SITE ANALYSIS
More than 90% of Addis Ababa's inhabitants live in slum areas

--UN-HABITAT(2012)

Distribution of slums
SITE ANALYSIS - LOCATION

Kirkos Sub City
SITE ANALYSIS - CONTEXT

Kirkos Sub City
SITE ANALYSIS - CONTEXT

Kirkos Sub City

Kirkos Market

Kirkos Church
SITE ANALYSIS - CONTEXT

Kirkos Sub City
SITE ANALYSIS - CONTEXT

Kirkos Sub City
The income of the inhabitants related closely to the land they are living.
If condominium comes...
If condominium comes...
Conclusion 1

Instead of relocation and site-clearing, there should be an alternative approach that allow people remain in place and upgrading the slum area incrementally.
SITE ANALYSIS - SPATIAL HIERARCHY

Main Street
SITE ANALYSIS - SPATIAL HIERARCHY

Pedestrian Street
Conclusion 2

The street carry almost all the public activities and even some private activities, causing a great deal of stress to the space and sanitation of street.

There should be more layers of public space serves different activities.
Conclusion 3

Courtyard is an essential space which derives from the local way of living. But in many cases, the space of the courtyard is not enough to carry the activities it suppose to.

So the scale of the courtyard and the number of households that share one courtyard should be redesigned.
Conclusion 4

The main typology of dwelling in slum area is single-storey house, as a result, the building density is low. For kirkos which is a central part of Addis Ababa, the densification of building is necessary, eg. introducing multi-storeys building typology.
Conclusion 5

Several households sharing facilities is a way to ease both the spatial and economic burden of low-income people, however it should be improved and transferred.
SITE ANALYSIS - CONCLUSION

Key Words: remain in place
incremental
multi-layer
scale
densification
shared facilities
URBAN STRATEGY
Step 1

collect data and recognise existing social connection
URBAN STRATEGY - IN-SITU SLUM UPGRAFTING

Step 2
merge small plots
URBAN STRATEGY - IN-SITU SLUM UPGRADING

Step 3

create pedestrian street
Step 4

create arcade
Step 5

create public square
Step 5

create public square
Step 6

incremental development
Step 7

further development
URBAN STRATEGY - IN-SITU SLUM UPGRADING
ARCHITECTURAL DESIGN - CLUSTER STRUCTURE

- Regular-shaped plot
- Grid
- Module
- Gallery & Semiprivate deck
- Grid
ARCHITECTURAL DESIGN - CLUSTER STRUCTURE

Flexibility of two grids
ARCHITECTURAL DESIGN - BUILDING TYPOLOGY

Commercial

6m X 6m

7.5m X 6m

9m X 6m

10.5m X 6m

4.5m X 9m

6m X 9m

7.5m X 9m

9m X 9m
ARCHITECTURAL DESIGN - BUILDING TYPOLOGY

Commercial & Dwelling

6m X 6m

7.5m X 6m

9m X 6m

10.5m X 6m

4.5m X 9m

6m X 9m

7.5m X 9m

9m X 9m
ARCHITECTURAL DESIGN - BUILDING TYPOLOGY

Individual dwelling

6m X 6m

7.5m X 6m

9m X 6m

10.5m X 6m

4.5m X 9m

6m X 9m

7.5m X 9m

9m X 9m
ARCHITECTURAL DESIGN - BUILDING TYPOLOGY

Shared dwelling

- 9m X 6m
- 13.5m X 6m
- 9m X 9m
- 13.5m X 9m
ARCHITECTURAL DESIGN - FLOOR PLAN
ARCHITECTURAL DESIGN - BUILDING TYPOLOGY
ARCHITECTURAL DESIGN - BUILDING TYPOLOGY
Interlocking Earth Brick

Simple on-site production

Various profile for different function

soil + cement

reinforcement

infill wall with interlocking brick

beam-brick for openings

concrete load-bearing structure
ARCHITECTURAL DESIGN - FUTURE DEVELOPMENT
ARCHITECTURAL DESIGN - FUTURE DEVELOPMENT