

Exercise 02: SURVEY THE INFORMAL- GATSATA

Issued: 10.07.2023 Due: 17.07.2023

Informal settlements have become integral to the urban imagery of the cities across the global South. Forms of urban informality emerge and grow through some generative processes of self-organization and incremental adaptations. While formal interventions have often failed to put an end to such a resilient and complex type of urbanism, the desire for eradication and demolishment still prevails. Most of the informal settlements can benefit from incremental upgrading and micro-scale design interventions, which then rely on a sophisticated understanding and analysis of informal morphologies and adaptations. However, forms of urban informality and adaptations of informal settlements are relatively understudied.

FORMS OF INFORMALITY AND ADAPTATIONS IN INFORMAL SETTLEMENTS*Hesam Kamalipour*

The goal of this second exercise is to explore the spatial qualities of the informal built environment through the accurate survey of a portion of informal shelters, and to integrate them in the project of a dwelling for an individual. Attention has to be put on the typologies of shelters, their arrangement in the assigned block, and the study of the space dedicated to different daily activities. The students are required to accurately survey the built elements (using their exteriors and interiors spaces). Students will therefore properly report the findings through architectural section and elevation drawings, observe how the exterior spaces are used by their occupants during a prolonged time (minimum 1 hour), sketch the exterior spaces they find interesting in terms of design, proportion, use or occupation. The students are encouraged to interview the residents/occupants to collect more information on their life style, the number of people they share the space with, and their positive or negative remarks. After the collection of these first field data, the students will propose a design of a dwelling for an individual that will reflect the studied typology, will integrate the informal spatial qualities they observed and considered interesting, and will address the reported unsatisfying living conditions with the minimum design upgrade.

Each group of students will be assigned a block in the chosen informal settlement, after a first observation and interview of the dwellers, the students will be assigned one **cluster** of houses within the **studio site** and perform the architecture survey of its interiors and exteriors.

The students **are encouraged to develop criteria for observation to meet the aim of the design studio iii, and pay attention to the architectural elements (no limited to) the following aspects:**

- a. Typology of dwelling/shelter
- b. Plot, Building/House Access, arrangement, measures and design
- c. Materials and measures of floors, walls, roof
- d. Materials, measures and distribution of windows and doors
- e. Number, use and measures of each interior room
- f. Use and measures of each exterior pertinent space
- g. Presence, measure, design and distance of toilet
- h. Presence, measure, design and distance of kitchen, Number of people sharing the kitchen
- i. Presence and distance of renting units (if any), Number of renters
- j. Number of people sharing the interior space
- k. Number of people sharing the exterior space
- l. Number of people sharing the sanitation facility
- m. Quality of water (accessibility, cost, time needed to access)
- n. Source of energy for cooking/lighting

- o. Quality of storm water drainage, Quality of garbage collection
- p. Distance to public transport service, school, health, religious facility
- q. Quality of road/pavement/path/walkways/drains
- r. Street-life intensity (high, low)
- s. Functionality (work, live, visit)
- t. Public vs private interface (impermeable, set back. Direct/opaque, transparent)
- u. Loose parts (garbage bin, stored materials, vehicles/moto, appliances, furniture, vegetation, charcoal, etc)

***Additional points from students after class discussion of 23.06.2023**

- A.1. Social Activities
- A.2. Shops (boutiques), outside commercial activities
- A.3. Outside cooking (micro-scale business)
- A.4. Different types of pathways
- A.5. Access to houses (gates)
- A.6. How people use the kitchen
- A.7. Social cohesion
- A.8. Conformity with the masterplan
- A.9. Drainage Pathways
- A.10. Playgrounds
- A.11. Education services
- A.12. Source of income (main occupation)
- A.13. Street Garden (Street trees)
- A.14. Street Gathering
- A.15. Status of peoples who are occupying the area (single or married)
- A.16. Topography (how people live according to the topography)
- A.17. Where have people lived in the past five years and why have they relocated?
- A.18. Satisfaction with the space they are living in (Where would they like to relocate if they got money (30Million FRW) to own a house? and why?)

Useful fieldwork tips

The following is a list of useful tips the students can follow while performing the survey, reporting the information through appropriate architectural drawings, and integrating the informal qualities into their design.

- Draw a schematic sketch of the shelter on your sketchbook before you start the survey.
- Locate windows in plan and elevation and take their measures, their measures from the floor, from the wall corners, etc
- Check for presence of electricity and other infrastructures (drainage, water tap, etc) and locate them accurately
- Sketch exterior spaces you find interesting. Why do you find them interesting?
- Annotate personal feelings (i.e. warm environment, cold, windy, stinky, dark, etc) and occupants' remarks
- Pay attention to the materials used for construction
- Pay attention on how people access the shelter
- Pay attention on how people use the exterior spaces in proximity to the shelter
- Pay attention to what happens outside the houses and plots- what do they enjoy most on the street?
- Pay attention to quality of road, path, drain
- Pay attention to all the loose parts in the plot or street e.g. garbage, vegetation, stored material etc.
- Find out who lives there and/or who is there for work/business or just to visit or pass by.

The following items are due for the final of this section: (A.1, A.2, A.3, A.4)

- A.1. A **physical site model** of the entire studio site (**1:200**)- HANDOUT 03
- A.2. Survey drawings of the plot and buildings/houses in your block (1:100): 4 Elevations, 3D perspective with correct materials. (material Catalogue to be agreed in class)
- A.3. Quick responses from household interview and participant observations
- A.4. Sketches of the observed informal qualities, street life, public-private interface, loose parts.
- A.5. A 3D model (**physical**) of the assigned block (1:100)- **Group of 3/4**
- A.6. A 3D model (**physical**) of the assigned Plot (1:100)- **Group of 2**
- A.7. A 3D model (**physical**) of the chosen houses/shelters (1:50)- **Individual**
- A.8. Design drawings of the dwelling (1:50): 1 floor plan, 1 relevant cross section, 1 main elevation
- A.9. A 3D model (**physical**) of the designed dwelling for one individual (1:50) Before and After
- A.10. One exterior axonometric view of the dwelling design

Understand the Community Context

To help you determine the characteristics of your community and work out where your interests intersect with the community's needs, consider asking the following questions:

Neighbourhood

- What are the socio-economic and demographic characteristics of the area?
- What are the social, economic and environmental challenges or priorities in this neighbourhood?
- What is happening in terms of neighbourhood improvement and real estate development?
- What is the backbone of community economic development?
- What employment growth strategies are promoted in the community?

Household

- How many people live in different household? Number of people sharing the interiors space?
- Functionality (work, live, visit)?
- Education Levels
- Occupation/employment. No. of household members/persons working?
- Nuclear family/ Relatives/ Friends/ Visitors/guest not family members/ Maids/House helpers
- Children (Age)/ Adults (Age)
- Monthly total household income (income generated by all HH members who are working)
- How long have you lived in this house?
- If less than 5 years, Where did you live (before moving here)? Why did you move here?
- Property ownership (how many renting/owning)
- In which Ubudehe Category does your household belong to?

EVALUATION CRITERIA

The marks will be allocated as follows:

- 4 marks. Persistence and production. The consistency of production and improvement during the design process.
- 4marks. Clarity of survey, research and report. How accurate is their survey, how rich is their field research, reported through drawings, sketches and relevant observations.
- 2 marks. Inventiveness & innovation and in their design.
- 2 marks. Quality of oral presentation.
- 2 marks. Model making. PRECISION, inventiveness/effectiveness of representation.
- 4 marks. Quality of graphics. PRECISION, inventiveness/effectiveness of representation, and overall composition.
- 2 marks. Initiative and participation.