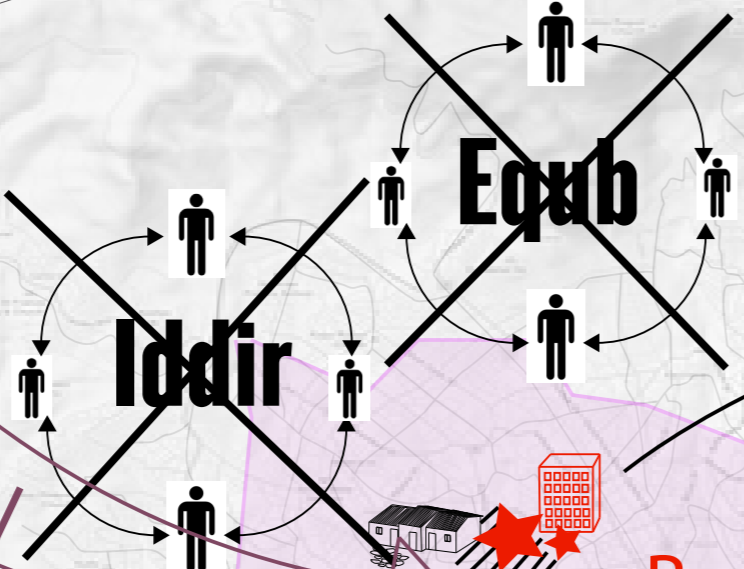
400-800 Birr



Bole Semit
30.000 houses



Bole Ayat
5.000 houses



Tension between the current way of living and the new forced way of living



Main arguments /design intentions

This intervention in the inner-city of Addis Ababa is focused on **marrying the traditional way of living with a new modern way of living.**

Through implementing a network of interconnecting facilitary units that offer a set of **affordances** within the local context and that facilitates and unleashes a process of upgrading that is laid out over a larger period of time, local communities are empowered to take control of the development and sustainability of their own habitat.

The intervention helps to create a new **topofilia** for the place. Through introducing facilities like hygienic, sanitary facilities etc that it didn't had before, a new meaning is inserted into the neighborhood. This is a meaning that can be used to offer an alternative of living, people are no longer compelled to search for that other 'modern' type of living they already have it in their own houses. They also remain or retain their identity, their love for their space.

Urban analysis





Density



Infrastructure



Infrastructure









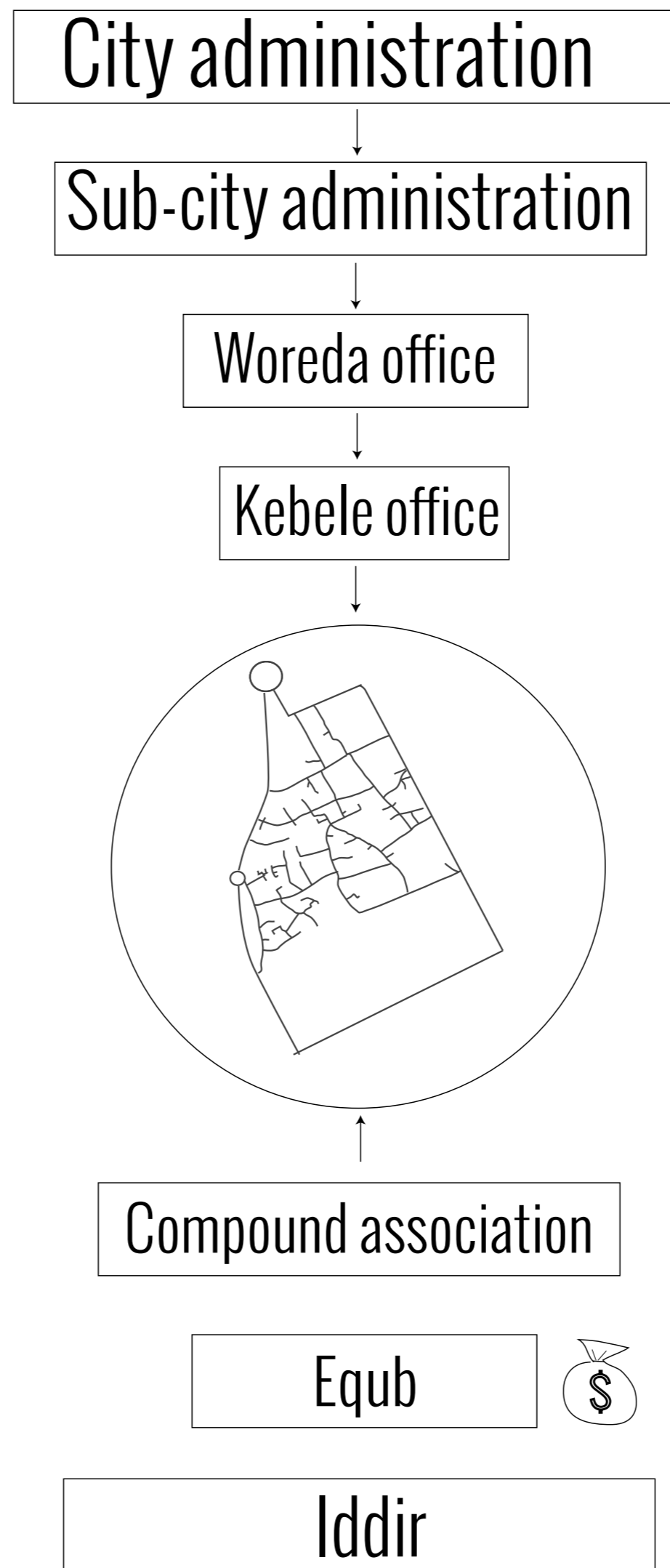






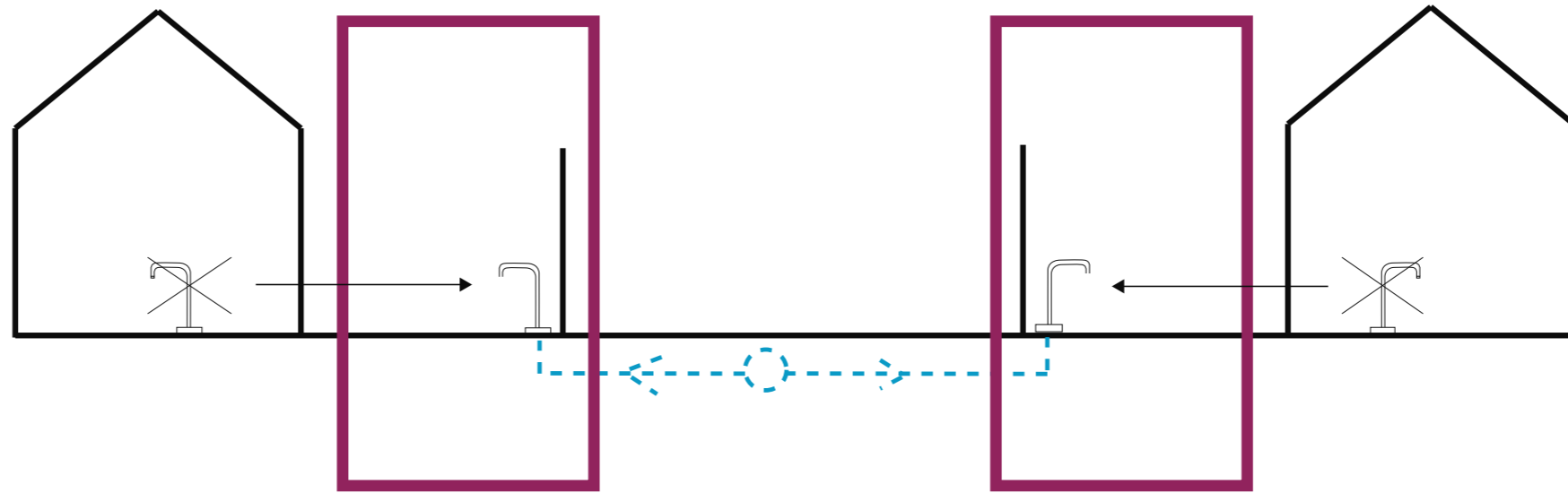


Organisation

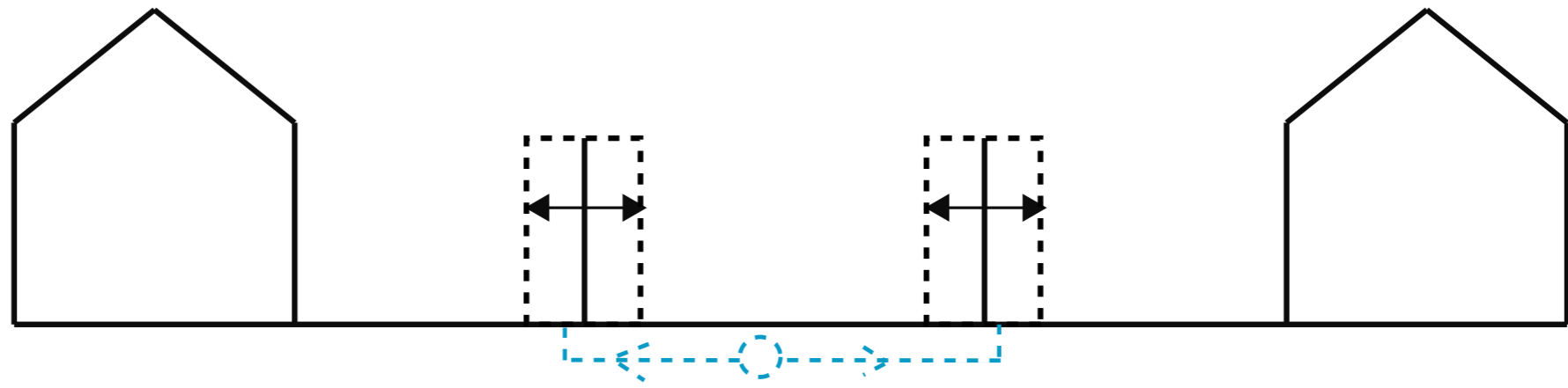


Strategy

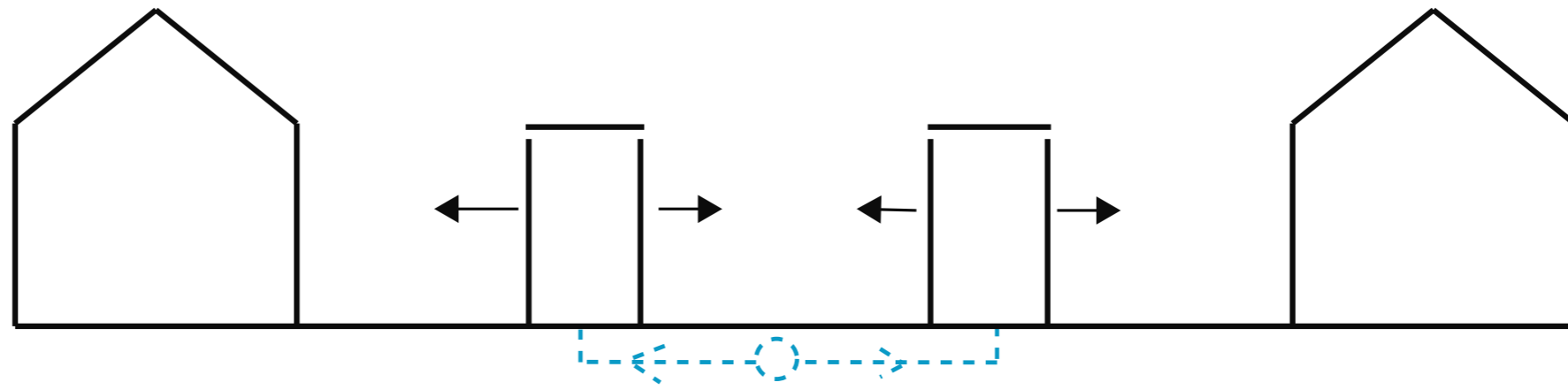
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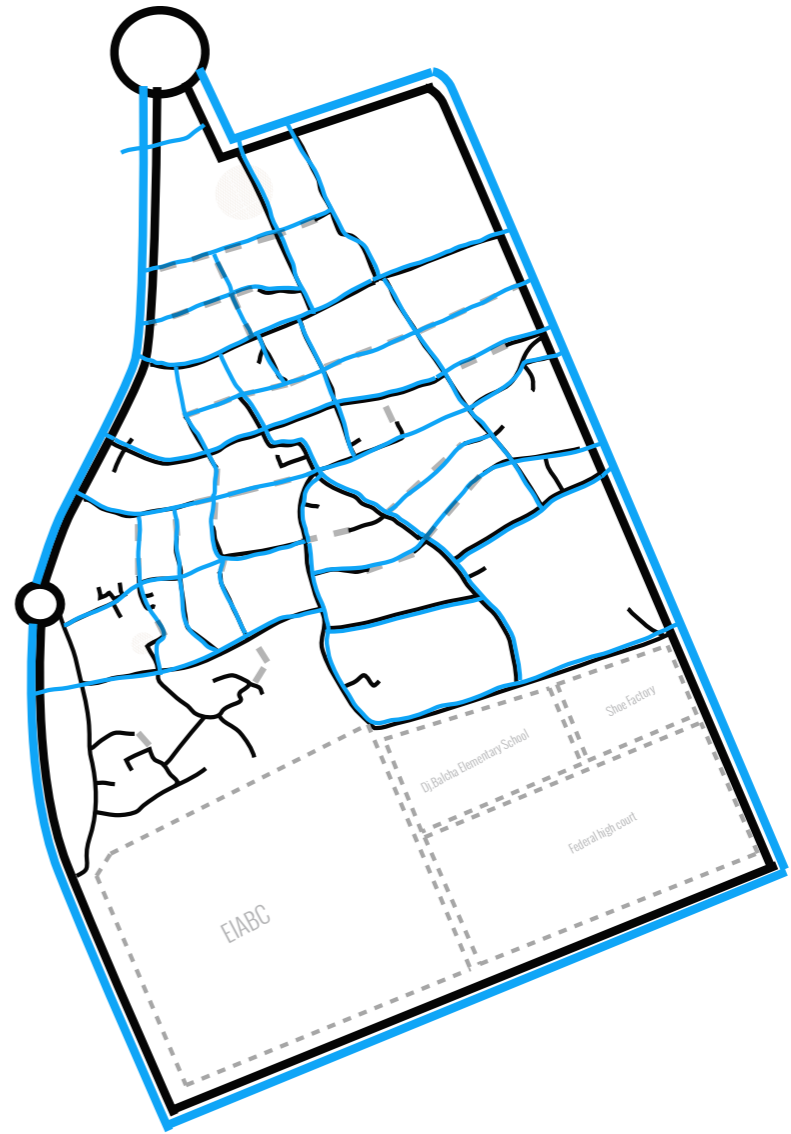
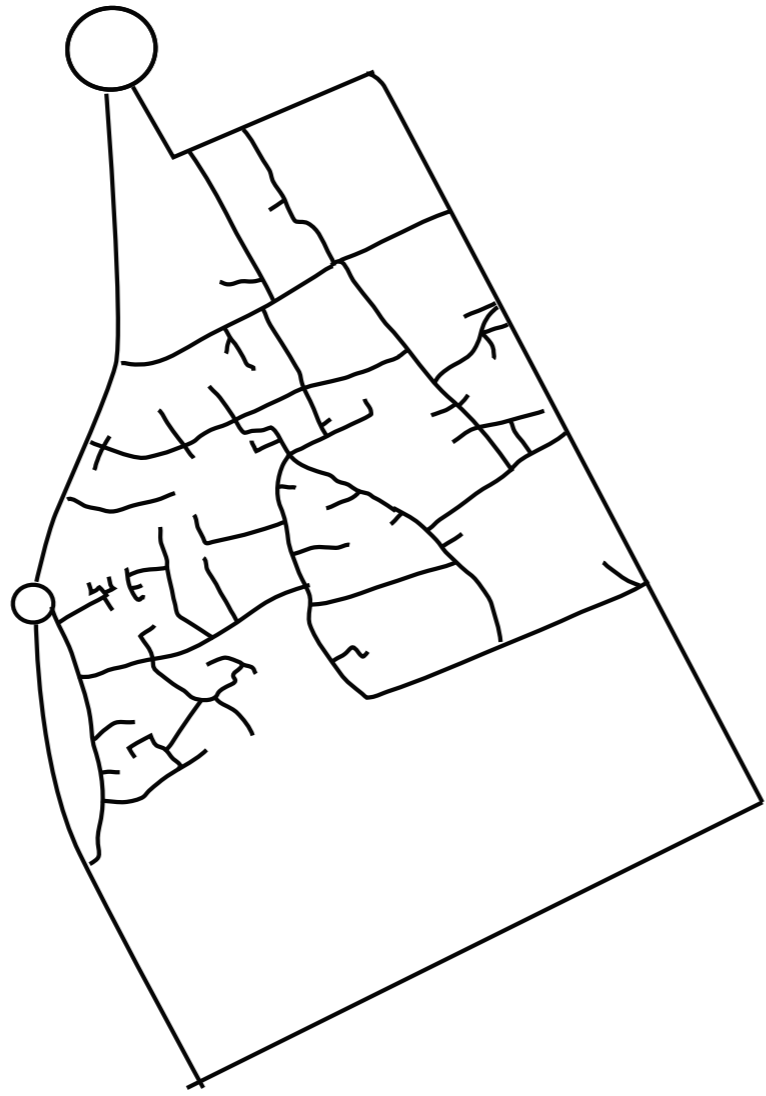
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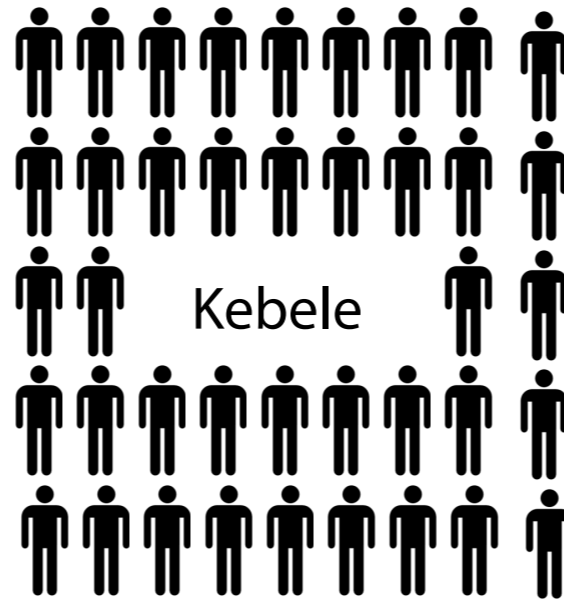
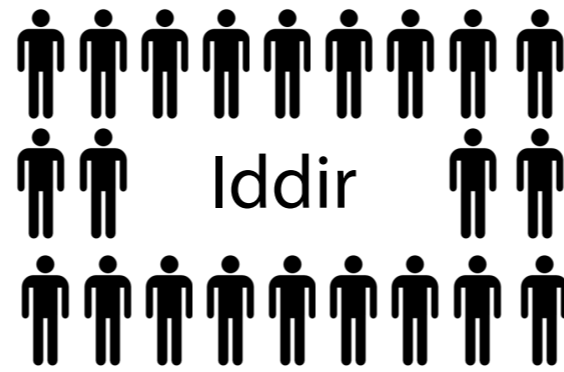
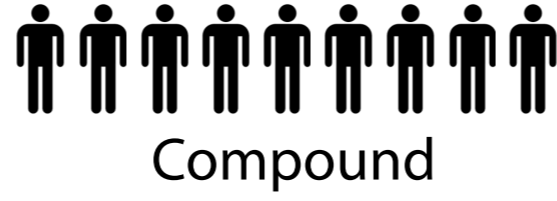
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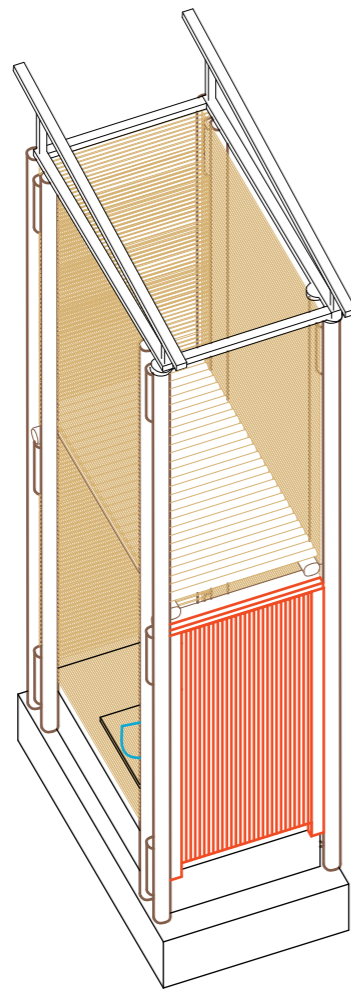


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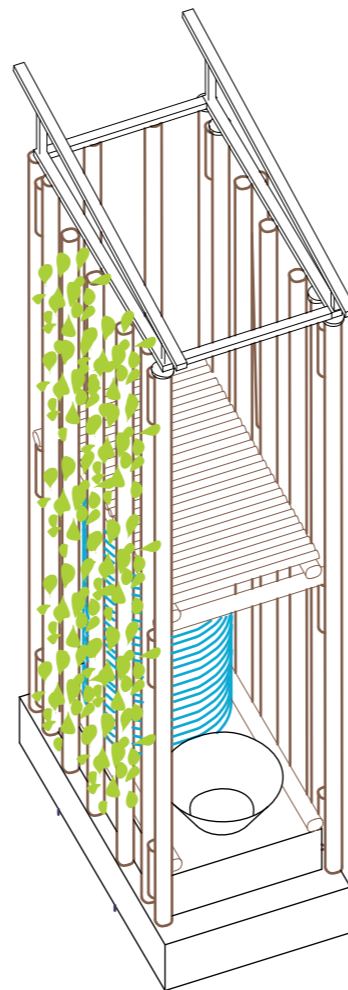


Design

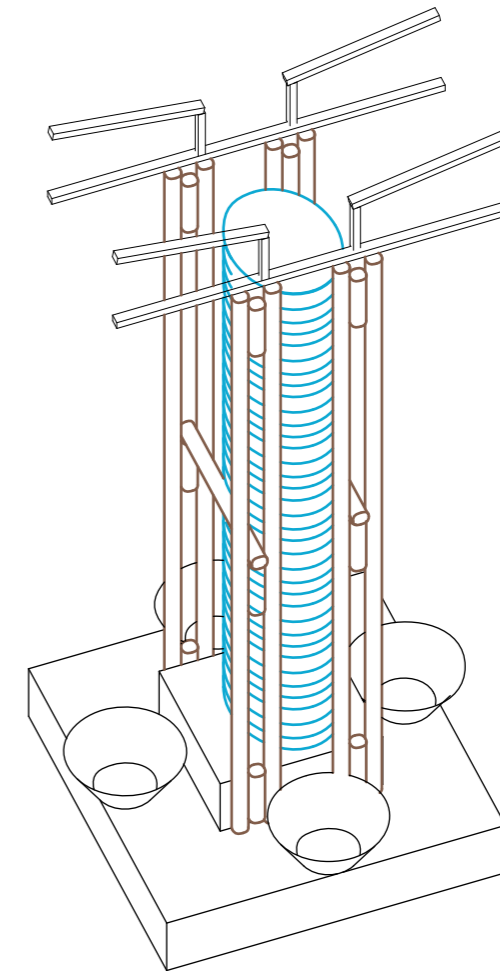
Three units



Toilet unit



Water unit small



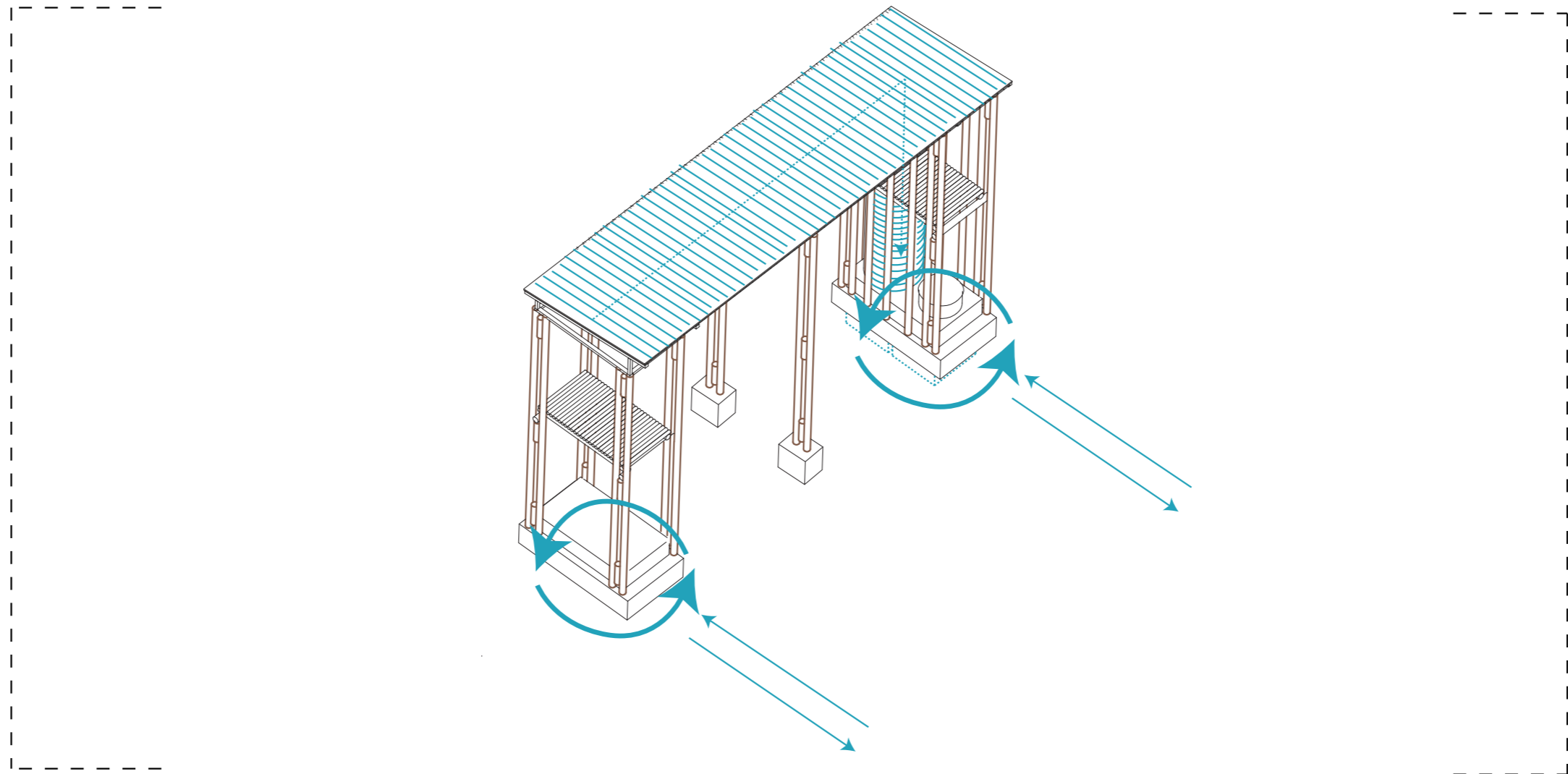
Water unit big

Concept



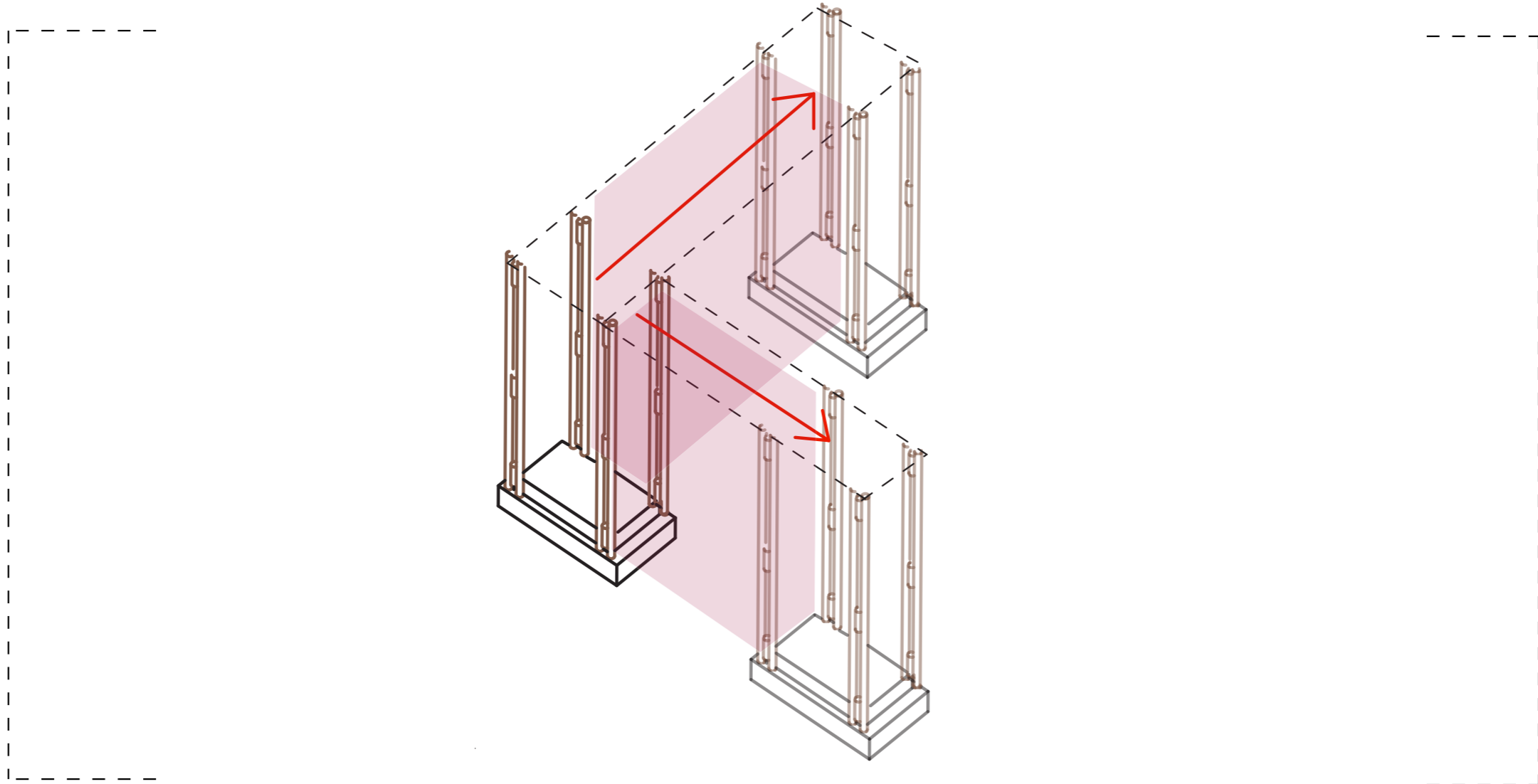
A. Inserting a unit form in a organically formed urban fabric

Concept



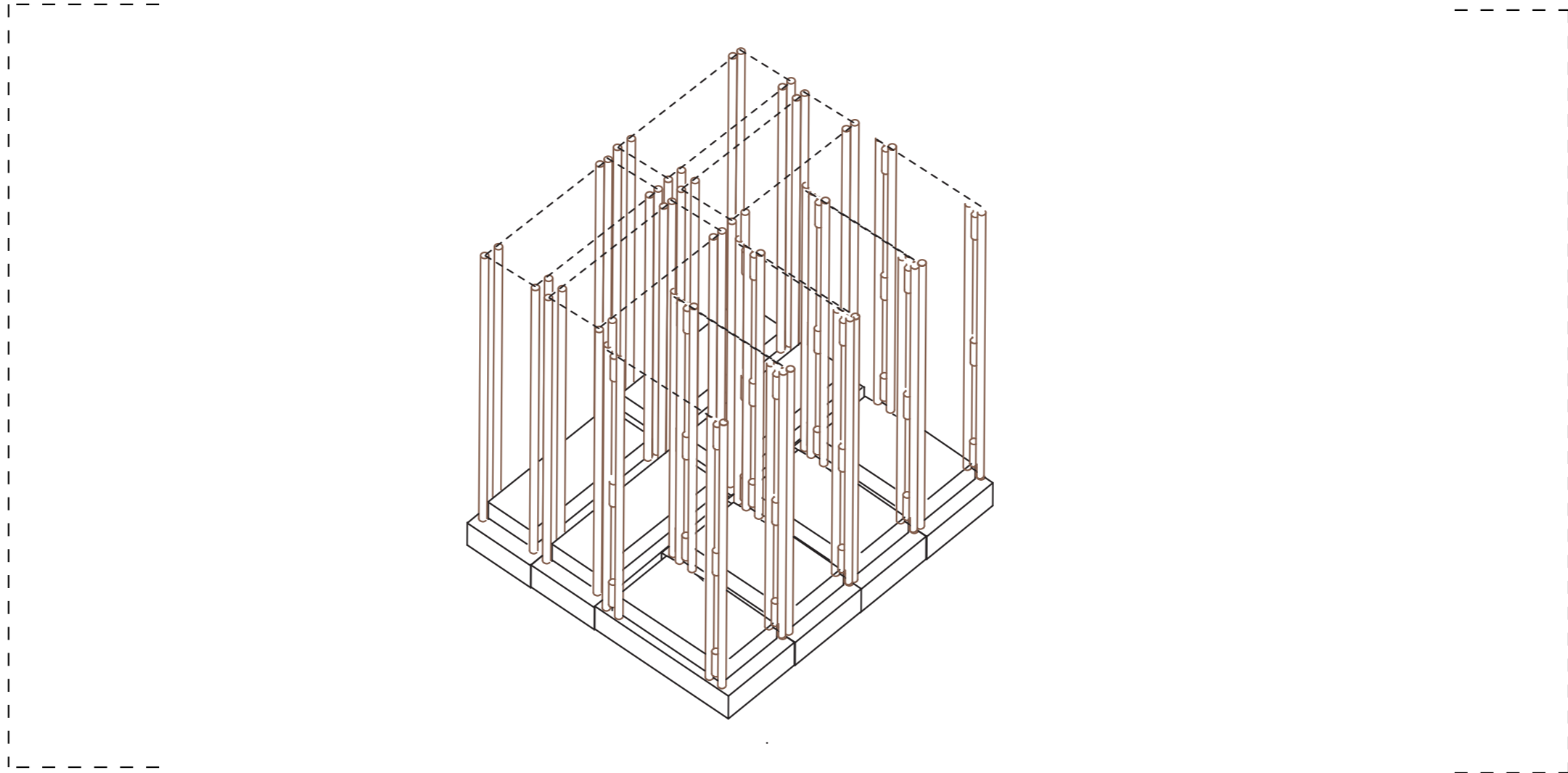
B. Unit as smart service block

Concept



C. Unit as columns

Concept



D. Unit as Blocks Box

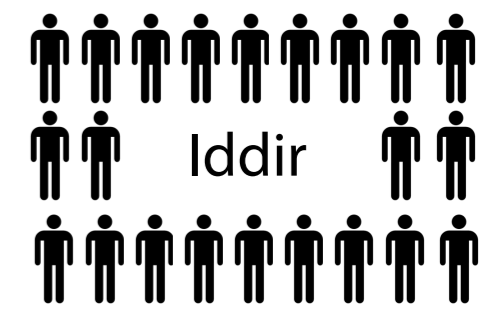


Type **A**


Compound

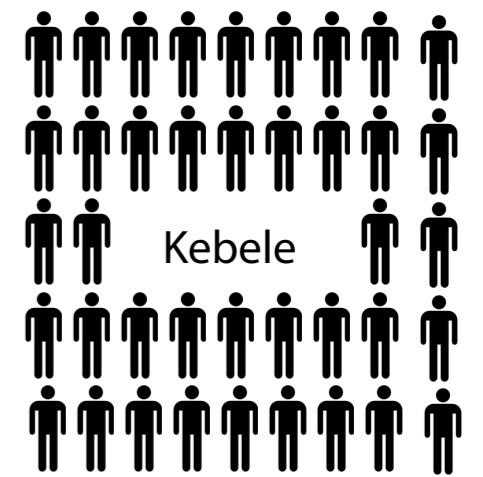


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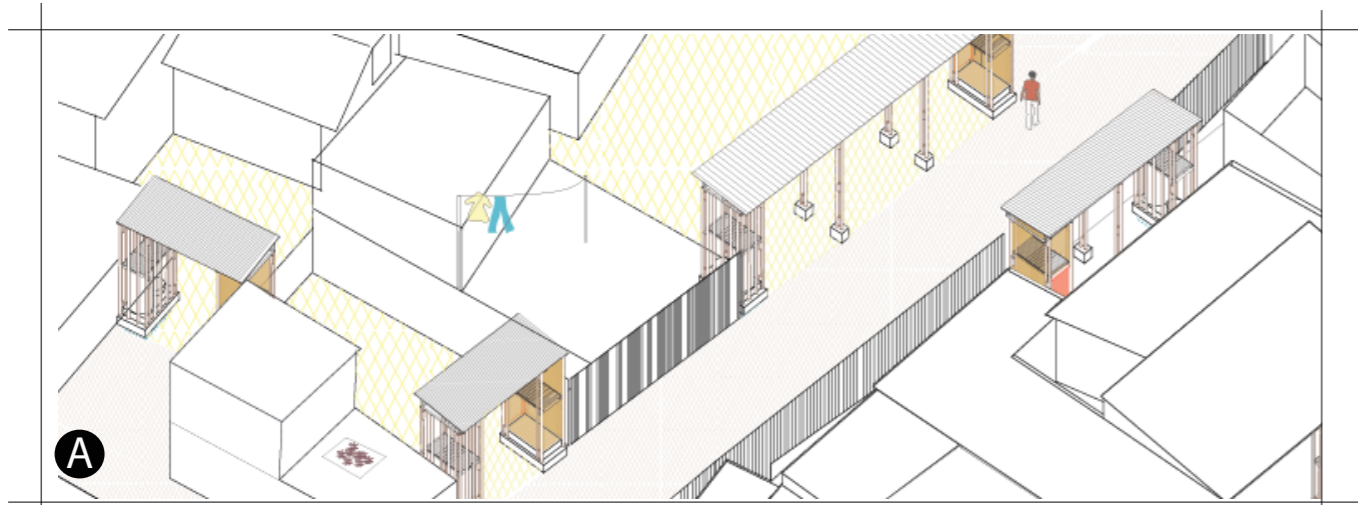




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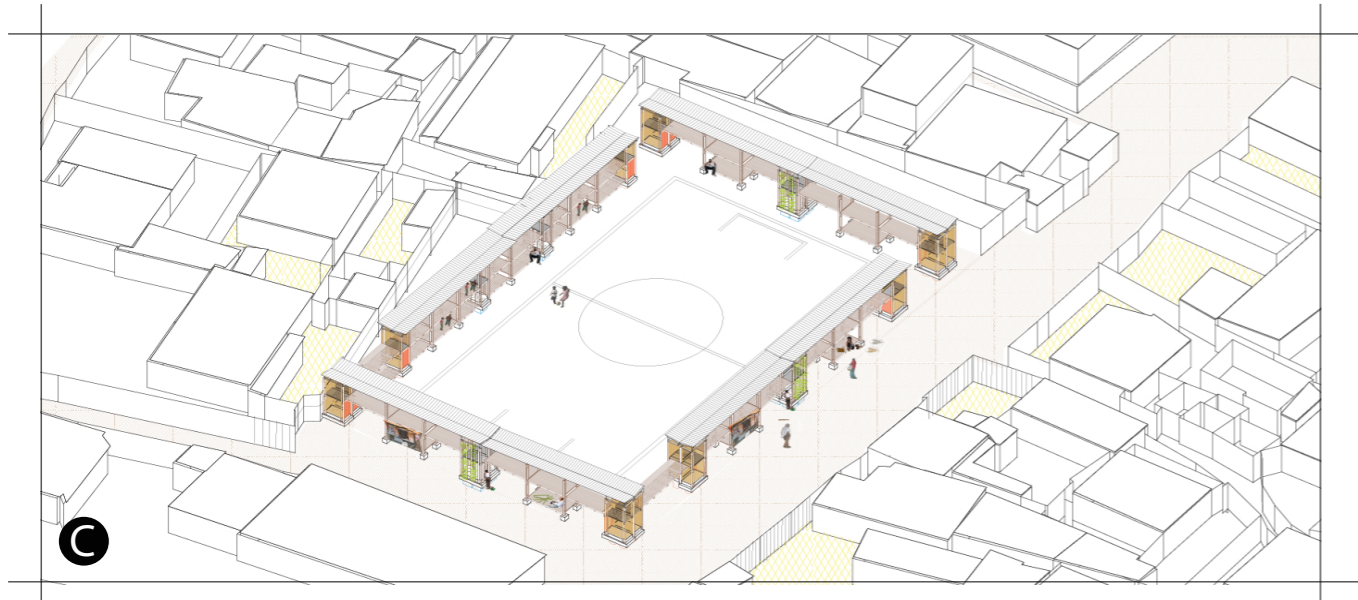
Environmental Challenges and Sustainability



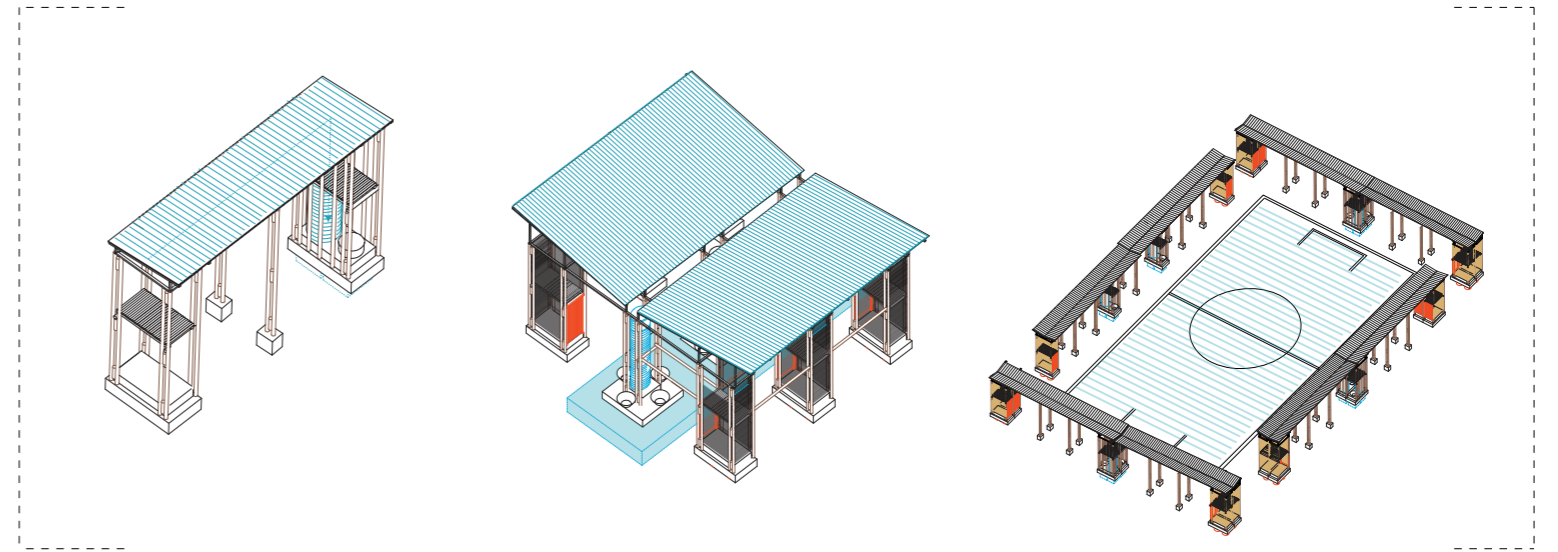
A



B

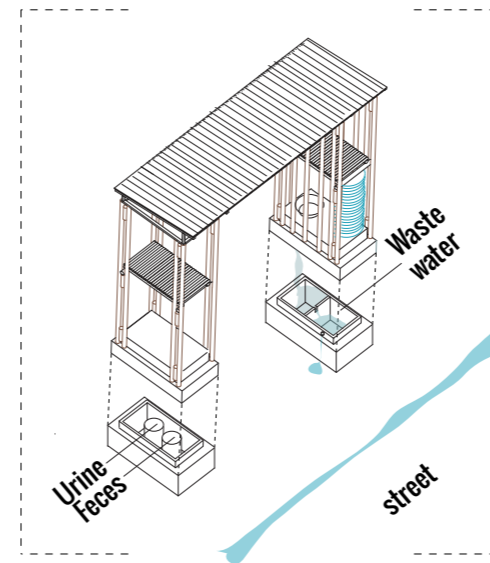


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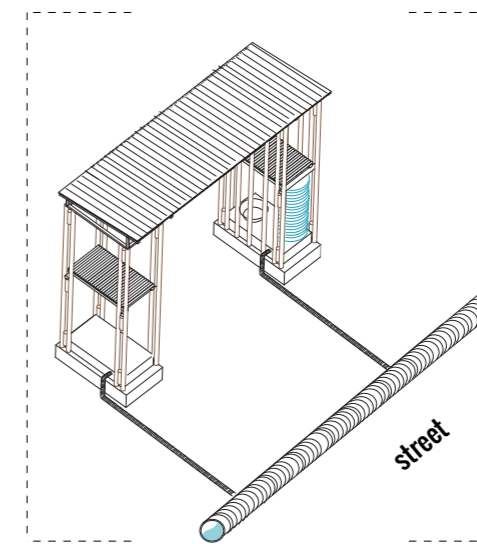
A. Rainwater collection and storage

A B C



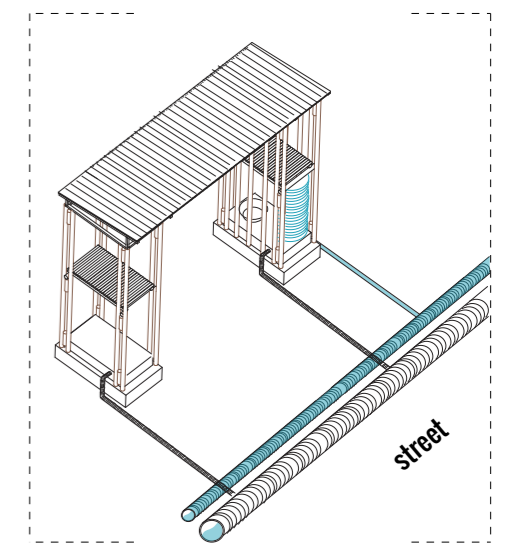
B. Waste water collection and treatment

A B C



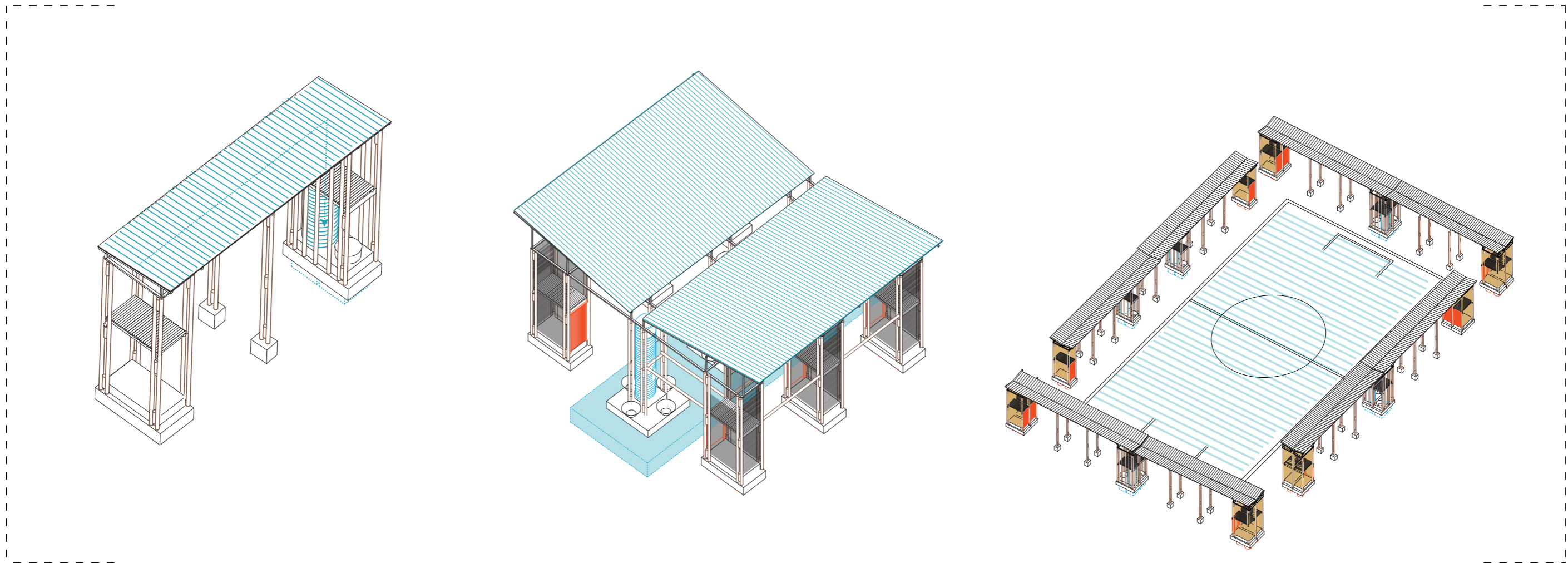
C. Low-cost sewage system

A B C



D. Water distribution

A B C



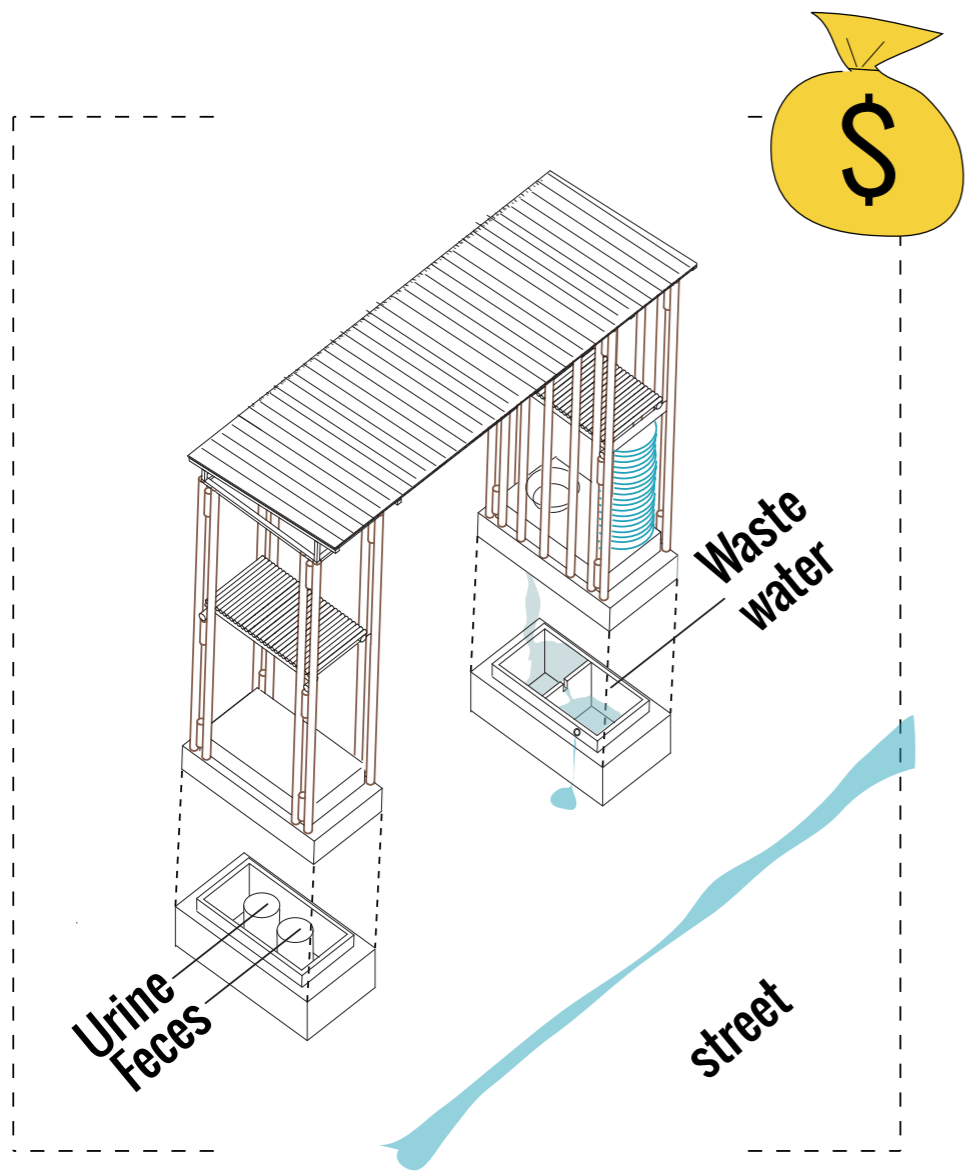
A. Rainwater collection and storage

A

B

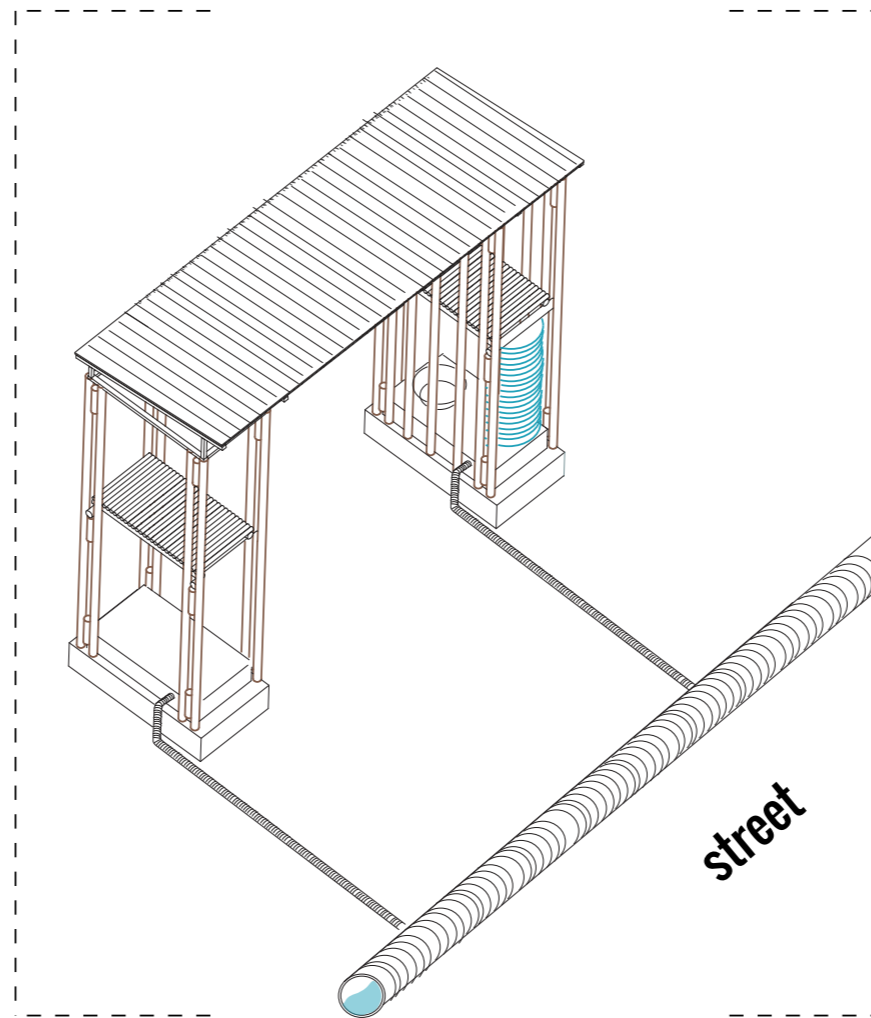
C





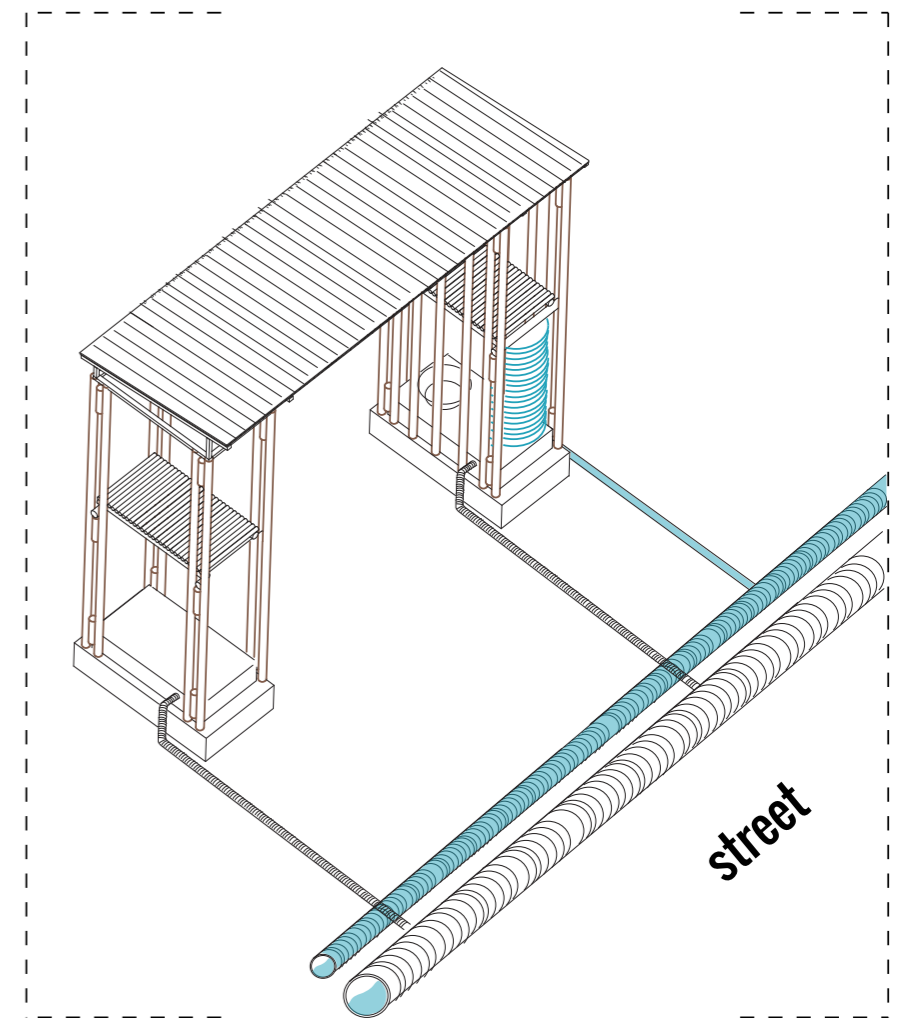
B. Waste water collection and treatment

A B C



C. Low-cost sewage system

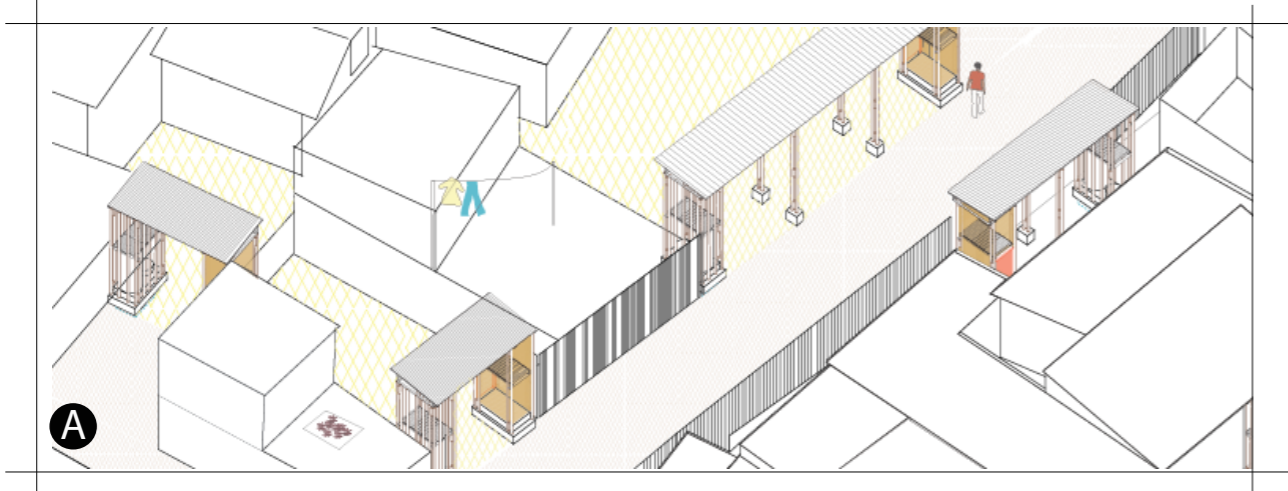
A B C



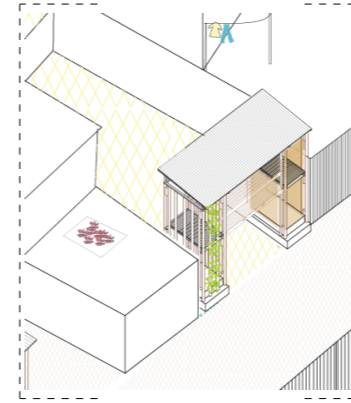
D. Water distribution

A B C

Functions and daily activities



A



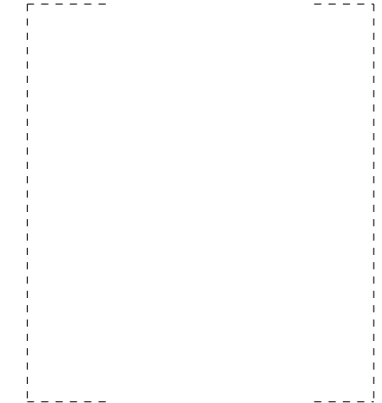
A. Entrance to courtyard

A



B. Improving street life and image

A B C

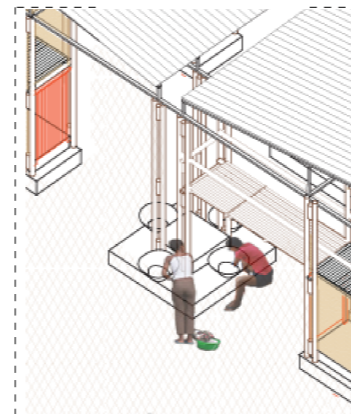


C. Sanitation

A B C



B



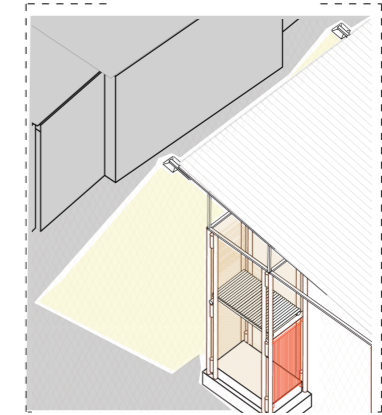
E. Community gathering space

B



F. Providing covered space between courtyard and street

A B C

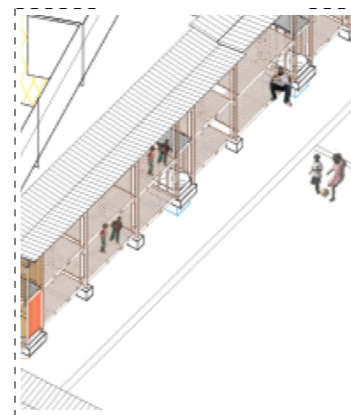


G. Street lighting

A B C

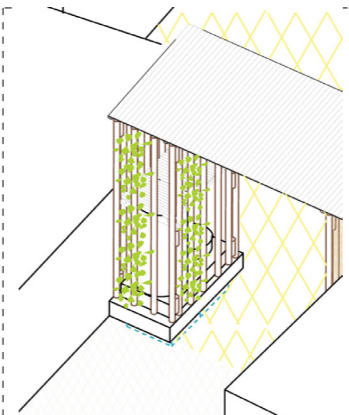


C



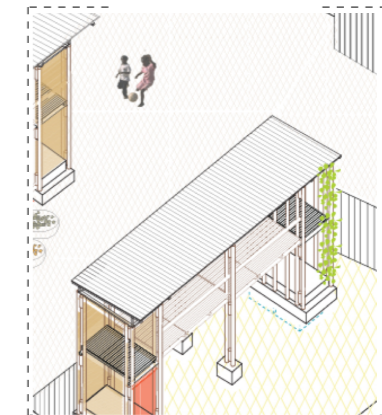
I. Tribune

C



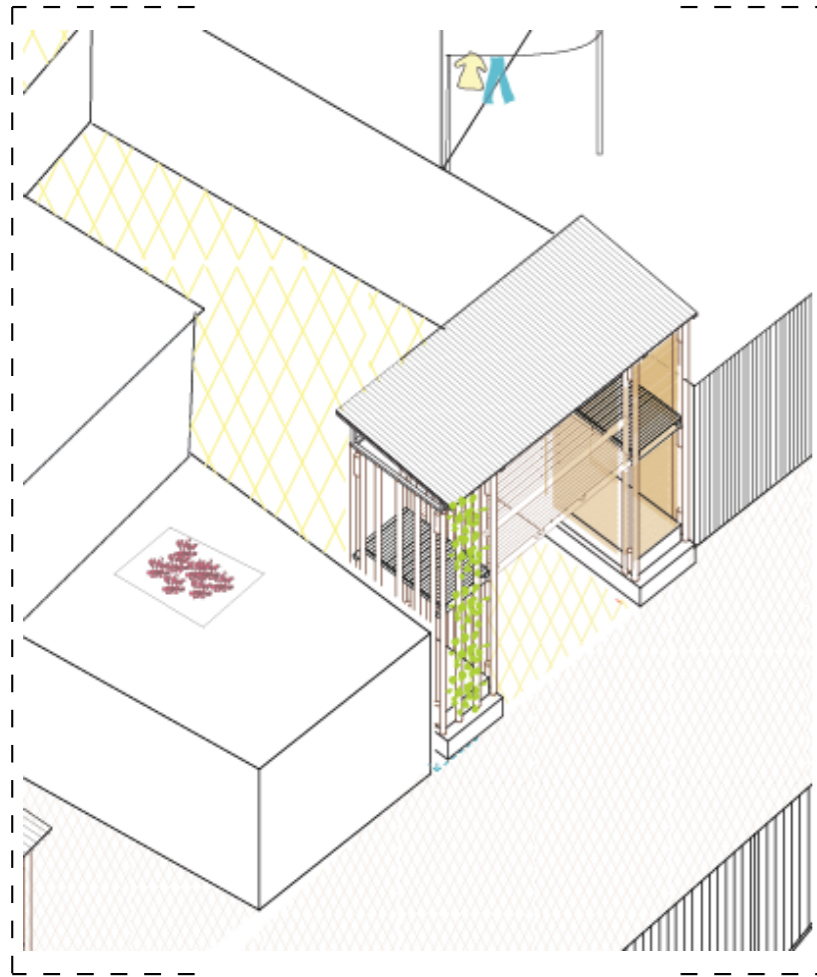
H. Urban agriculture

A B



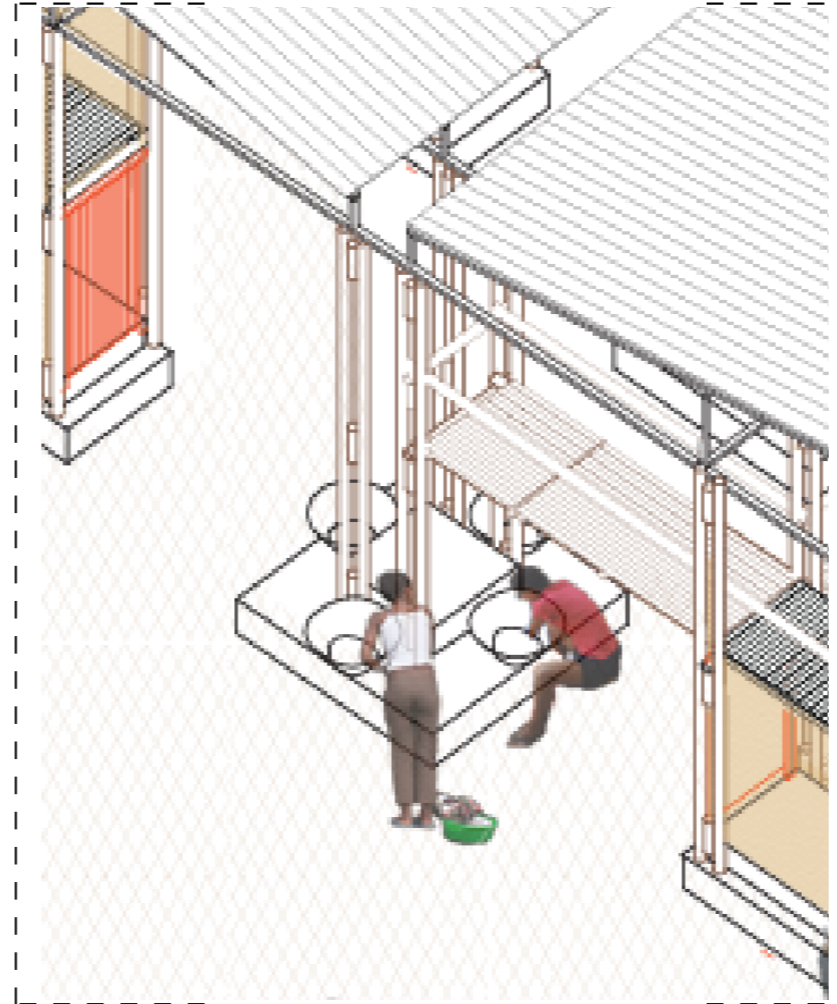
D. Temporary house

A B C



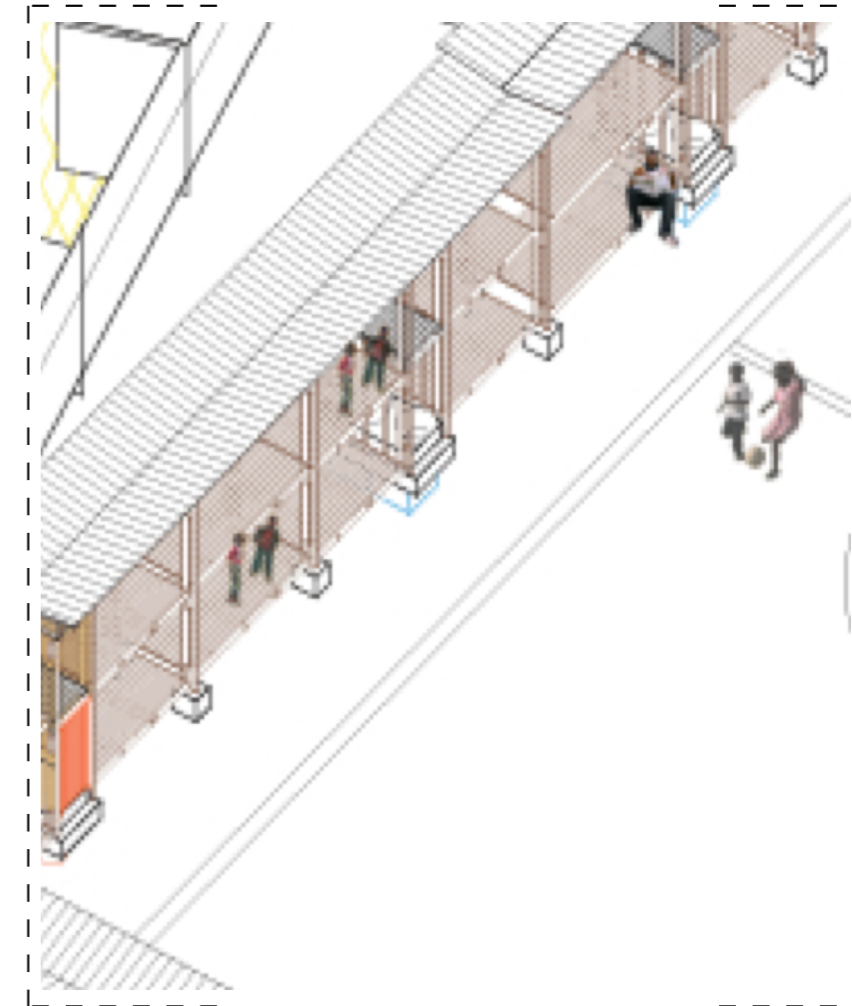
A. Entrance to courtyard

A



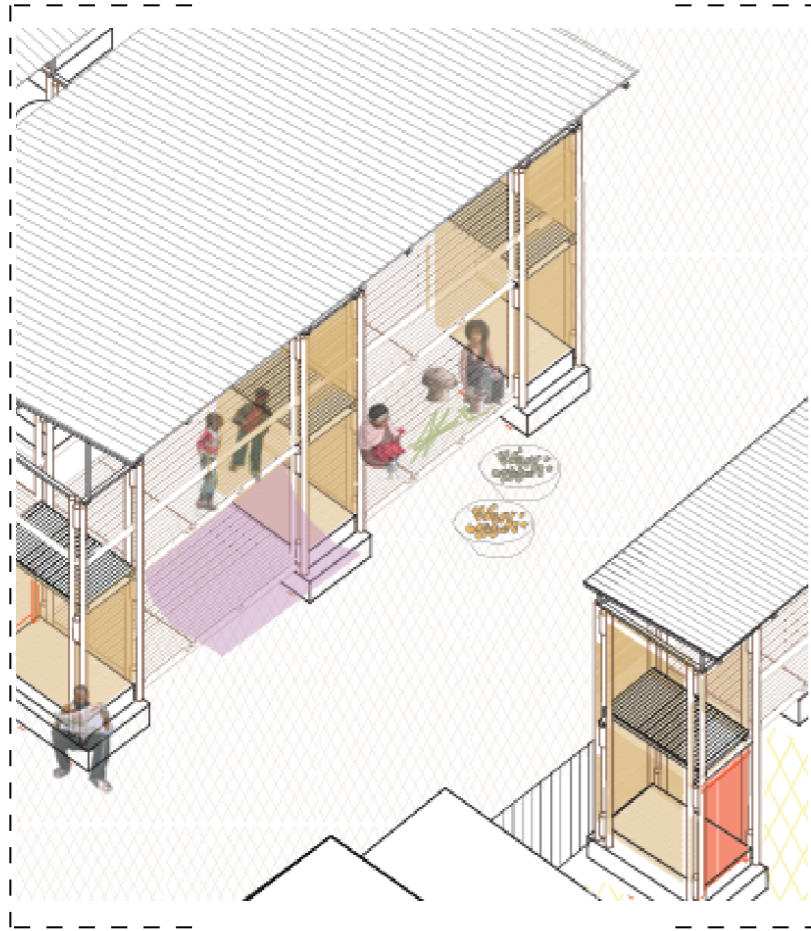
E. Community gathering space

B

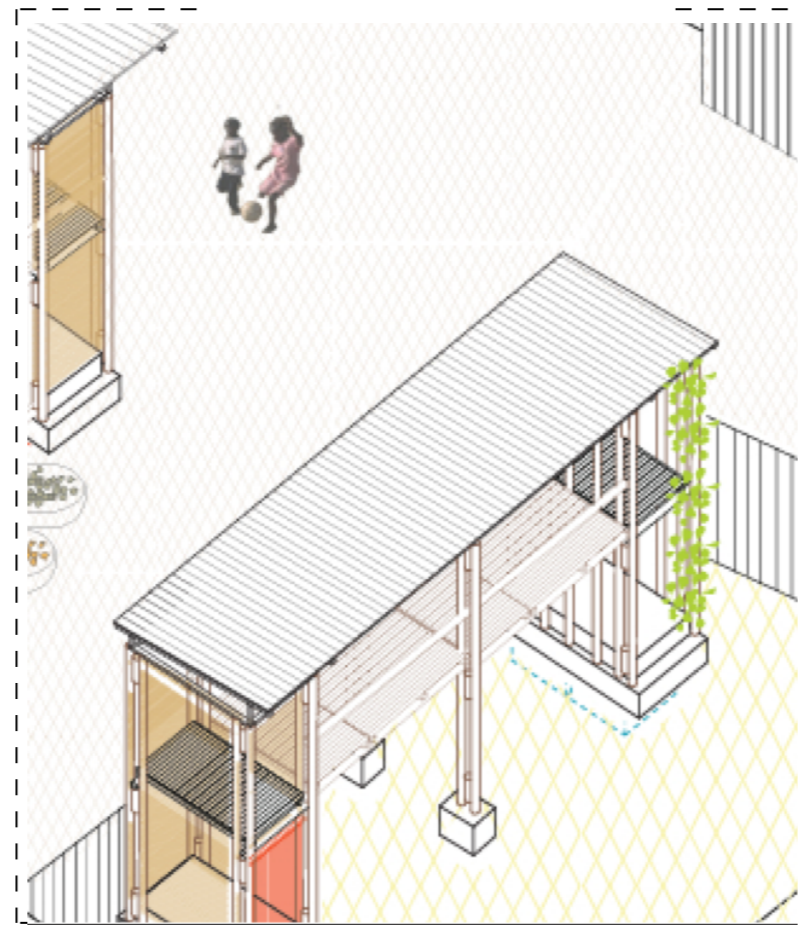


I. Tribune

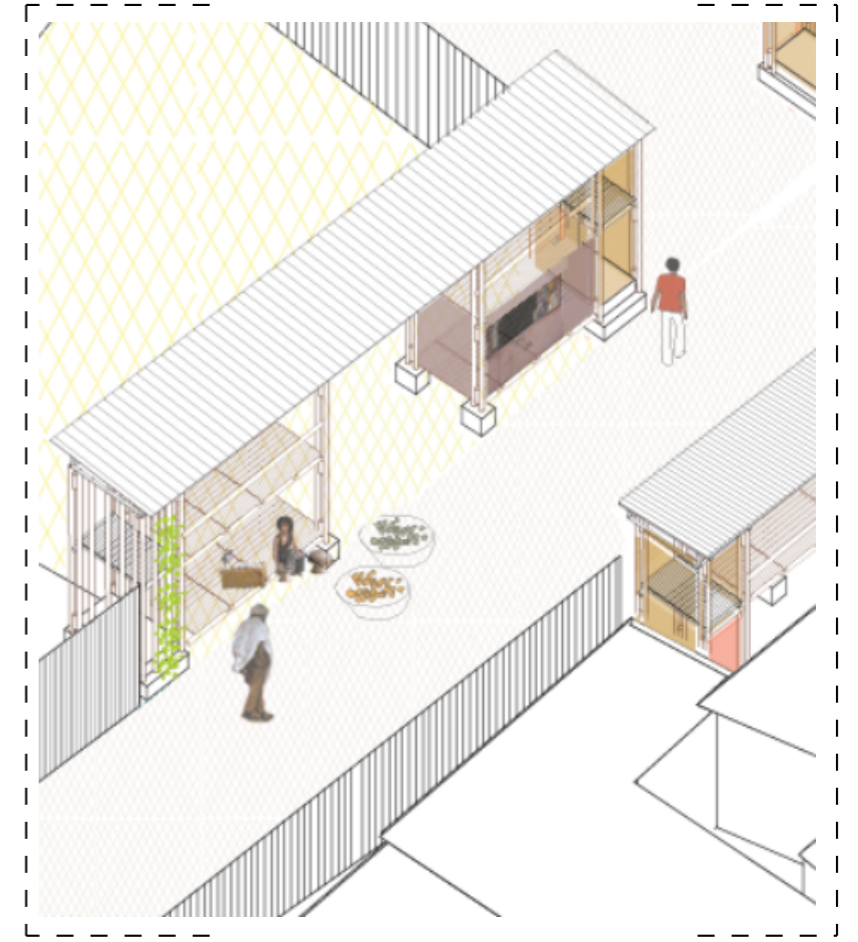
C



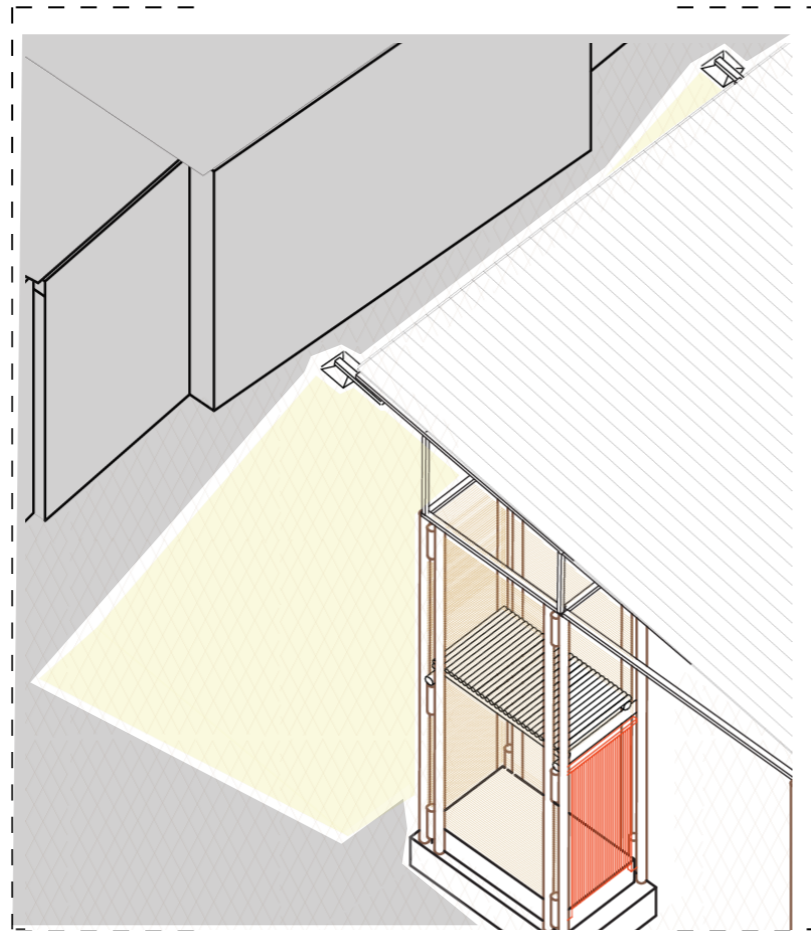
F. Providing covered space between courtyard and street **A** **B** **C**



D. Temporary house **A** **B** **C**

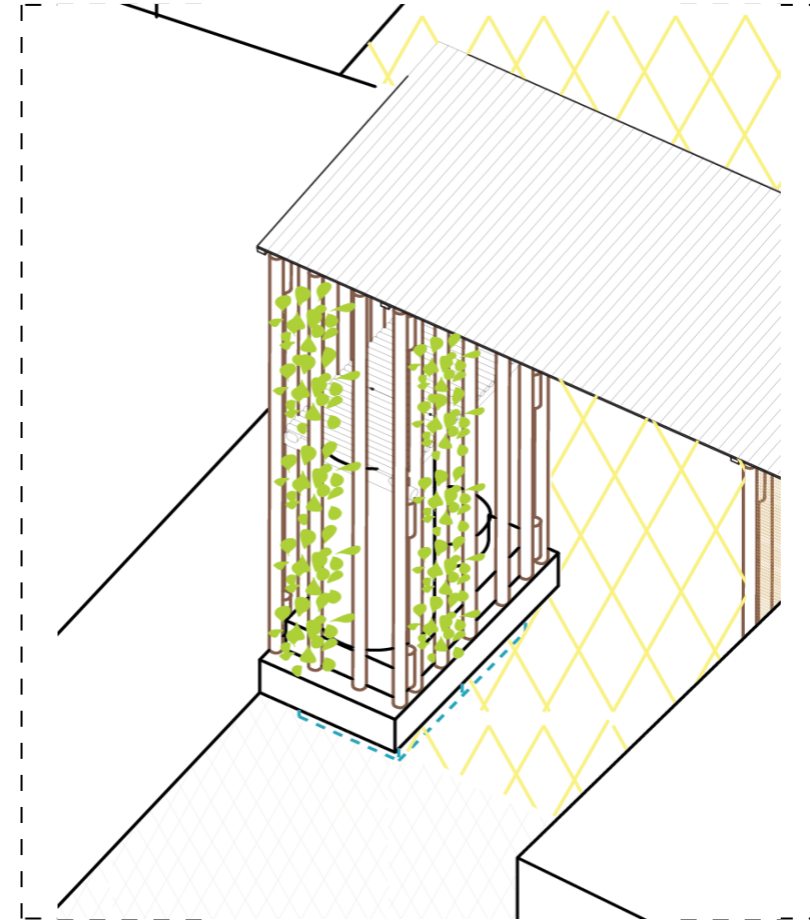


B. Improving street life and image **A** **B** **C**



G. Street lighting

A **B** **C**



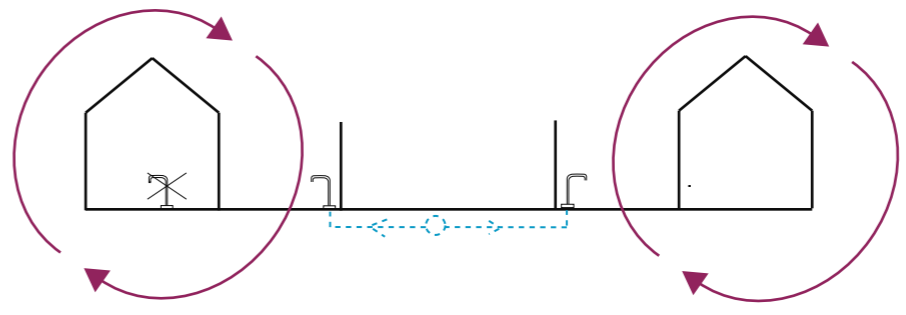
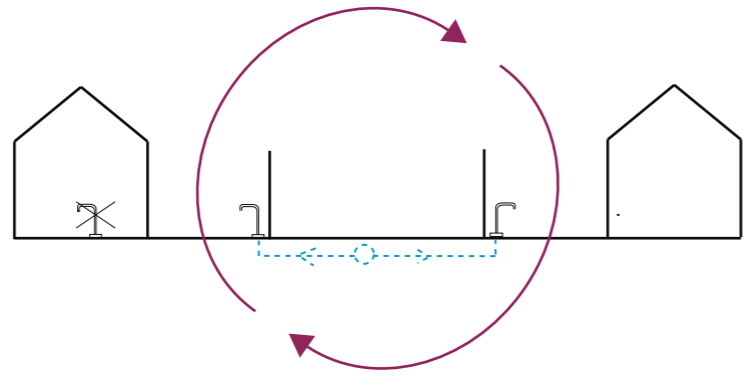
H. Urban agriculture

A **B**



Phasing

2030
2025
2020
2015
2013



Phase 1- 2014

Goal of Phase 1:

The project catalyst. Small scale intervention with wide effect.

Site selection:

The community sports field is a place with already a strong sense of ownership. Any change has a direct impact on the community, but not an individual.

Proposal:

A new open public structure around the sportsfield in stead of a wall.

Actors/stakeholders:

- Surrounding schools
- Water and sewerage agency
- NGO's promoting water and sport in Ethiopia: WaterAid, Unicef, UN water
- City administration: Kebele office
- Representatives of community organisation Iddir
- Local manufacturig workshops

Financial model:

Investment:

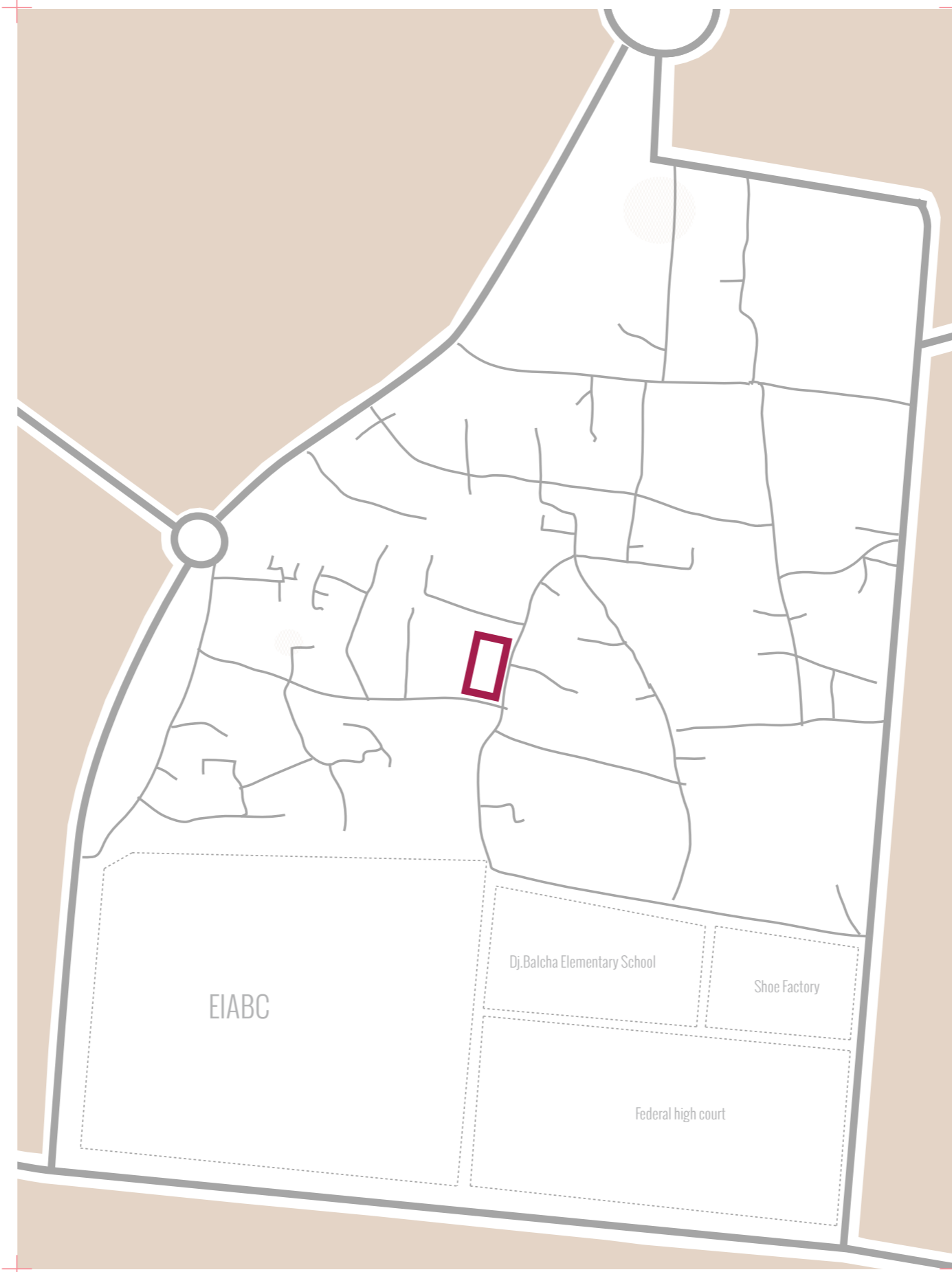
- Foundation: Water and sewerage agency
- Structure: Kebele office
- Infill information centre: Kebele office
- Infill office and storage: surrounding schools
- Infill shops: individuals
- Upgrading of sportsfield and infill for tribune: NGO's

Provit:

- Individuals: money from shops
- Community: water and sanitation
- Community: a sports field that can be used for organising matches public gatherings and that stimulates sociale cohesion.
- Water and sewerage agency: better accessibility to sceptic tanks and working towards a sewerage network.
- Kebele office: With this first project provite an example model for the rest of the neighborhood.

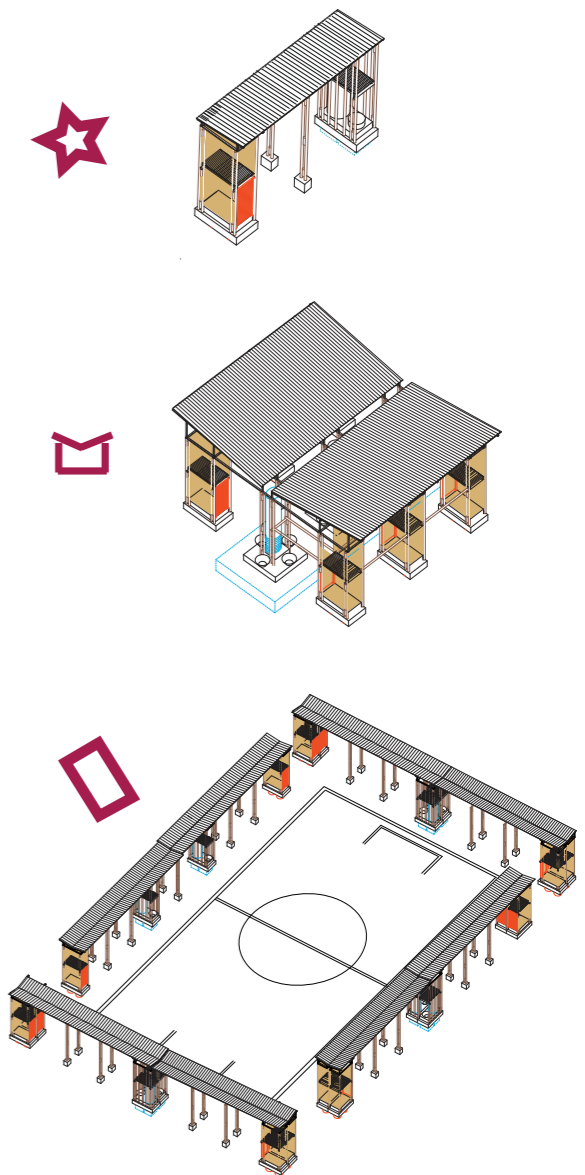
Project goals:

Re-generating the public sportsfield with new public functions and activities. Offering spaces for shops, tribune, information centre. Create conditions for community gatherings stimulating social cohesion in the neighborhood.



Site 2014

Interventions



Phase 2 - 2015

Goal of Phase 2:

A pilot project for the Courtyard structure with the goal to create visibility of the project and to be able to in order to evaluate feasibility, time and cost.

Site selection:

A central location, close to the soccerfield and along a busy walking route is chosen in order to create maximum visibility of the project.

Proposal:

The implementation of 10 to 15 Courtyard Structures on the pilot location.

Actors/stakeholders:

- Water and sewerage agency
- City administration: Kebele office
- Representatives of community organisation Iddir
- Local manufacturing workshops
- Residents as individual households and compound communities

Financial model:

Investment

- Foundation: Water and sewerage agency
- Structure: Residents as individual households and compound communities, financed by Equb. Equb gets startup capital from city administration.
- Infill shops / workspaces / covered space: individuals

Provit

- Individuals: money from shops
- Households and compound community: free acces to water and sanitation
- Water and sewerage agency: better accessibility to sceptic tanks and working towards a sewerage network.

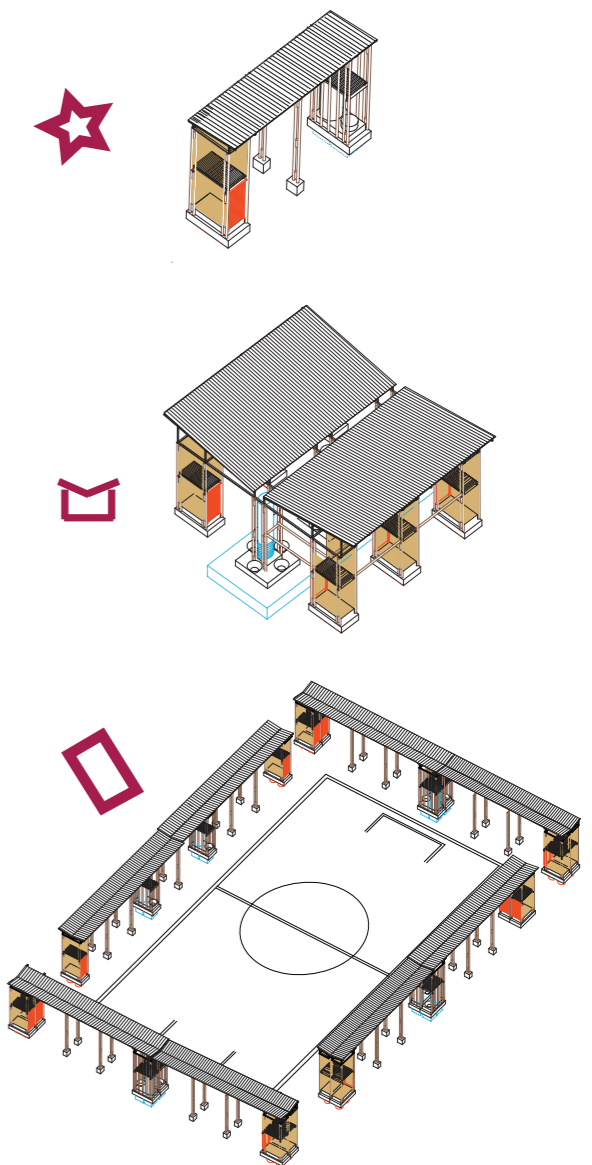
Project goals:

Improving and increasing the household sanitary facilities. Enhancing the productivity of the courtyard. Re-vitalising the streetnetwork.



Site 2015

Interventions



Phase 3 - 2020

Goal of Phase 3:

Start up of the housing upgrading process. Improving accessibility through the creation of new and wider streets.

Proposal:

Stimulating the construction of the Courtyard structure through the neighborhood. Beginnings are made on the new simplified sewage system. Connecting the first septic tanks to the new simplified sewage line that connects to the main sewerage line of the city.

Actors/stakeholders:

- Water and sewerage agency
- City administration: Kebele office
- Representatives of community organisation Iddir
- Local manufacturing workshops
- Residents as individual households and compound communities

Financial model:

Investment

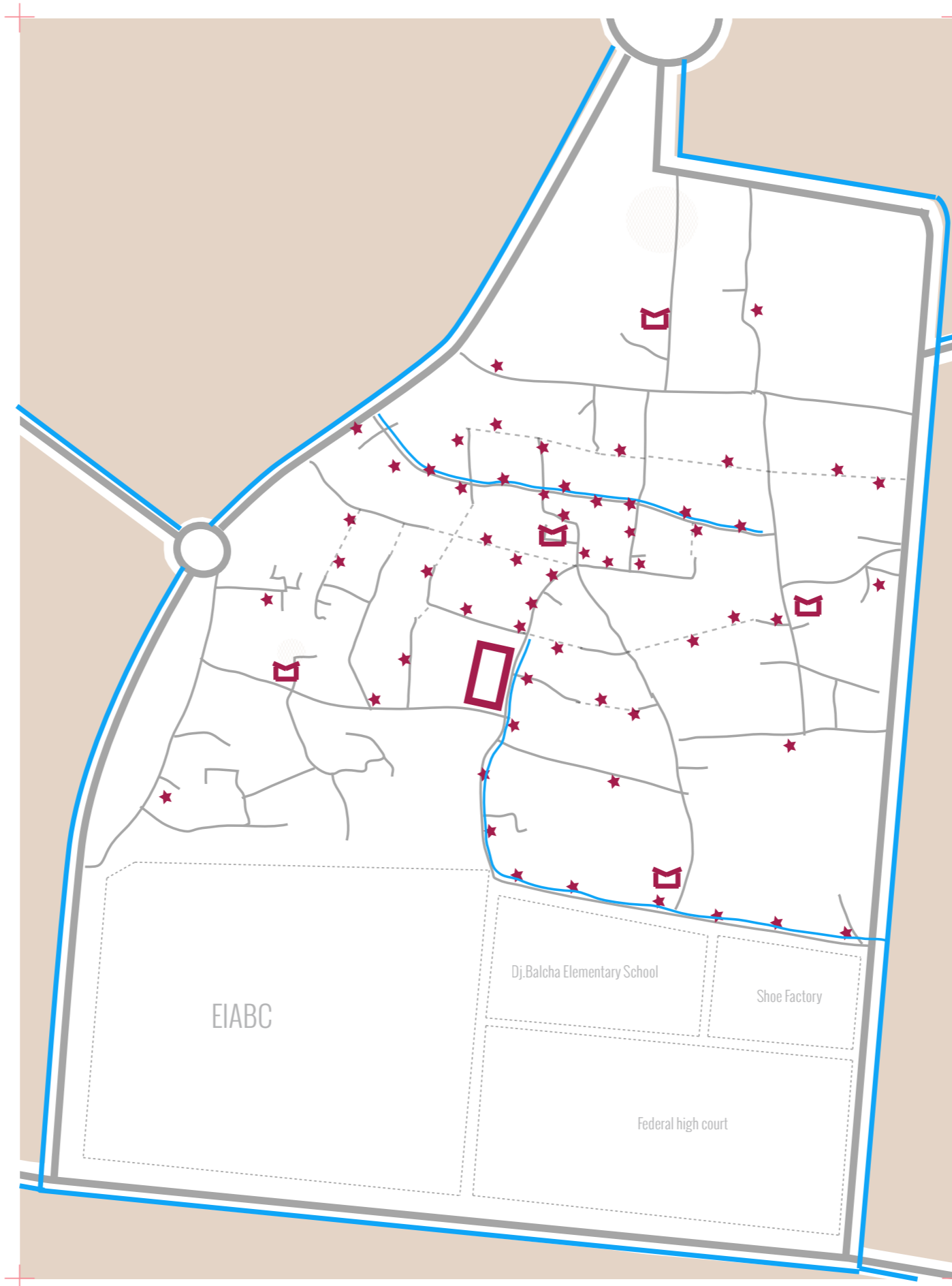
- Foundation: Water and sewerage agency
- Structure: Residents as individual households and compound communities, financed by Equb. Equb gets startup capital from city administration.
- Structure community sanitation building: IDDIR
- Infill shops / workspaces / covered space: individuals
- Street profil and sewerage system: Road and transport agency/ Water and sewerage agency.
- House ownership: Kebele office

Provit

- Individuals: money from shops
- Households and compound community: free acces to water and sanitation
- Water and sewerage agency: better accessibility to septic tanks and working towards a sewerage network.
- Kebele office: Residents thake control of upgrading their own housing.

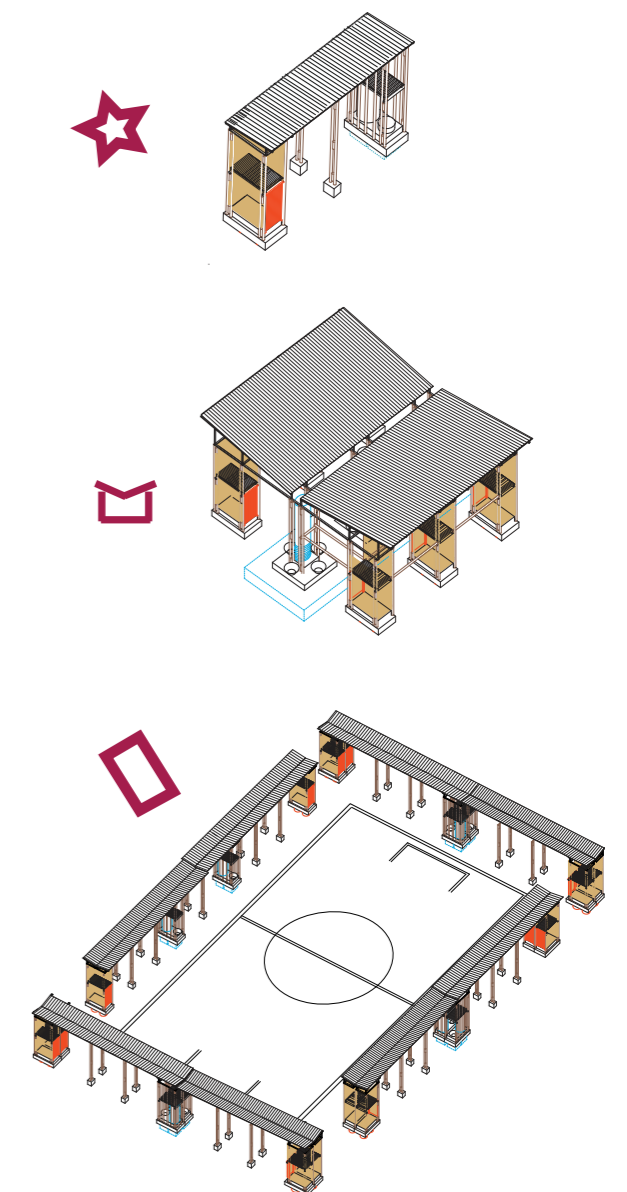
Project goals:

Improving and increasing the household sanitary facilities. Enhancing the productivity of the courtyard. Re-vitalising the streetnetwork. Improving accessibility in the neighborhood.



Site 2020

Interventions



Phase 4 - 2025

Goal of Phase 4:

Residents take control of upgrading their own housing. Improving accessibility through the creation of new and wider streets.

Proposal:

Re-connecting all deadend roads. Simplified sewage system laid out through all streets.

Actors/stakeholders:

- Water and sewerage agency
- Road and transport agency
- City administration: Kebele office
- Representatives of community organisation Iddir
- Local manufacturing workshops
- Residents as individual households and compound communities

Financial model:

Investment

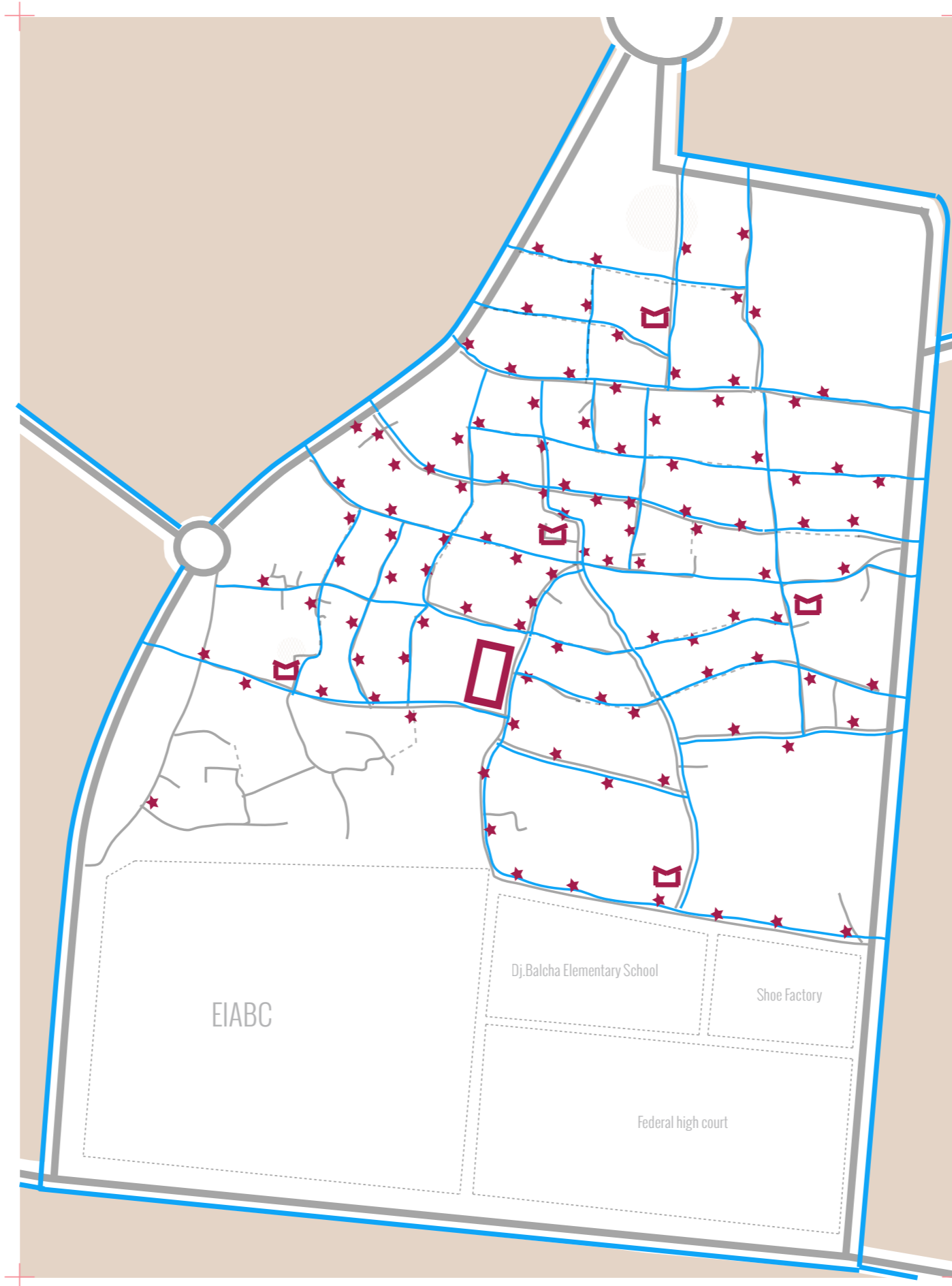
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- Structure community sanitation building: IDDIR
- Infill shops / workspaces / covered space: individuals
- Street profil and sewerage system: Road and transport agency/ Water and sewerage agency.
- House ownership: Kebele office

Provit

- Individuals: money from shops
- Households and compound community: free acces to water and sanitation
- Water and sewerage agency: Sewage line connections in residential area's of innercity. No need for sceptic tank service anymore.
- Road and transport agency: improved accessiility throughough inercity. More possibilities for public transport.
- Kebele office: Residents thake control of upgrading their own housing.

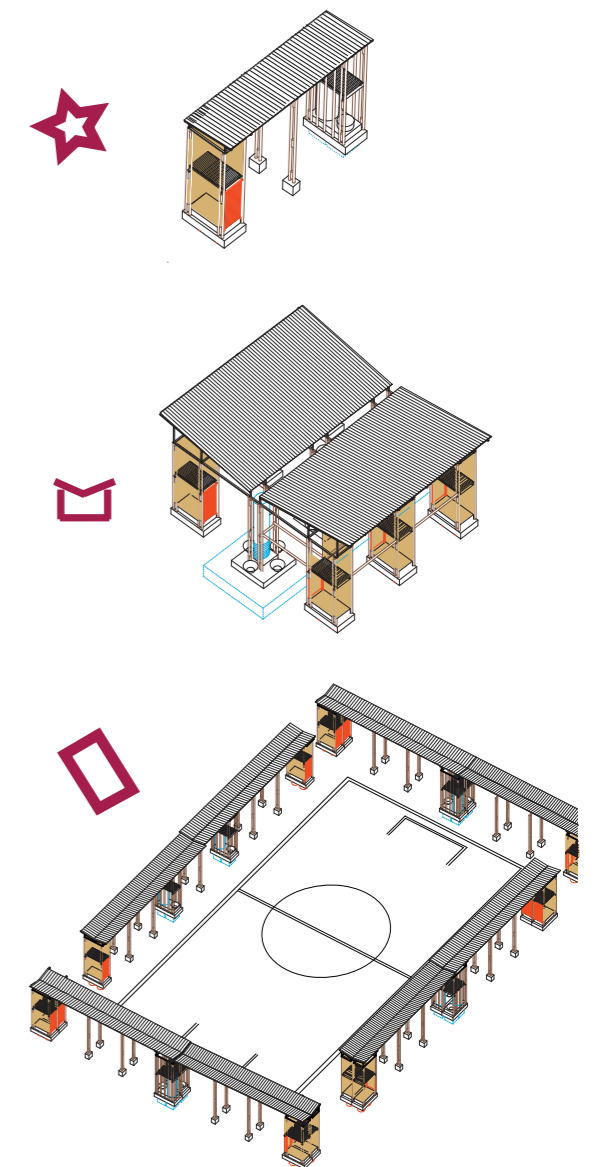
Project goals:

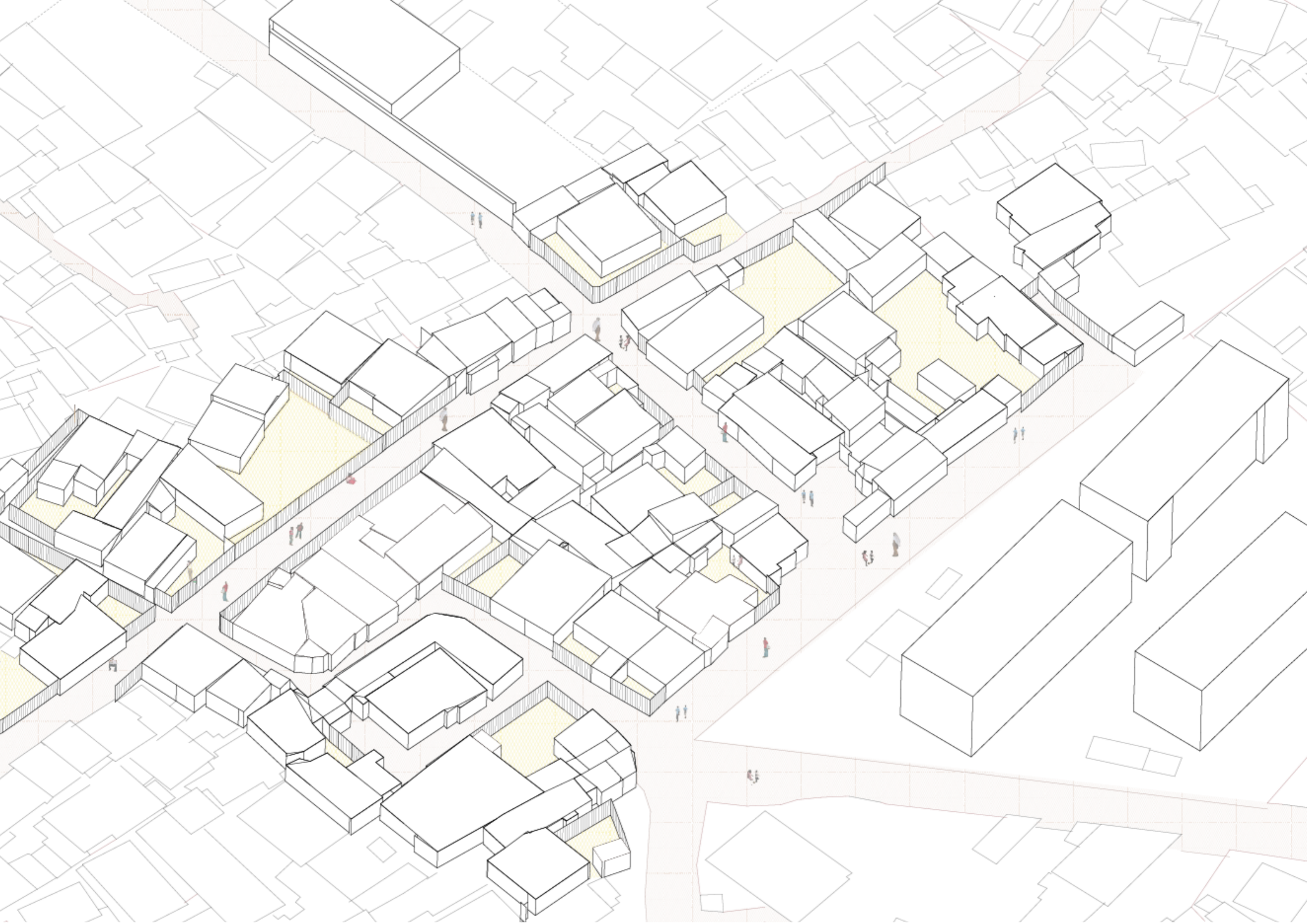
Improving and increasing the household sanitary facilities. Enhancing the productivity of the courtyard. Re-vitalising the streetnetwork. Improving accessibility in the neighborhood.



Site 2030

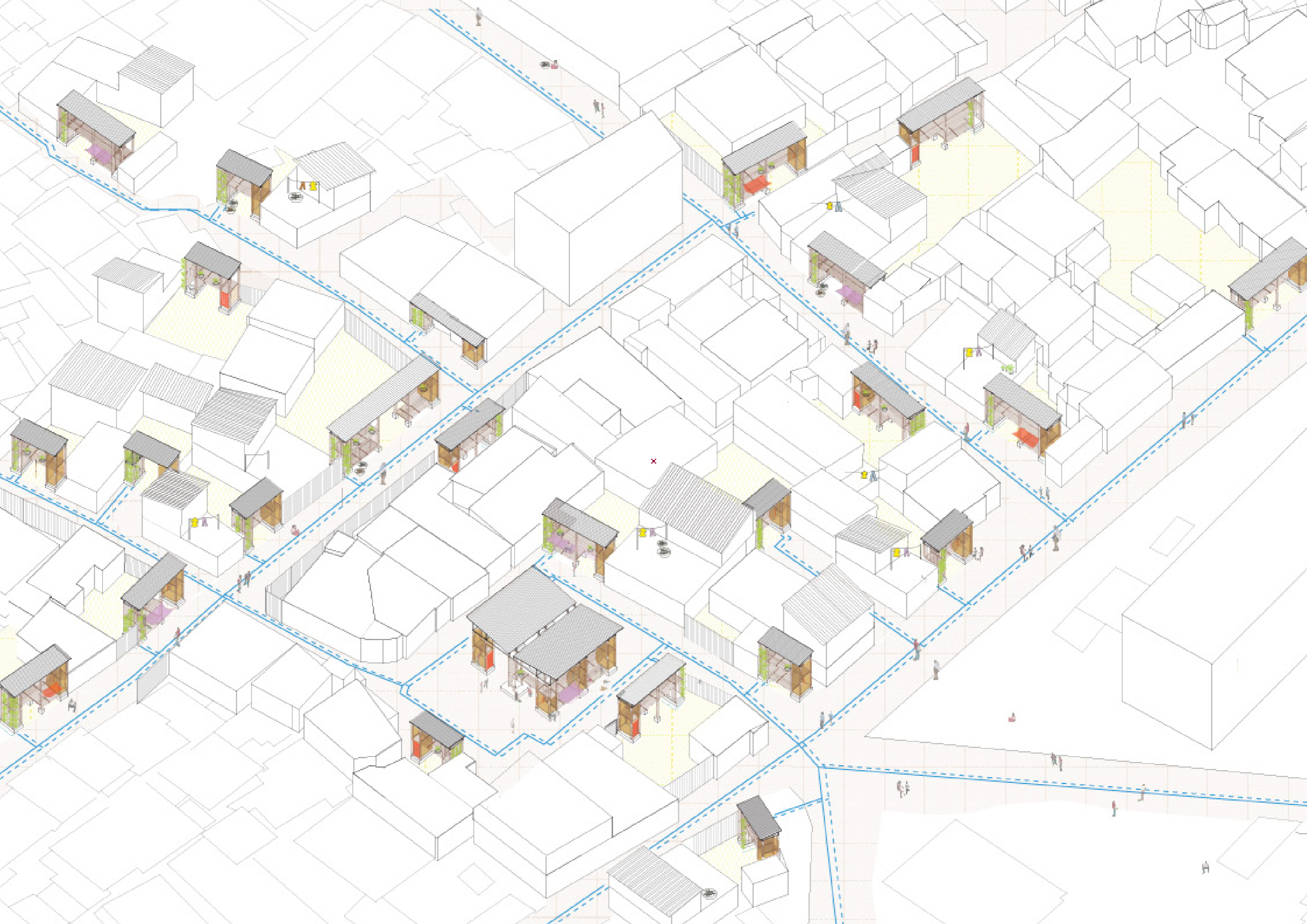
Interventions







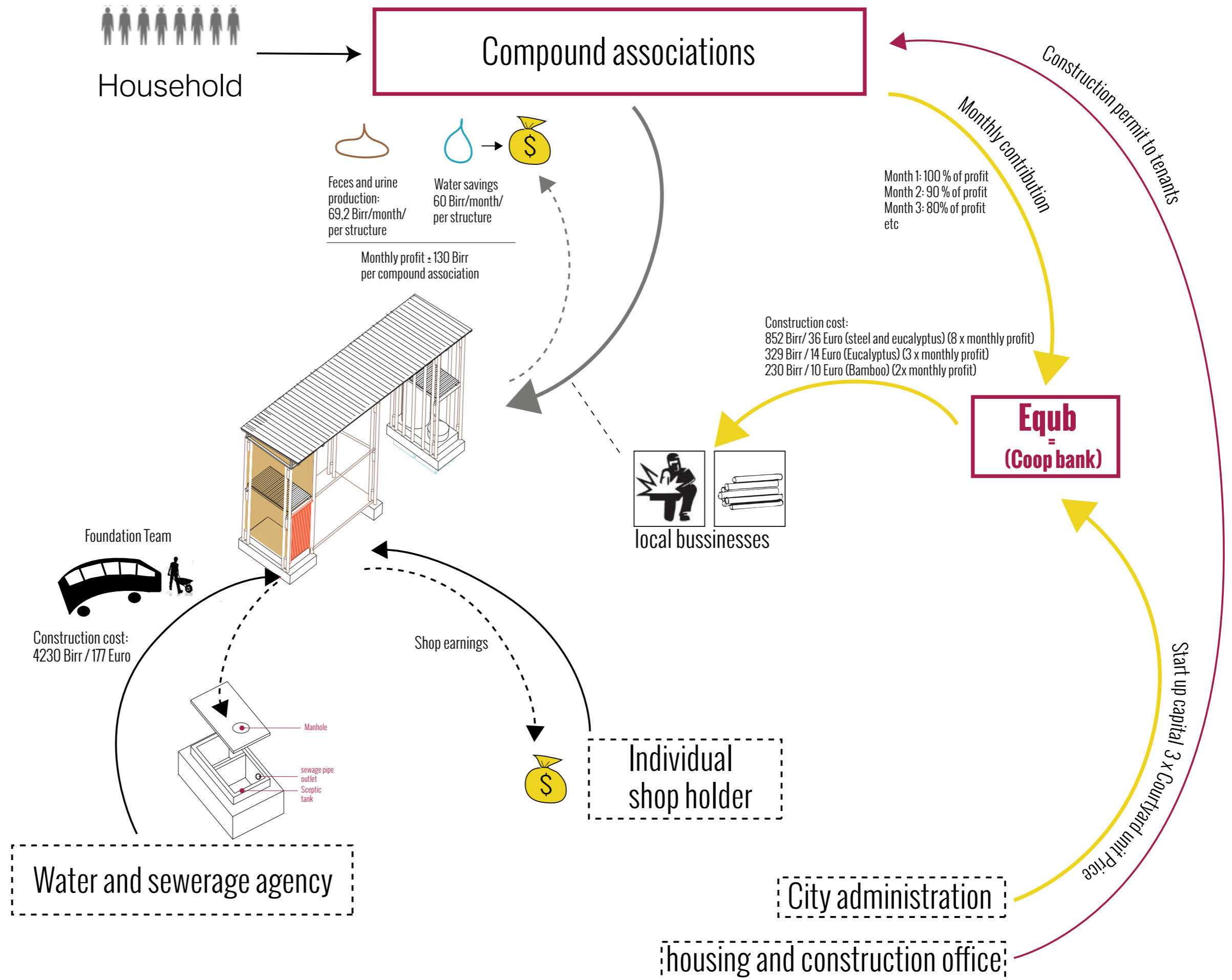




Economic model

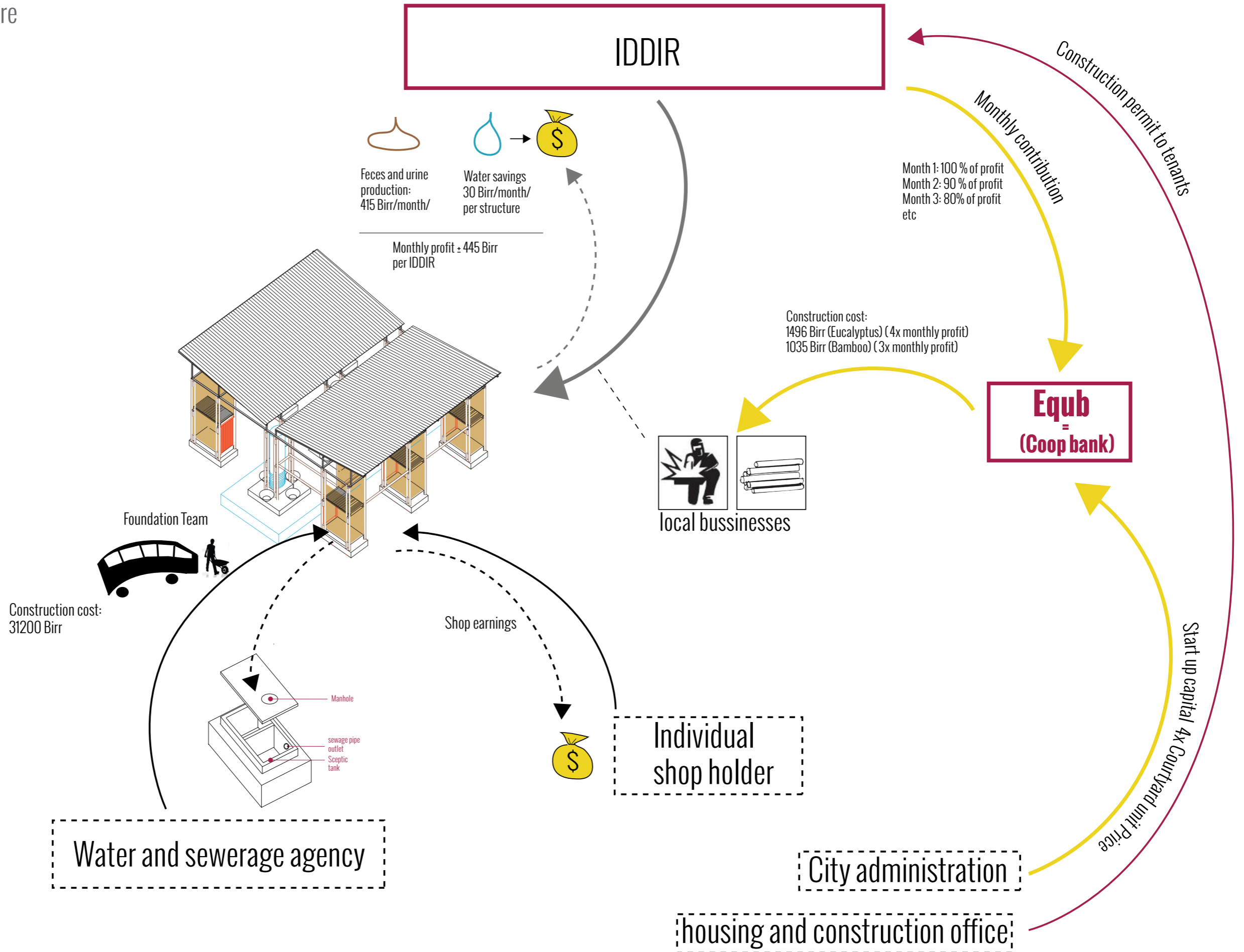
Economic model

Courtyard structure



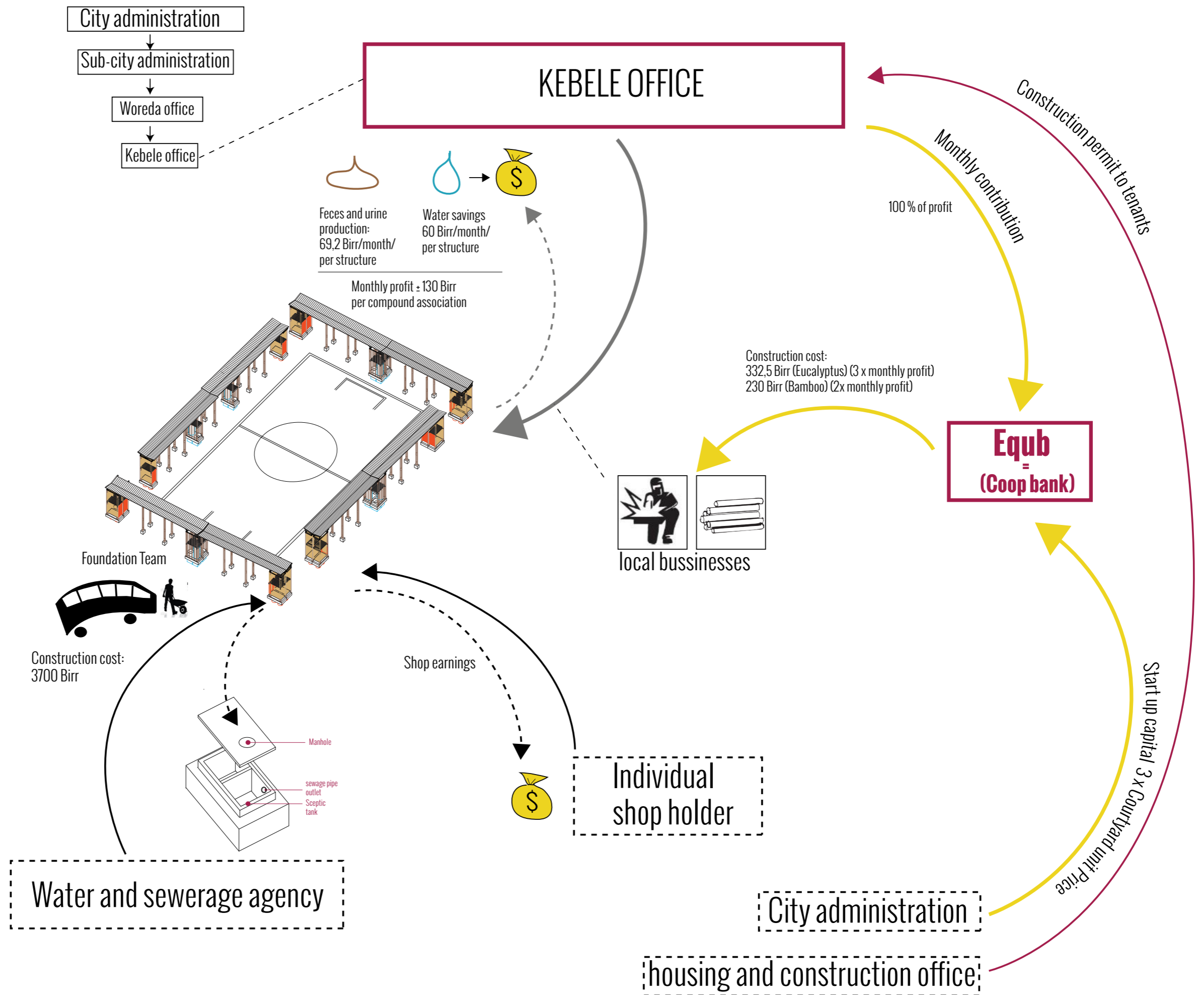
Economic model

Community structure



Economic model

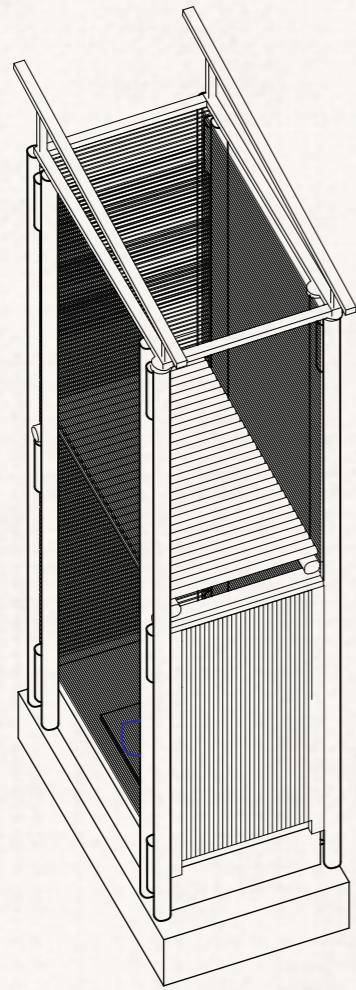
Sportsfield structure



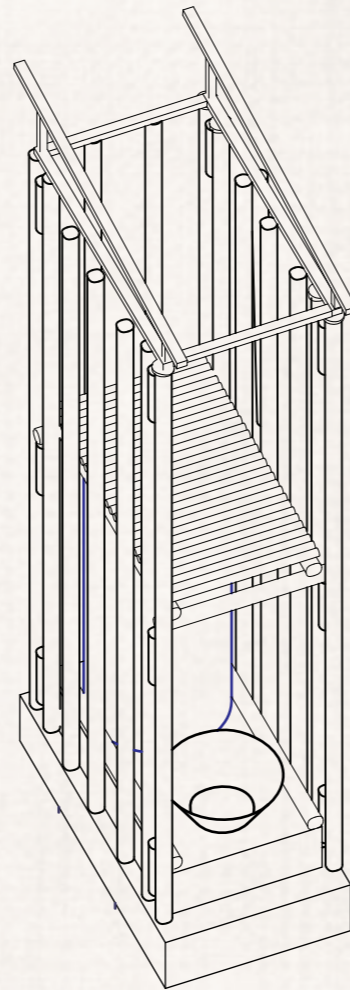
An isometric architectural drawing of a residential block. The drawing shows a central courtyard area with a yellow checkered floor, surrounded by white buildings. Blue dashed lines indicate a network of walkways and courtyards. Several buildings have small, modern, glass-enclosed structures on their roofs or balconies. Small human figures are scattered throughout the scene to provide scale. The overall style is clean and technical, typical of architectural visualization.

Handbook

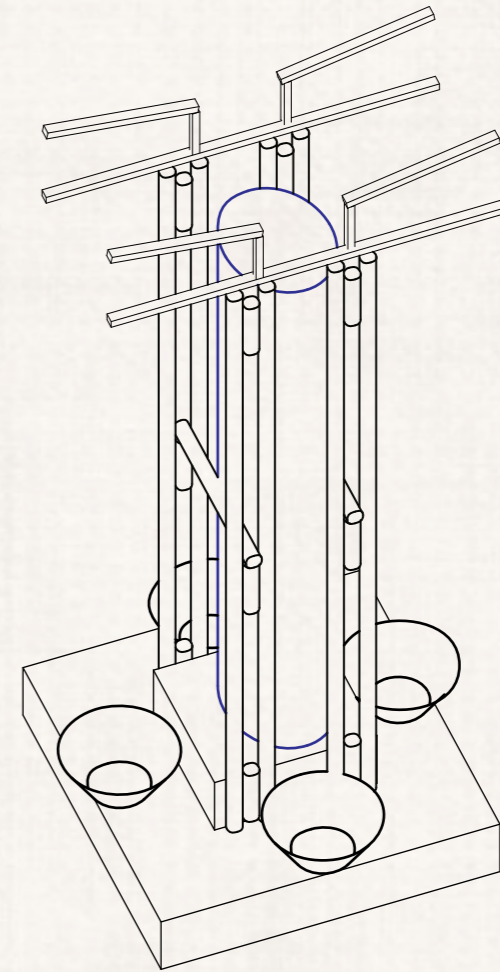
How to **organise** and self-**build** the Units



Toilet unit



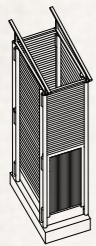
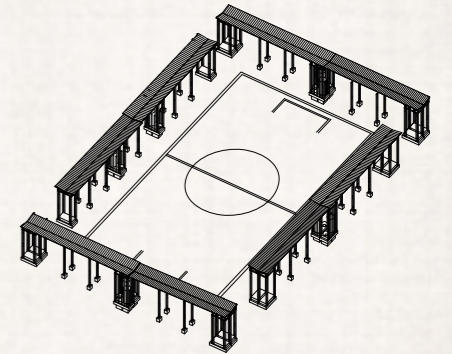
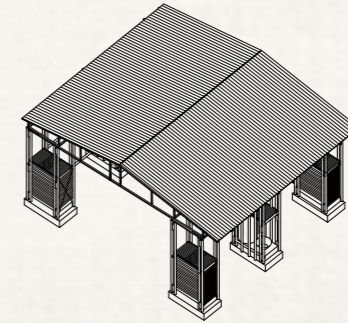
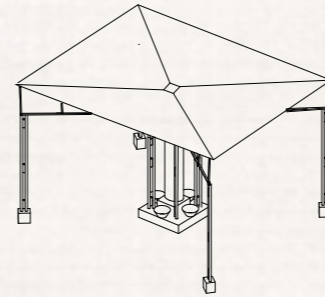
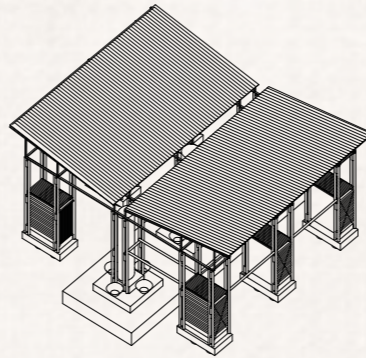
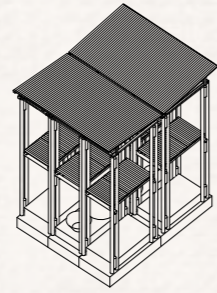
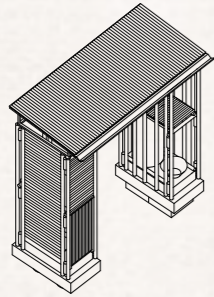
Water unit small



Water unit big

Possible structures

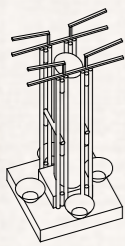
Basic constructive units



Toilet unit



Water unit small



Water unit big

X

XXX

XXX
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XXX

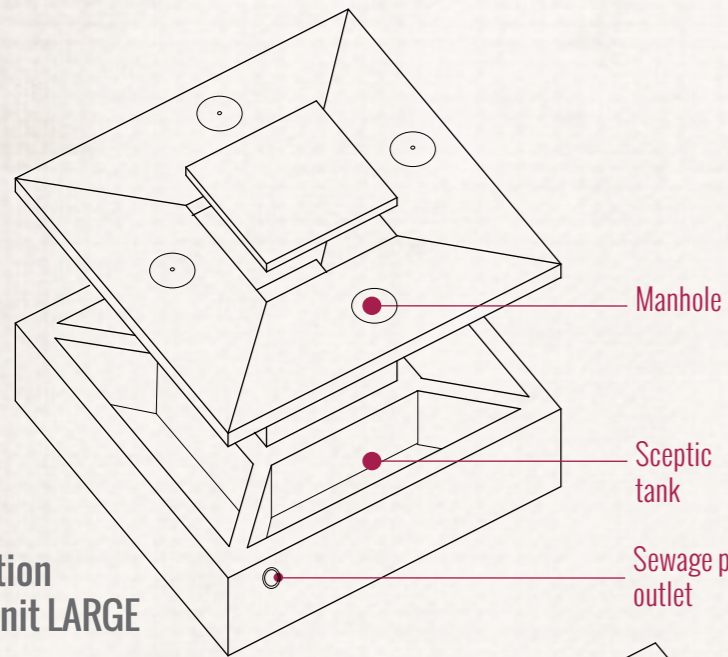
XXX

XXXXXX

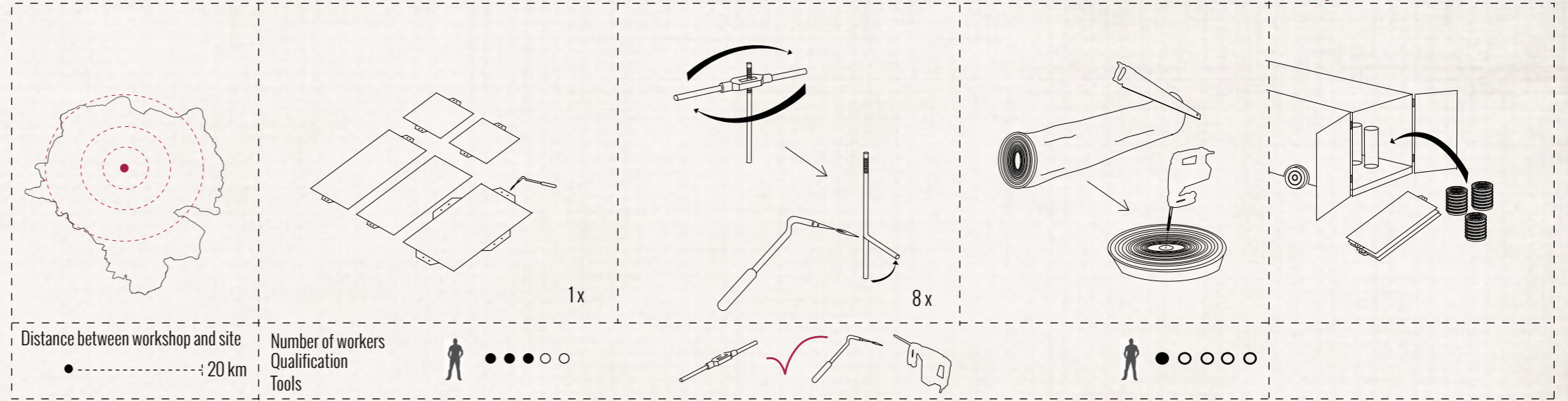
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X

1 Foundation

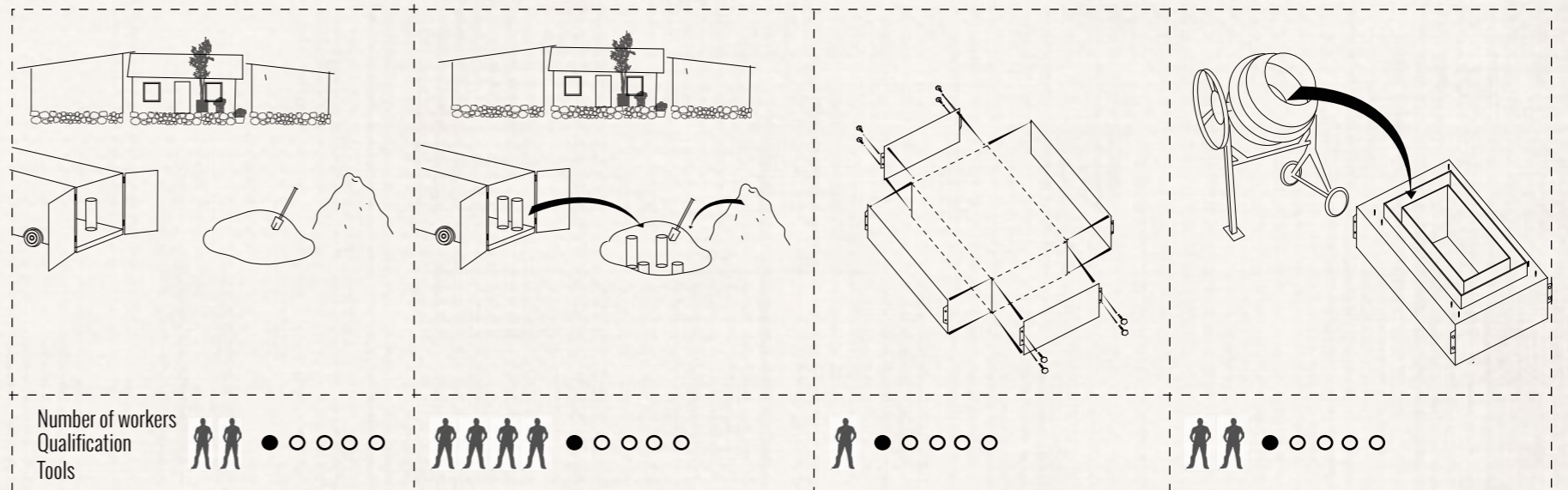


Preperations in workshops

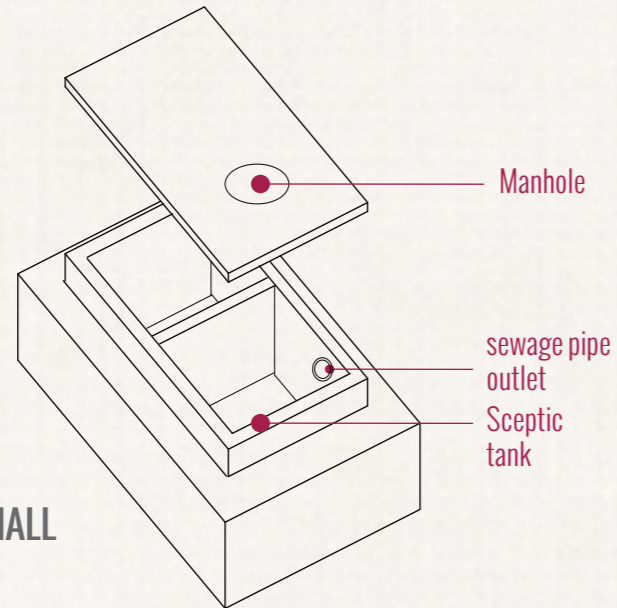
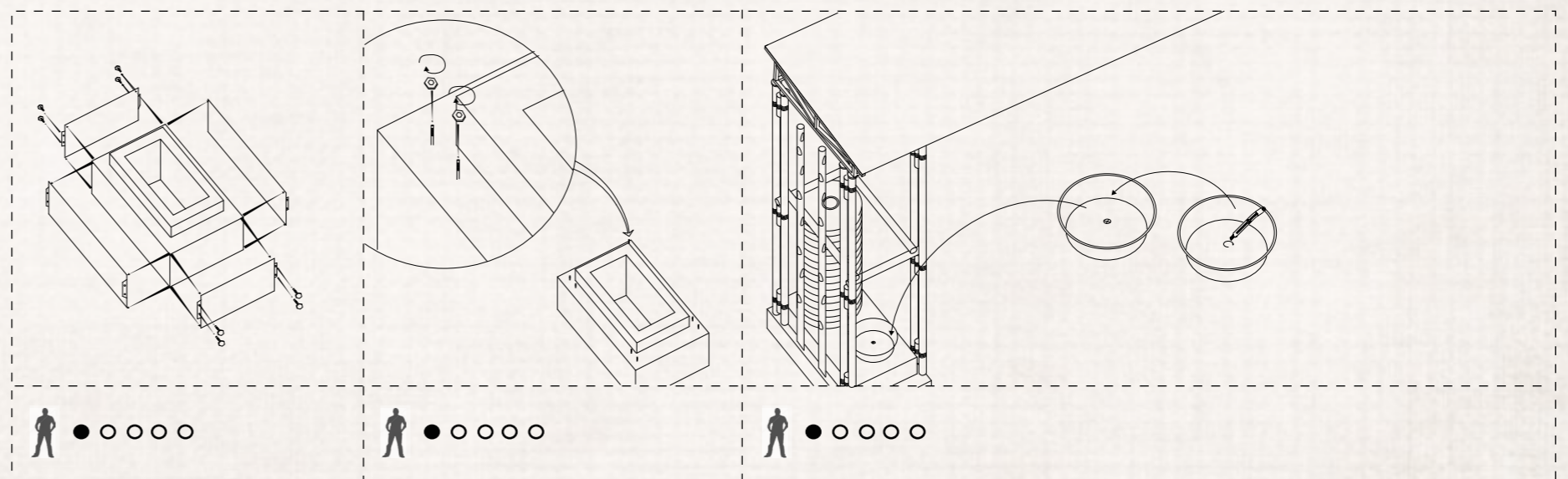


Transportation to site

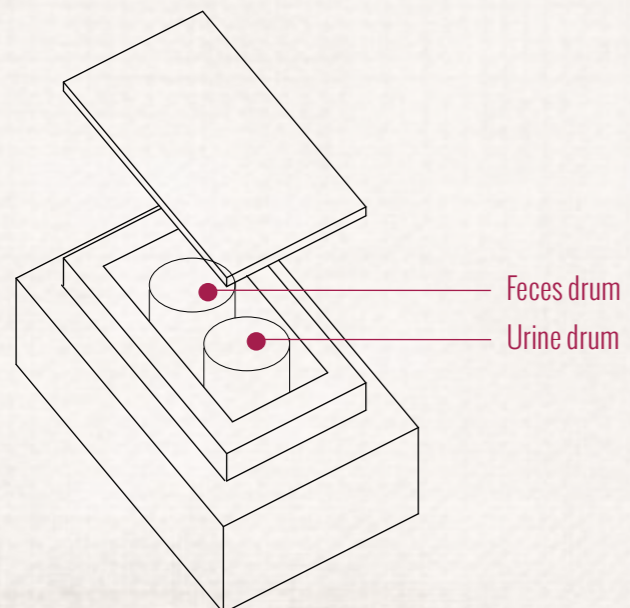
On-site setup by Foundation Team



On-site setup by residents



Foundation Water unit SMALL

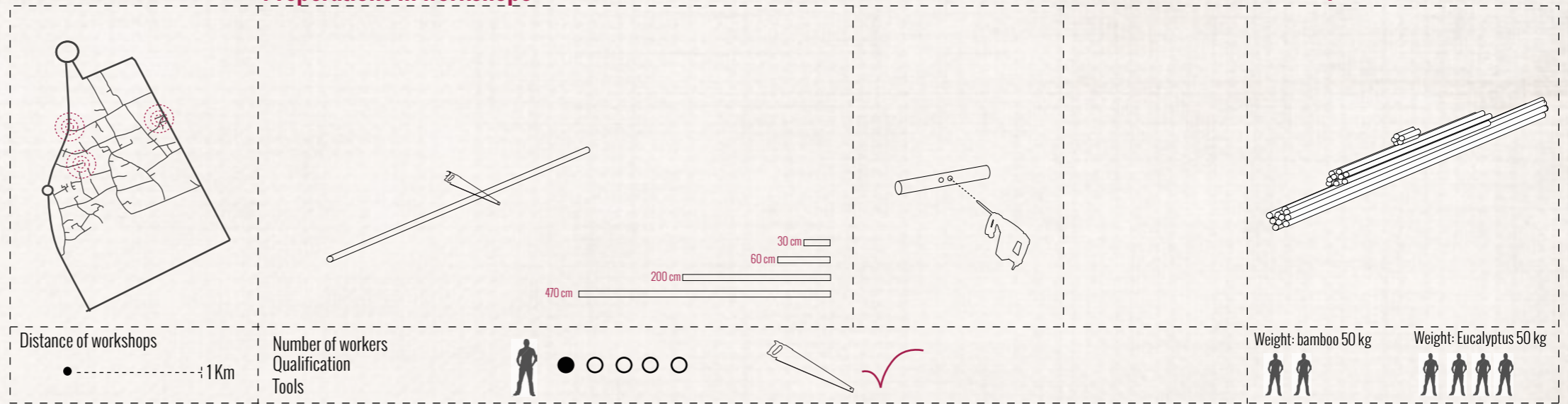


Foundation Toilet unit

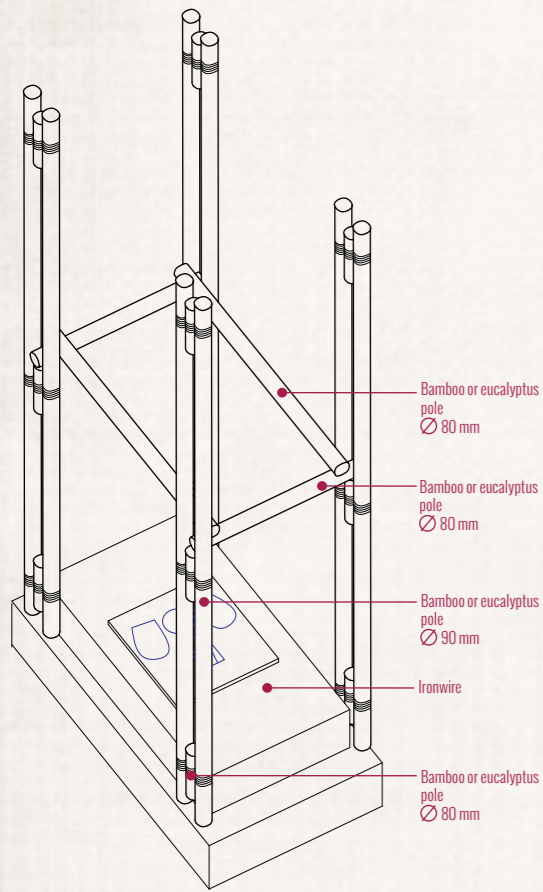
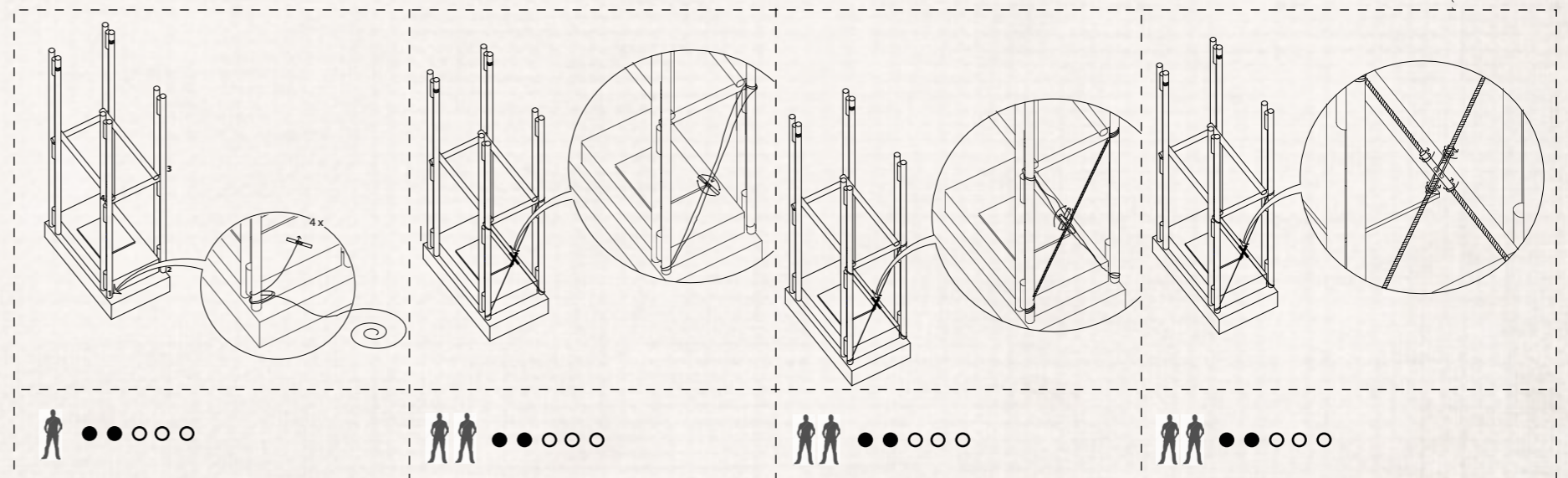
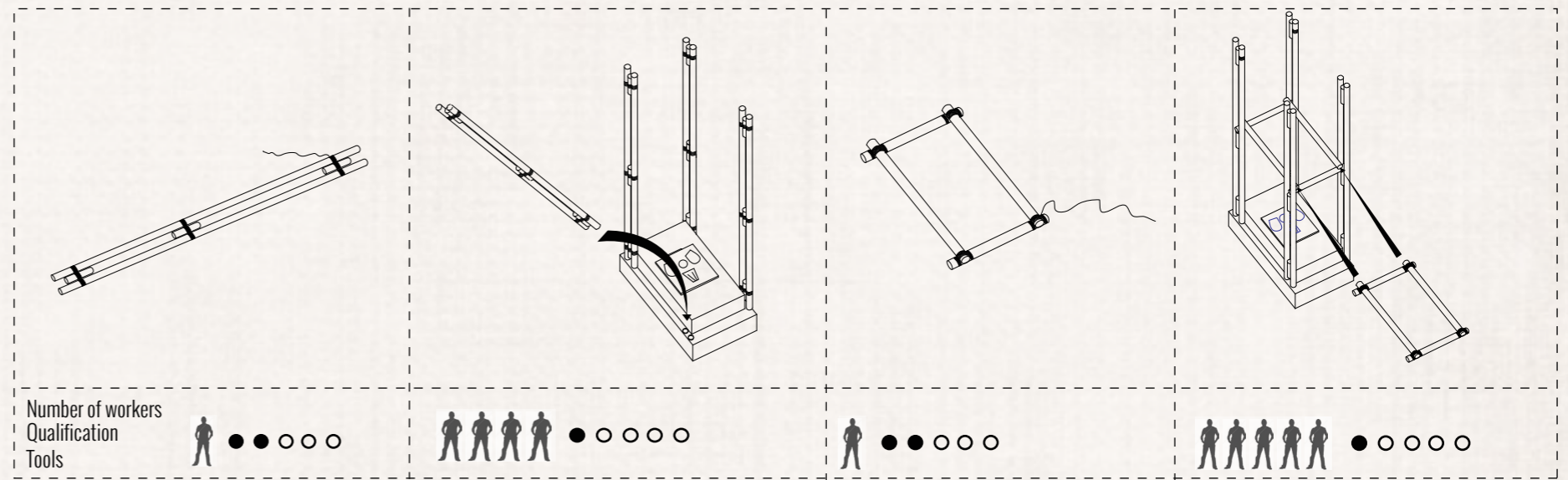
2 Bamboo/Eucalyptus structure

Preperations in workshops

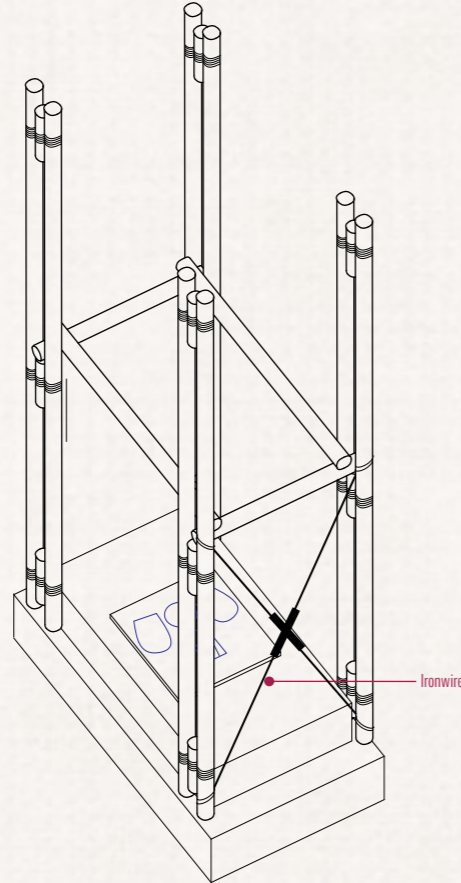
Transportation to site



On-site setup by residents of compound association



Courtyard side



Street side

3 Roof

Preparations in workshops

Transportation to site

<p>Steel</p> <p>Wood</p>	<p>4x</p> <p>4x</p>	<p>30 cm</p> <p>4x</p>	<p>4x</p> <p>9x</p>	<p>4x</p> <p>1x</p> <p>1x</p>
<p>Distance of workshops</p> <p>●-----1Km</p>	<p>Number of workers</p> <p>Qualification</p> <p>Tools</p>			<p>Weight: Steel 30 kg</p> <p>Weight: Eucalyptus 40 kg</p> <p>Weight: Eucalyptus 10 kg</p>

On-site setup by residents of compound association (steel roof construction)

- Corrugated iron sheet 2,5 m wide
- Gutter folded iron sheet
- Iron roof sheet mounting Corner profile 50x50x2 mm
- Roof construction Square profiles 50x50x3 mm
- Gutter mounting Bar steel 50x3 mm

<p>Number of workers</p> <p>Qualification</p> <p>Tools</p>			

On-site setup by residents of compound association (bamboo / eucalyptus roof construction)

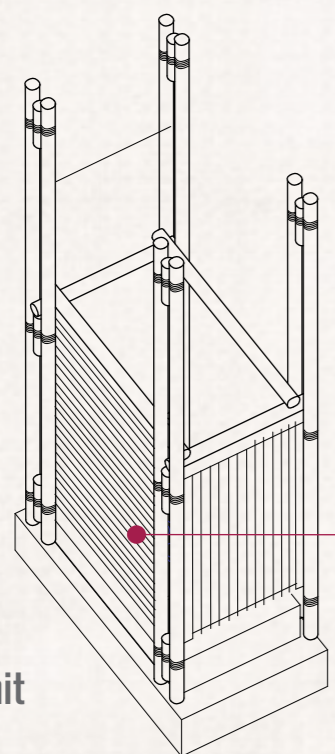
- Roof construction Eucalyptus/bamboo 60 mm
- Gutter mounting Bar steel

<p>Number of workers</p> <p>Qualification</p> <p>Tools</p>			

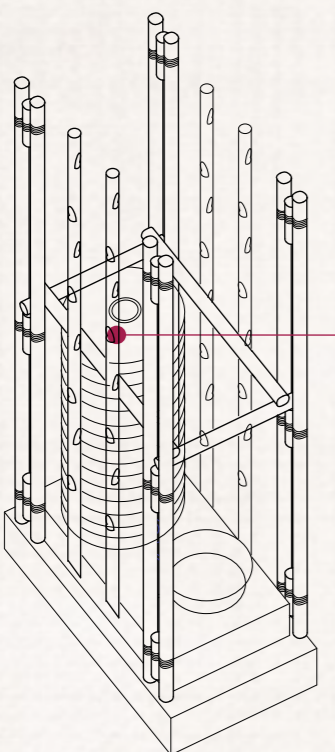
Steel profiles

Bamboo / Eucalyptus

3 Facade



Toilet unit



Water unit

Number of workers: 2 icons	Qualification: 5 circles (1 solid, 4 hollow)
Tools:	

Number of workers: 2 icons	Qualification: 5 circles (1 solid, 4 hollow)	Number of workers: 2 icons	Qualification: 5 circles (1 solid, 4 hollow)
Tools:			

4 Infill

