



**Mlalakuwa**  
**Informal settlement**  
**Dar es Salaam, Tanzania**

Summer internship - Global Minds - VLIR-OUS project

# **UNDERSTANDING THE EMERGING COLLECTIVE SPACES AS ALTERNATIVE INFRASTRUCTURE NETWORK IN MLALAKUWA INFORMAL SETTLEMENT, Dar es Salaam, Tanzania**

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# FRAMEWORK

[photo credit: Alessandra Bonelli for KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

## **PART ONE - FRAMEWORK**

### **1.1 RESEARCH GROUP KU LEUVEN**

This project has been supported by the research group “Urban Projects, Collective Spaces, and Local Identities”. It is an interdisciplinary research group that brings together experts from several fields at the Department of Architecture of the University of Leuven (KU Leuven). Its goal is to launch and advance research on the creation and utilization of collective spaces in urban projects in relation to theoretical perspectives and scholarly debates. The goals of the research group “Urban Projects, Collective Spaces, and Local Identities” are to examine how these parallel mechanisms of space production balance out in various contexts and test the results through practical, hands-on projects while taking into account the surrounding community’s stakeholders, protagonists, and primary beneficiaries. Furthermore, it aims to disseminate their research findings also to practitioners in urban design and architecture, and to local governments and decision-makers. This proposed research is linked to the research line “Collective spaces and Limited resources”.

### **1.2 RELATION TO THE SUMMER INTERNSHIP**

This VLIR-OUS project, planned for four students in a 6 weeks long internship in July-August 2022, focuses on the relationship between urban projects, locality, collective spaces, and informal neighbourhoods. Alessandra Bonelli, Aurélie De Mol and Tim Kuijlen (master architecture students) and Magdalena Vieren (urban planning student) have been selected in the aftermath of a call within KU Leuven Faculty of Architecture to understand the emerging collective spaces as alternative infrastructure networks in the Mlalakuwa Informal settlement-Dar es Salaam. Researcher Jacob Lutta has been working in the Mlalakuwa Informal Settlement as part of his Ph.D. case study at the KU Leuven. He assisted in connecting with locals and city authorities for official and non-official practicalities. The project was under supervision of Prof. Yves Schoonjans who is a promotor from KU Leuven and Prof. Aldo Lupala a local promotor from Ardhi University.

### **1.3 CONTEXT AND PROBLEM**

Dar es Salaam, Tanzania’s largest city and commercial port on the Indian Ocean coast, emerged from a fishing town. In comparison to other regions of Tanzania, where ~80% of the population lives in rural areas, the city has a significant concentration of trading, manufacturing products, and other services. It has been observed that a large number of individuals are migrating from the countryside to Dar es Salaam city in quest of new possibilities, resulting in more than 75% of the population living in informal

neighbourhood, where informality is an integral part of life. The collective life is defined by the various economic and social networks that can be conducted in streets, open spaces, and built-up collective spaces. The existing urban fabric is under pressure. Shops/workshops and high-rise building amenities frequently expand using open spaces. It results in a general densification and a diminution the possibilities of communities for open-air freely usable collective spaces. Mlalakuwa is unique due to its intertwined links with nearby activity clusters shaping its urban structure. Its collective spaces seem to act as an extension of these activity clusters. The study examines the qualities of the various collective spaces, as well as their physical, symbolic characteristic and their relationship with their users.

The project aims to explore the potential of graphic representation to reveal the attributes and dynamics of collective spaces, particularly in the Mlalakuwa informal settlement neighbourhood. This project concentrated on three main aspects. First, the mapping of the Mlalakuwa neighbourhood with a focus on emerging public/collective spaces. This has been based on explorations through Google Street Map platform, and one-site observations. Secondly, the analysis of the interactions between collective spaces and the conditions of the surrounding urban landscape. Finally, to propose speculative suitable design strategies for Mlalakuwa's collective spaces. The main objective was to acquire personal knowledge of the structure of collective space characteristics in informal urbanization in a country of the Global South. The secondary objective was to propose a development strategy for future interventions of collective spaces in informal settlements. The lists of tasks that were necessary to complete the work are the following:

- i. Visiting the site mentioned in the research proposal
- ii. Data collection, analysis, and strategy development are all part of the process.
- iii. Defining alternative mapping methodologies and mapping the stated case study on various levels.
- iv. Presenting the results to Ardhi University and local stakeholders as a contribution to local development.



# ANALYSIS

[photo credit: Alessandra Bonelli for KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

## PART TWO - ANALYSIS

### 2.1 LOCATION

Mlalakuwa's informal settlement is located in a sub-neighbourhood of Makongo ward in the Kinondoni district, Dar es Salaam. It is in the northwest of Dar es Salaam, and 11.4 kilometres from the city centre. The area is delimited by Mlalakuwa river on the west and by the major roads of Sam-Nujoma, Bagamoyo and Makongo Juu. The University of Dar es Salaam and Mlimani City Mall border it on the south. Ardhi University borders it on the west. Makongo Military Camp borders it on the northwest. The Mwenge area borders it on the north (Fig. 2.1). It was observed that the Mlalakuwa growth contributed to activity clusters and a number of commercial activities that surrounded the neighbourhood. The proximity and convenience of the neighbourhood caused a high demand for spaces for various needs. Therefore, Mlalakuwa's growth is the result of the changes in land use and social structure.

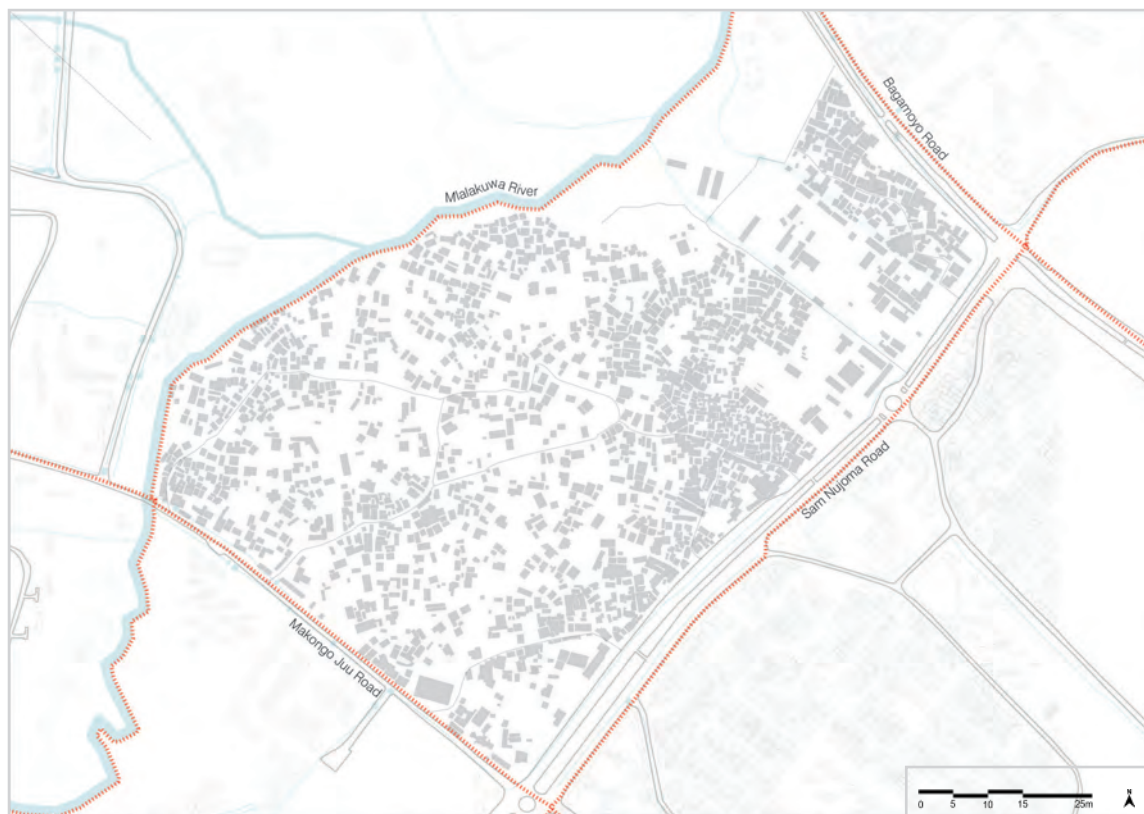


Fig. 2.1 - Map of boundaries of Mlalakuwa informal settlement [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

### 2.2 DENSIFICATION

Densification increased because of a lack of planned and surveyed land to fulfil the rising housing demand, which led to the creation of additional informal settlements (Nguluma, 2013). During the period from 2000 to 2022, a significant densification was observed. The built surface grew of 40% in 20 years leaving



only 5% of the open spaces out of the total area (Fig. 2.2 - Fig. 2.3). To study the phenomena, the following issues have been looked up at. First, the increasing number of housings. Secondly, a large number of informal settlements. Thirdly, the conglomeration of economic activities. The analyses revealed that the informal settlements have expanded simultaneously with the inhabitants' need for housing and spaces for social and economic activities. The cost to access basic infrastructure services and community facilities rises to an unaffordable level. Fast urbanization had a significant impact on the growth of informal settlements overall in horizontal densification. The detailed analysis of the densification in Mlalakuwa is the result of renovating and extending existing buildings as well as brand new constructions on open spaces or after a demolition.

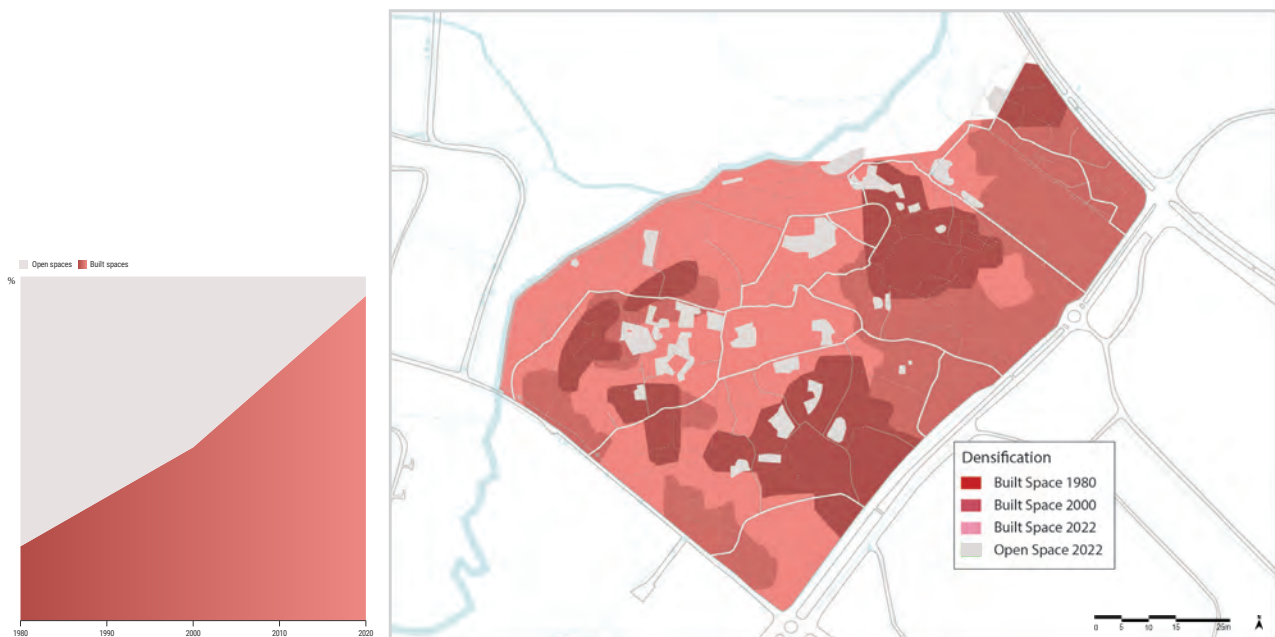


Fig. 2.2 - Graph which shows the decrease of open spaces in comparison with built spaces

Fig. 2.3 - Map of the progressive densification from 1980 to 2022

[source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

### 2.2.1 Renovating Existing Buildings

Existing buildings are renovated either by raising them, building new walls, or repairing sections of the walls and plastering them with cement and sand to give the structure a more modern aspect. As shown, the older structures lacked adequate foundations to protect occupants from weather hazards. Floor level of the visited houses was discovered to be the same as the ground level. Therefore, the owners tend to rise up foundations so that their construction can sustain weather conditions. However, in most of these buildings' beams and columns do not offer a sufficient structural stability, which endangers safety of their occupants. Some constructions were found to be constructed of adobe, while others were composed of cement and sand blocks. As a result, modification appears to involve beams addition, to assure security both beneficial to the owner and user (Fig. 2.4).



Fig. 2.4 - The figure shows repaired old buildings by extending the headroom and providing new roofing. Later the fence walls will be plastered by the owners. [source: Fieldwork, 2022]

### *2.2.2 Extension Of Buildings*

This is another evidence of spatial densification as a result of the extension of the existing buildings to accommodate a commercial use. During the investigation, two types of building extensions stood out: vertical and horizontal extensions. Vertical extension occurs when one-story buildings are vertically extended by the addition of floors (Fig. 2.5). While horizontal extension occurs in buildings that are extended horizontally to add a space on one side of the building (Fig. 2.6). Besides that, incremental changes appear to be another method of transformation that result in constantly changing architectural forms. Needs of the current community and the developer's standards are frequently guiding the final purpose of those intervention. The flow of individuals who require venues for a variety of activities generated different kinds of physical alterations. The key reasons Mlalakuwa has been more appealing for densification are its closeness to other major activity clusters resulting in its location surrounded by those clusters. Therefore, depending on a building's location, its spatial proximity with an activity cluster, densification by extension is favoured.



Fig. 2.5 - A vertical extension of commercial building at Mlalakuwa. [source: Fieldwork, 2022]



Fig. 2.6 – The figure shows the horizontal extension of the building as part of densification in Mlalakuwa. [source: Fieldwork, 2022]

### *2.2.3 New Construction*

Finally, densification has been also the result of the establishment of new building typologies in open spaces. Developers tend to demolish existing buildings and construct new building structures that opens many possibilities for commercial activities. The construction of various building types in the Mlalakuwa neighbourhood has overall seen the multiplication of adaptable spaces for commercial and social activities, such as the micro-open spaces on the sides of many streets. The picture below (Fig. 2.7) shows an example of the new commercial facilities where was located a church beforehand.



Fig. 2.7 – New commercial facility built on a plot where were standing a church before demolition. [source: Fieldwork, 2022]

## **2.3 MLALAKUWA URBAN STRUCTURE**

### *2.3.1 Roads*

The urban structure in Mlalakuwa also includes how Mlalakuwa can be viewed and connected through the city level. As was aforementioned, three major roads of Sam-Nujoma, Bagamoyo, and Makongo Juu (Fig. 2.8) delimitate Mlalakuwa's area. The operation of the networks plays a significant part in experiencing substantial spatial changes in both physical and economical terms. Additionally, the interior streets and



Fig.2. 8 – Makongo Juu Road: Mlalakuwa on the left, Mlimani City Mall on the right looking toward the crossover with Sam Nujoma road. [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

alleys linked to the main highways ease the access the Mlalakuwa neighbourhood's core from the main thoroughfares' borders. Main roads and streets in Mlalakuwa cause spatial changes of social economic and physical components at different scales leading to urban growth (Fig. 2.9).

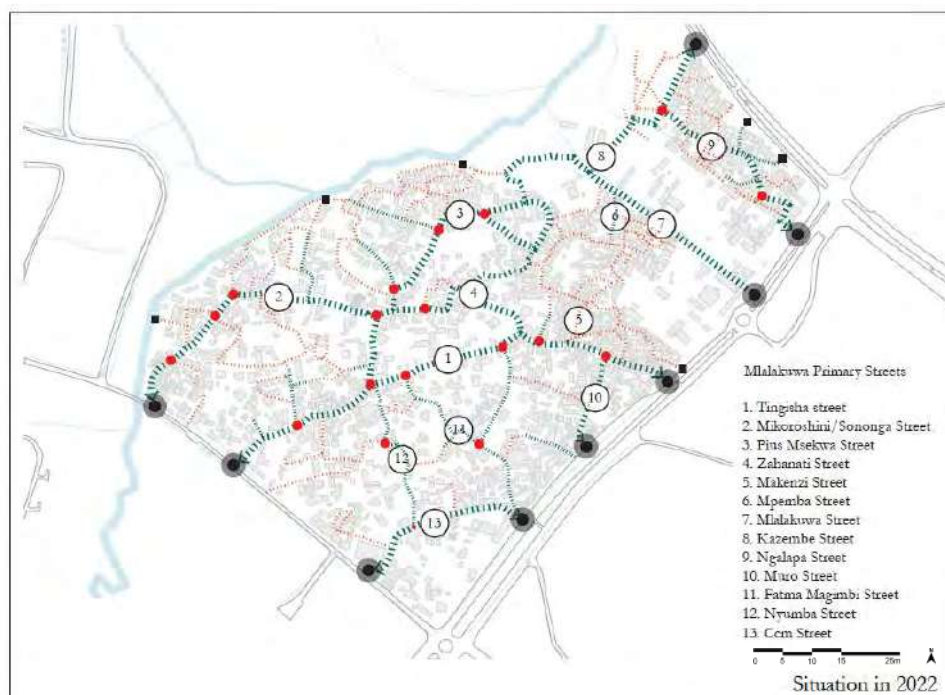


Fig. 2.9 – The figure shows the map and distribution of the road system in Mlalakuwa. [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

### 2.3.2 Edges

A boundary between the public and private sectors divides the two domains by a plot boundary (Levy, 2017). As a result, the Mlalakuwa informal settlement is made up of various kinds of boundaries that specify the general structure of the areas in the neighbourhood. There are solid masonry walling fences, thorn fences, and street stores. The existing structure put in evidence the irregular plot proportions and variability series in the spatial organization, which are often squarish in shape and edges. Given the difficulties of access to the infrastructure systems, this seems to be less advantageous. The following sections explore the types of edges observed that participate in Mlalakuwa urban structure.

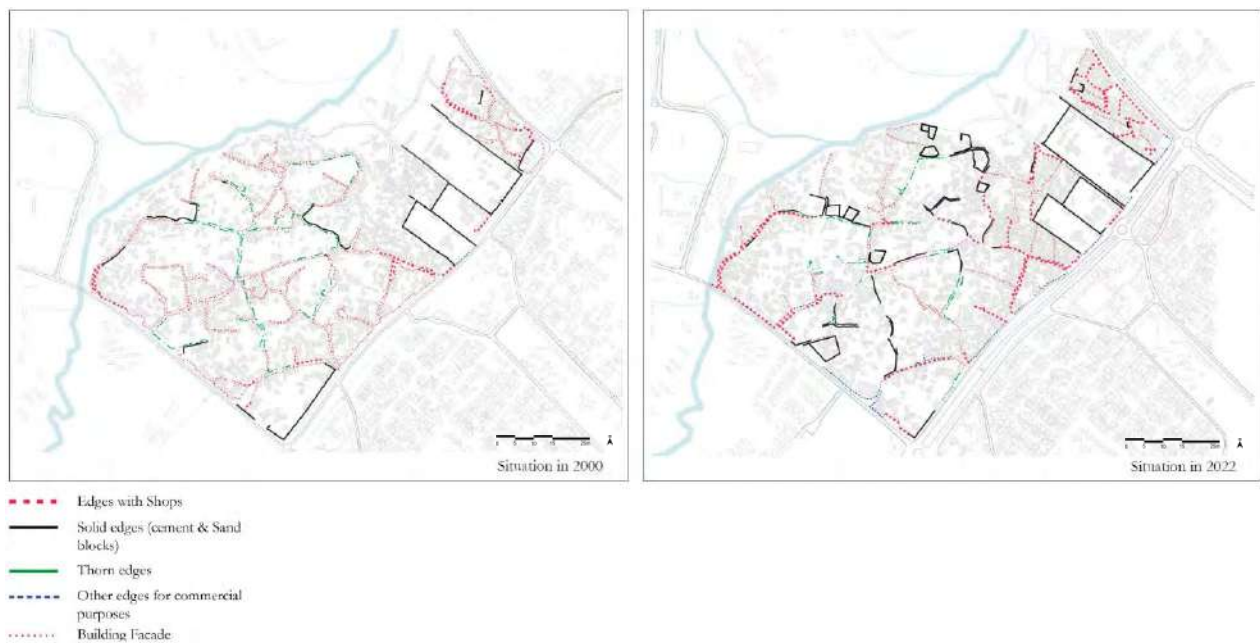


Fig. 2.10 - Map showing types of edges in the year 2000 and the current edges of the year 2022 in the Mlalakuwa neighbourhood. [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]



Fig. 2.11 – The figure shows solid edges at Mlalakuwa which have sidewall collective spaces for streets vendor stores [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

## Solid Masonry Walling

On a map, the investigation uncovered considerable solid boundaries with thick black lines composed of cement and sand screed block walling. A map of Mlalakuwa in the year 2000 and a map of Mlalakuwa in the year 2022 are shown in Figure 2.10, with black solid lines denoting the steadily rising number of structures with solid edges. To inhabitants, solid edges areas reinforce feeling of security by creating buffer zones between private spaces and outdoor collective spaces (Fig. 2.11). Such fences have grown in importance as a result of the growing population in the informal settlement.



Fig. 2.12– Thorn edges [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

## Thorn Edging

Hedging is seen as a more affordable option for fences in Mlalakuwa than other fencing materials (Fig. 2.12). These hedges had different purposes, including securing private spaces. Agrarian plots were once fenced. The maps for the years 2000 and 2022, (Fig. 2.10) show that there are fewer thorn edges in the Mlalakuwa area due to security concerns; the majority of the thorn edges have been replaced with contemporary commercial structures or masonry fences. This suggests that the area is experiencing solid-edge urbanisation with less consideration for greenery because of Mlalakuwa's constantly expanding population and diminishing natural resources.



Fig. 2.13 - It shows streets stores as part of the urban structure of the Mlalakuwa neighbourhood [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

### **Streets Stores**

The analysis revealed that the edges of stores that created a variety of economic activities define urban structure. The retail spaces on the streets encourage the expansion of the neighbourhood's boundaries, which adjusts to the current suitability of economic activity (Fig. 2.13.). The map above (Fig. 2.10) shows also shops as thick red lines and other commercial facilities as thick blue lines, such as warehouses for building materials and auto showrooms, which are distinct from shop facilities. Only a few shop edges alignments from 2000 are depicted on the map. However, there is a sharp increase in the number of store edges along the streets in 2022.



### 2.3.3 Activity Clusters

Activity clusters can be defined as poles of attraction since they affect the urban structure evolution. Six activity clusters have been identified: The universities cluster, the Military Hospital cluster, Woodcarvers Market, Mlimani City, and Mlimani DDC. In times, physical connections, and a boom of activities testify to the development of both Mlalakuwa and the clusters. These iterative interactions between Mlalakuwa had not only shaped the urban structure within the neighbourhood but also stressed the importance of the open spaces provided outside of it. Those outside open spaces compensate for the lack of places where people can socialize. There is a correlation between inadequacies of open space and an increase of collective ones. Figure 2.14 depicts a Woodcarvers Market's area and Figure 2.15 is Mlimani city shopping mall these clusters that appear to include a variety of activities that influence the social and economic development of the Mlalakuwa community's residents. Figure 2.16 shows the distribution of activity clusters that surround Mlalakuwa.



Fig. 2.14 - The figure shows Woodcarvers Market's activity cluster as a socialization and economic centre in Mlalakuwa [source: Lutta, 2022]



Fig. 2.15 - The figure shows at the entrance Mlimani shopping mall activity cluster as a socialization and economic centre for Mlalakuwa. [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

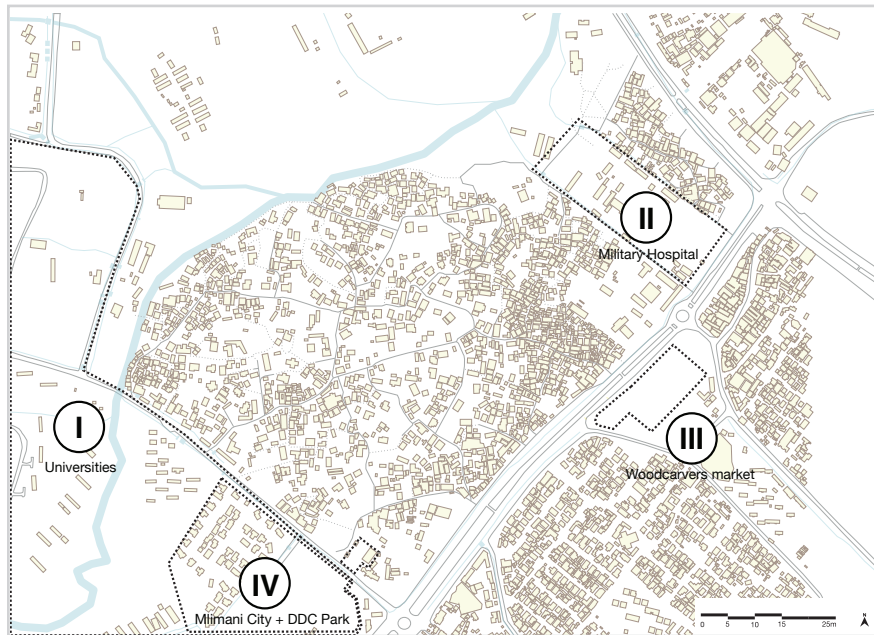


Fig. 2.16 - Locations of the activity clusters around Mlalakuwa [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

## 2.4 COLLECTIVITY AT MLALAKUWA

As aforementioned, collective spaces are increasingly emerging to provide spaces for social and economic activities by and for Mlalakuwa inhabitants because of densification that reduces the number of open spaces. We can already presume that a clear trend is ongoing and open spaces may disappear without intervention even though they appear crucial for the inhabitants. Those collective spaces participate actively in the urban structure as a proper infrastructure network (Fig. 2.17). This recent evolution of the area implied that people started to use the in-between spaces like roads, open spaces, streets, alleys, courtyards, verandas, corridors, staircases, and

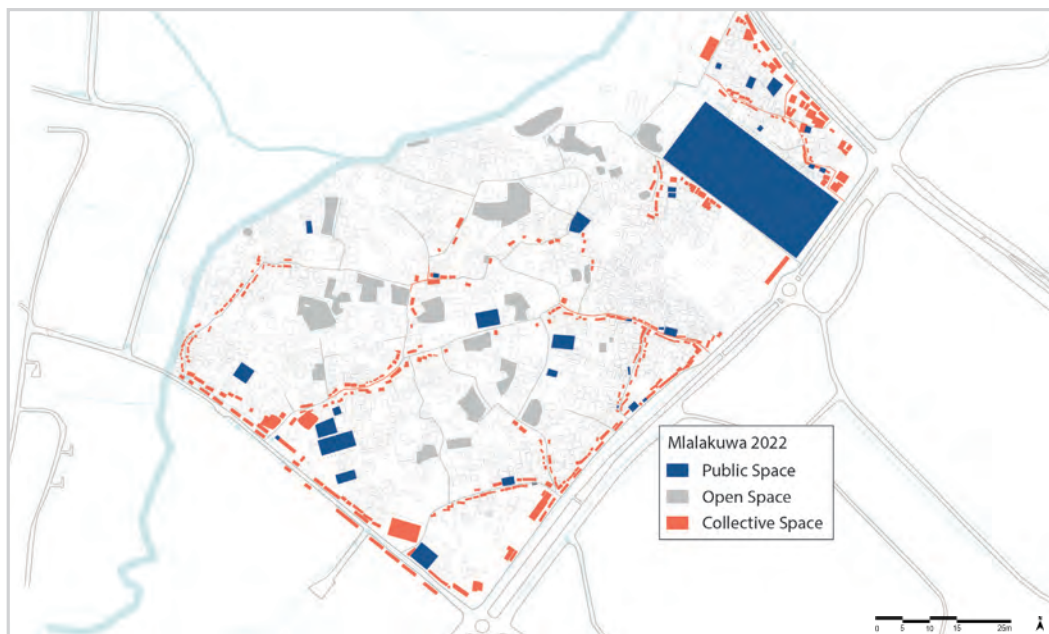


Fig. 2.17 – Map of the collective spaces in 2022 [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

rooms as collective spaces (Lutta, 2021a). Within these, they do a lot of activities like cooking, eating, gathering, sleeping, resting, washing, praying, and other social activities. As shown in a collage (Fig. 2.18), people perform their socio-economic doings in large varieties of spatial scales (public, collective, private area).



Fig. 2.18 – Collage section of the collective spaces [source: KU Leuven Summer Internship – Global Minds – VLIR-IOUS project, (2022)]

Those collective spaces participate actively in the urban structure as a proper infrastructure network. They have an undeniable value that needs to be highlighted and preserved.

Collective spaces are viewed as crucial elements for human development in many informal settlements. When it comes to the types of spaces and their uses, whether for private or public purposes, the concept of collectivity conceptualizes the degree of appropriation. Sociospatial, socioeconomic, and sociocultural behaviours are intertwined with informal urbanisation in many African cities. They describe urban life in most African cities (Kelleck, 1999; UNGA, 2011; Lutta, et, al, 2021a; Chukwuemeka, 2021). The Mlalakuwa neighbourhood's diversity of activities improves the flow of communal space from homes that reflect economic, social, and cultural values. The Mlalakuwa are distinguished by a range of cognitive and environmental frameworks that define collective spaces (Fig. 2.19).

- Therefore, collective spaces are identified by the distribution of economic activity (e.g., shops, vendors store, workshops, bars, and restaurants).
- Collective spaces can be identified by access like public buildings providing accessibility to residents of Mlalakuwa and beyond Mlalakuwa (e.g. Church buildings, mosques, and learning centres).
- Collective spaces identified by morphology where the alignment facilities along the roadsides and streets (e.g., shops and workshops along the street sides, street vendor stores, and in between buildings).

Therefore, the collective space term in Mlalakuwa can be thought of as a collection of farmed and open areas by the sides of streets that support a variety of human activities, such as social, economic, and cultural ones.

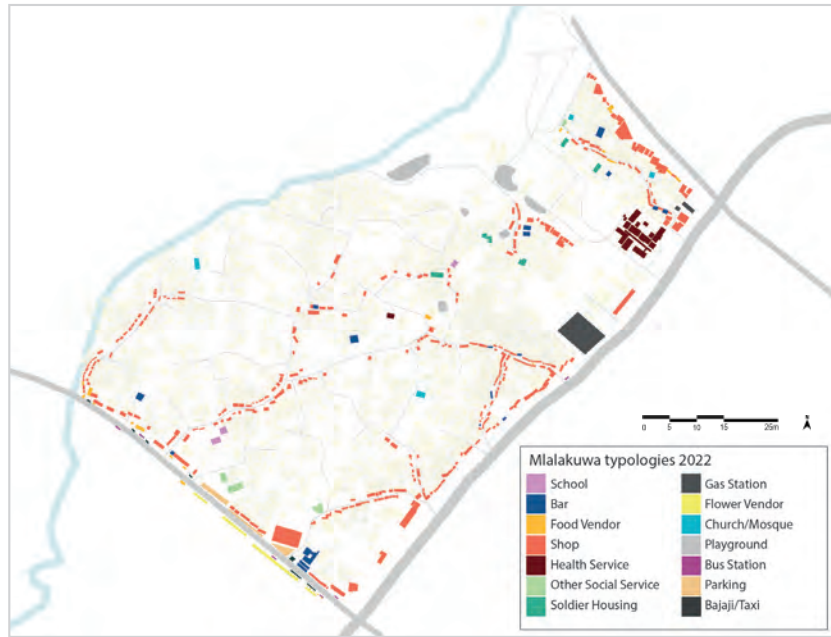


Fig. 2.19 – Map of the typologies in Mlalakuwa in 2022 [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]



# PROPOSALS

[photo credit: Alessandra Bonelli for KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

## PART THREE - PROPOSALS

Based on the trends that have been observed in the analysis, the design proposals are the outcome of a reflection upon a targeted public and its needs. Mlalakuwa already provides a lot of services in particular housing and commercial activities. However, open spaces are significantly decreasing, and the offer of services can be improved. Even though it has undeniable limits (in terms of budget, political will), design strategies can be imagined and applied within the area. On one hand, it appears evident to reinforce the remaining open spaces. On the other hand, to highlight how socio-commercial activities can be implemented on the fences with simple elements and simultaneously activate closed off residential areas.

### 3.1 PLAYGROUND

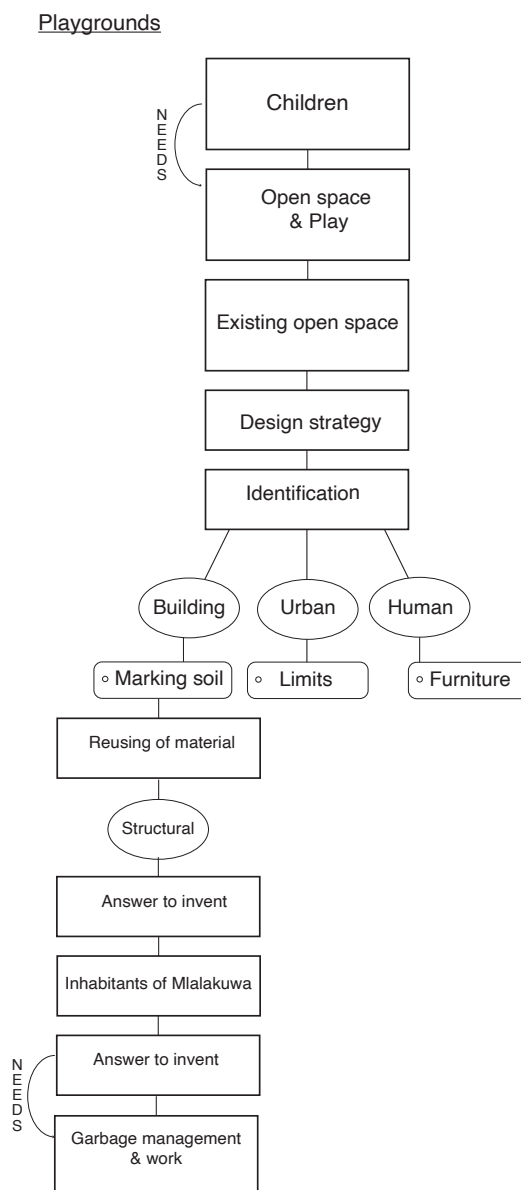


Fig. 3.1 – Diagram of reflection on the proposal on the playground: stakeholders, public, uses [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

To strengthen the existing open spaces, identifying them can participate in safeguarding them. Indeed, by marking them, those places can be valued as collective spaces even if they are not used. How? Marking the soil and the limits of the playground space and integrating simple urban furniture. Moreover, those acupuncture interventions can contribute to the local economy by providing employment and reusing exceeding materials from nearby worksites (Fig 3.1).

Begun in 1970, the Ekokathedraal in Mildam (The Netherlands) is the work of the artist Louis Le Roy and the local community. We can learn from it in the way that informality and handcraft brought people together. The project started from an unbuilt piece of land then slowly became a cathedral by reusing leftovers bricks and materials from worksites by locals in their spare time. The process was unhurried and constantly is in construction. It undeniably reminds us of the incremental building process observed in informal settlements in Dar Es Salaam: owners never stop to improve their habitation whenever they have the financial possibility.



Fig. 3.2 – Location of the playground of intervention in Mlalakuwa informal settlement [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

### *3.1.1 Intervention*

Situated on the military land property (Fig. 3.2), the open space is actively used by the children and Mlalakuwa inhabitants as a playground where they do sports and play. When it is not used, only the absence of grass indicates human use. Nevertheless, the place is one of the last open spaces remaining (Fig. 3.3). During the dry season, the challenge is to provide shade for people to gather, socialise protected from the sun. Trees can provide it. During the rainy season, the challenge is to manage water to avoid flooding and offer spaces to gather protected from the rain. Canalisation along the sports field has a double function: identify the limits of

the space and direct water to the underground water pipes. In day times, the field is mostly used by the children and youngsters to play and do sport. During the evening, people go back from work or universities and gather to play, to eat together around food vendors.

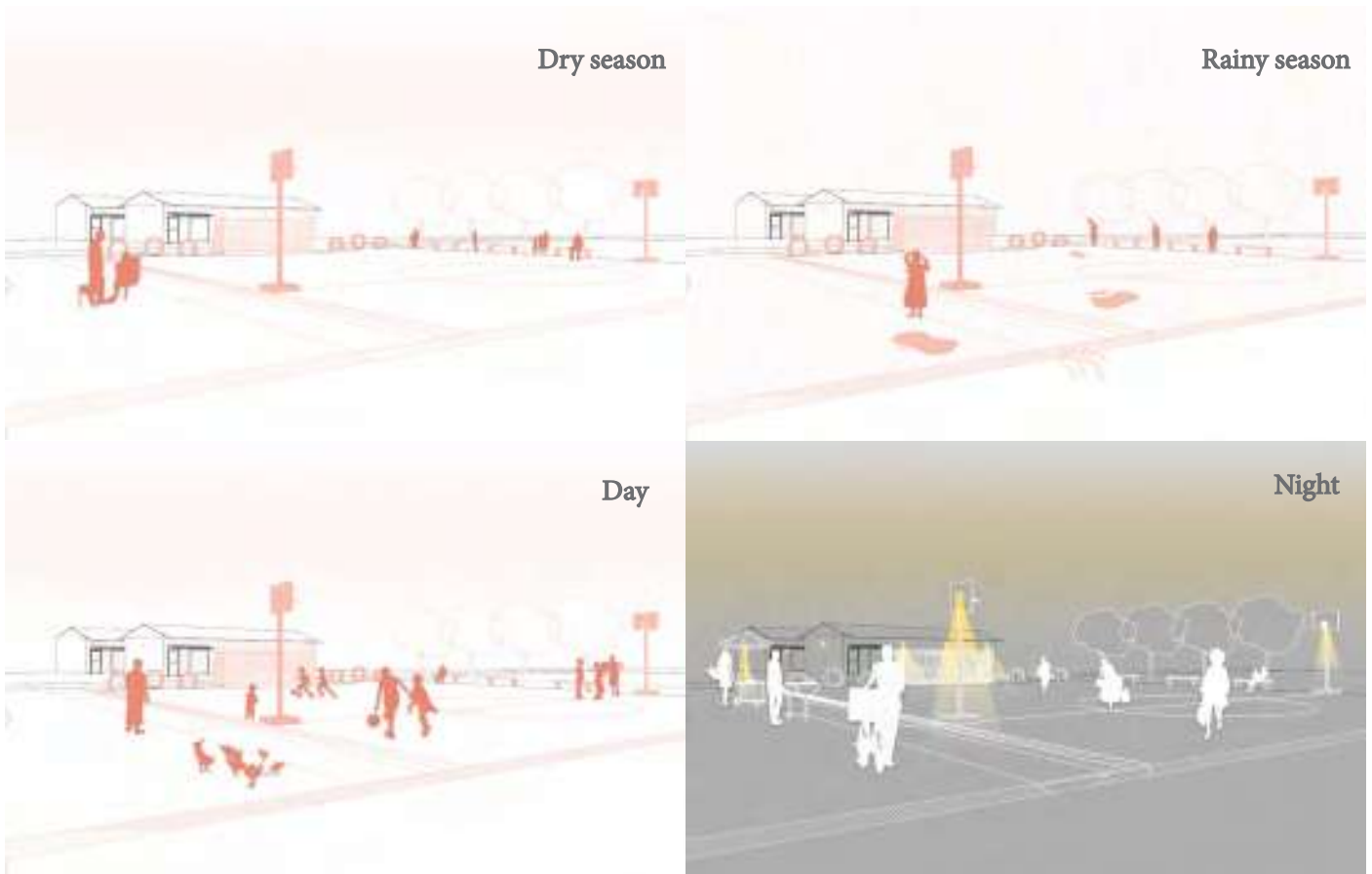


Fig. 3.3 - Intervention on playground: four scenarios depending on season and daytime [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

### 3.2 FENCES

The analysis shows that services and collective spaces tend to increase thus they appear to be essential for liveability within Mlalakuwa. To highlight how socio-commercial activities are crucial, we imagined how simple elements can be implemented on the fences and simultaneously activate closed off residential areas. The fences as they exist in their wide forms are not only a delimitation of a private property but cut off the lively interactions so specific to informal settlements. However, the need for privacy and the feeling of security can not be denied. That's why small interventions on the fences can be relevant. Moreover, as observed in other informal settlements in Dar Es Salaam, an owner could leave available a part of their land to the community. This piece of plot could be rented and provide both an income to the landlord and the vendors who rent to place. Again, such socio-economic activities enable people to earn a living no matter their social status by motivating a virtuous circle (Fig. 3.4).



Fences

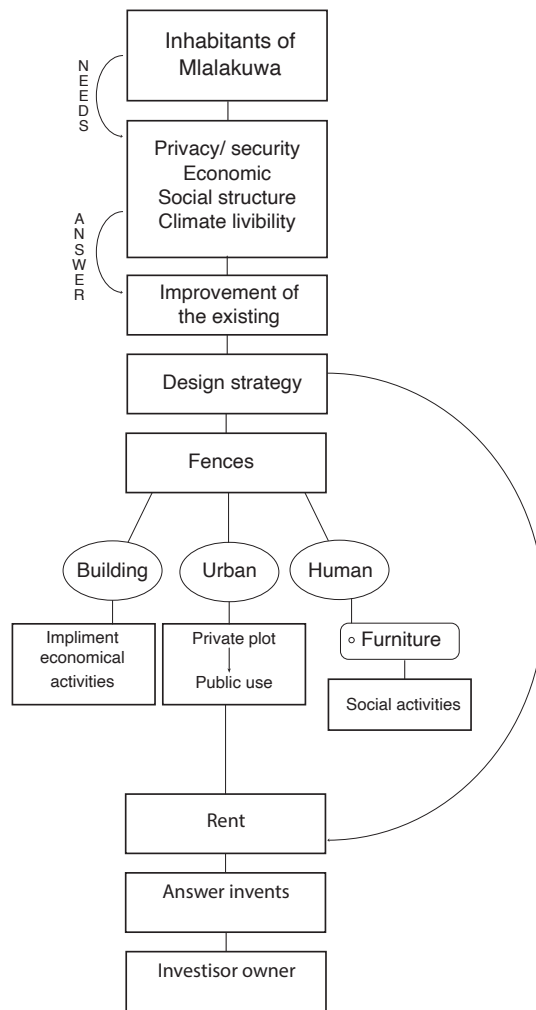


Fig. 3.4 – Diagram of reflection on the proposal on the fences: stakeholders, public, uses [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]



Fig. 3.5 - Location of the intervention in Mlalakuwa informal settlement [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

During our stay in Tanzania, we saw a couple of examples how owners personalise and use their fences as aforementioned. People painted the fences, provided lights and benches/steps. Some of them also made space for socio-economic activities thanks to the fences. All these spatial interventions that contribute to social life inspired us with the following design proposition.

### 3.2.1 Intervention

The location (Fig. 3.5) chosen for the proposal is a typical street in Mlalakuwa where plots are large and bordered by solid fences. Therefore, we aim this intervention to act as a model that could be relevant to other similar sites. During the dry season, the challenge is to provide shade for people to gather, and socialise protected from the sun. Verandas, roofs integrated into the fences can provide it. During the rainy season, the challenge is to manage water to avoid flooding and offer spaces to gather protected from the rain. Thus, roofs are integrated to the fences above the benches. In the daytime, the street is animated by people cooking, hanging their clothes, street vendors and shops activities with the social life that goes along. During the evening, people go back from work or universities and gather to eat together around food vendors.

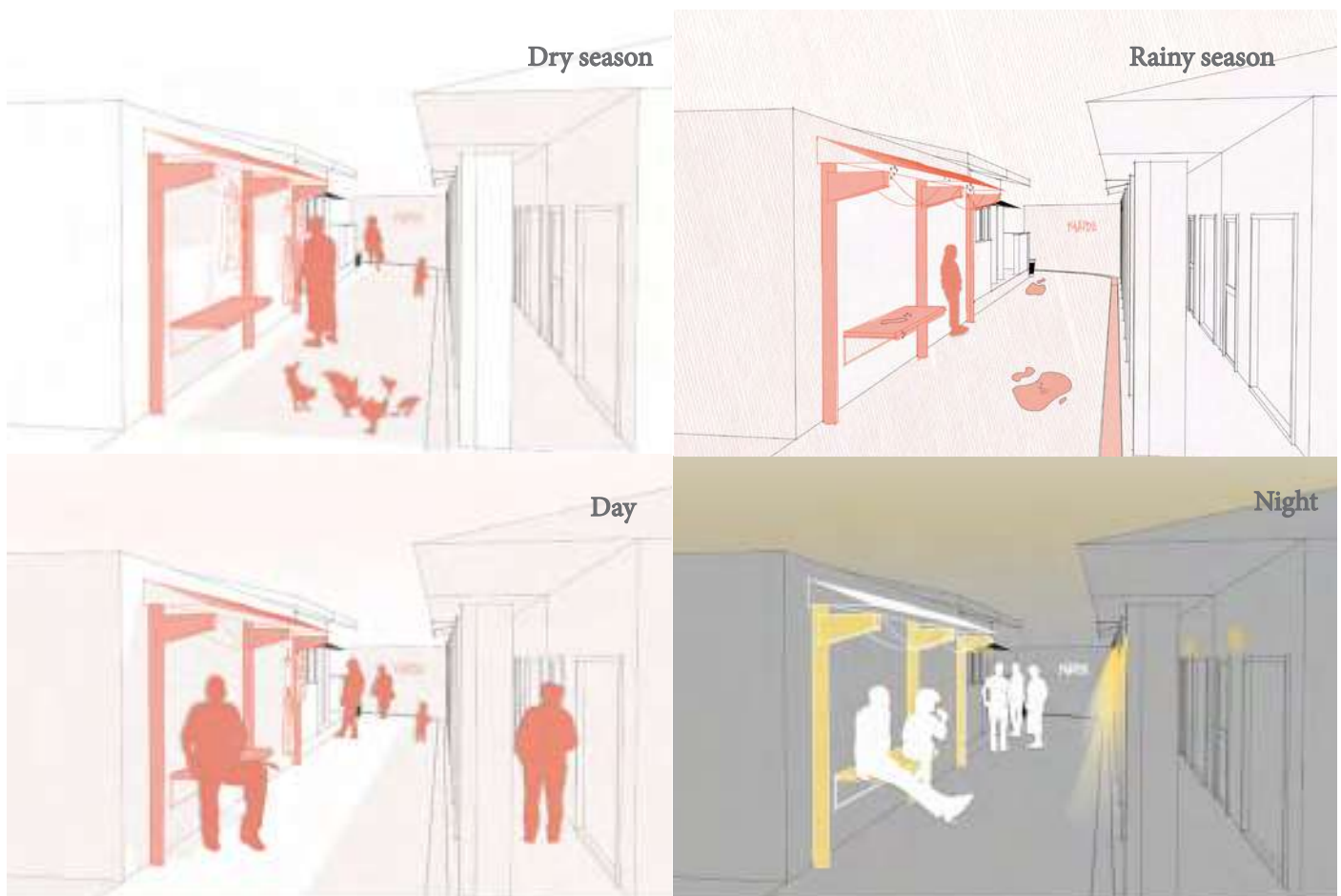


Fig. 3.6 - Intervention on fences: four scenarios depending on season and daytime [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]



# CONCLUSION

[photo credit: Alessandra Bonelli for KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

## **PART FOUR - CONCLUSION**

Far from the prejudices against informal settlements in Global South, Mlalakuwa neighbourhood study broadens our definitions of the development of the urban fabric. Its recent evolution has been driven by complex iterative interactions with polarised centres of social economic activities. It demonstrates a rich process of densification, residents' strong agency on public and private spaces and capacity of adaptability to its inhabitants' needs. Mobile shops, renovation, extension, demolition, and re-building are keys amongst the various strategies of space appropriations. Those changes are supported and framed by local leaders' management and progressive development of public service infrastructure. Moreover, collective spaces contribute actively to the daily life of its inhabitants and increasingly shape the symbolic and spatial identity of Mlalakuwa. Despite all, the densification puts an increasing pressure on a limited space, the decrease of open spaces is significant and puts at risk the natural resources and the residents' qualities of life. It might thus participate in the gradual emergence of fences and the increase of insecurity feelings. Our proposals aimed to tackle those issues by stressing the values in local methods and identity. Both inventions tend to be in line with a dynamic to enable inhabitants to earn a living and provide basic services. It is evident that they are only speculative. However, deeper fieldwork and integration of Mlalakuwa residents could not only raise wider awareness but also might concretely impact the neighbourhood. Overall, this work informs about a renewed definition of informality and propose a model of interesting growth different from the Eurocentric formal model.



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[photo credit: Alessandra Bonelli for KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

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# ACKNOWLEDGMENTS - APPENDICES

[photo credit: Alessandra Bonelli for KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

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## APPENDICES

### TEAM

This work is the outcome of an internship that took place during July and August 2022 in Dar es Salaam, Tanzania. We have been selected amongst other KU Leuven master students. Alessandra Bonelli, Aurélie De Mol and Tim Kuijlen are architecture students and Magdalena Vieren is an urban planning student (Fig. 1) . We worked for six weeks under the supervision of Drs Jacob Lutta, PhD student in both Ardhi University and KU Leuven University. We mainly focused on the issues of the role and evolution of collective spaces in Mlalakuwa informal settlement.



Fig. 1 - Team photo: Alessandra Bonelli, Aurélie De Mol, Tim Kuijlen and Magdalena Vieren. [source: KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]



## BAGAMOYO HISTORIC TOWN

During our stay, we visited Bagamoyo's historic town. Our ambition was to understand informal urbanization. Therefore, we started by first understanding the historical background of the city and how did it grow. Of course, the move of the administrative centre from Bagamoyo to Dar es Salaam during German rule marked the beginning of Dar es Salaam's expansion. Due to the city's position and the presence of a natural harbour, the Germans developed the planning idea between 1891 and 1916. This had an effect on the construction of new port facilities and the growth of Dar es Salaam's business and trade activities. As a result, more immigrants were attracted, and by 1894, the city's population had risen to almost 9,500. Germans established building codes and zoning plans with the goal of dividing up settlements among Europeans, Asians, and Africans in accordance with their racial groups. The European settlement zones were separated from the native and Asian settlement areas. Services like streets, water infrastructure, and electricity were provided to European and Asian areas. Therefore, the natives were able to generate their dwellings autonomously, without any rules from authority. Unfortunately, after Tanzania's independence, the new government developed the same procedures as the previous authority, leading to a dramatic increase in formalisation from the year 1915 to 2015. The map (Fig. 2) shows the informal urbanisation in the city of Dar es Salaam.

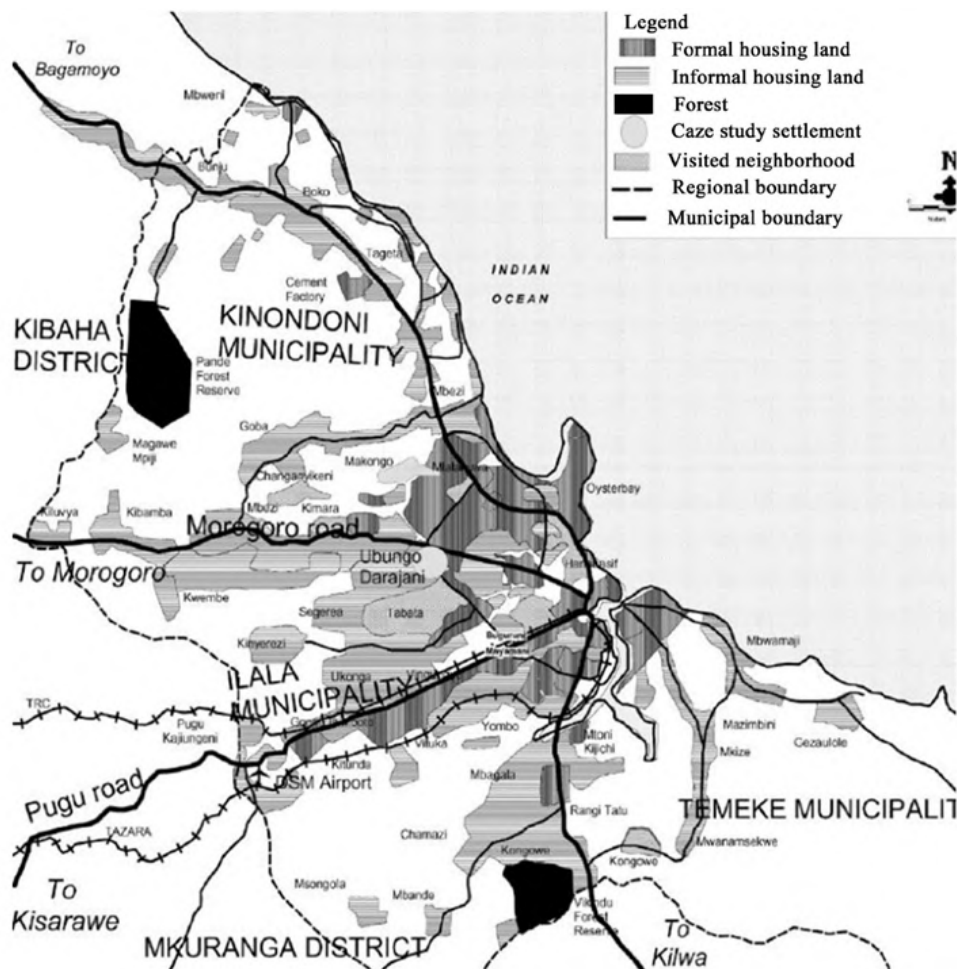


Fig. 2 - Distribution of Formal and Informal settlements in Dar es Salaam city. [source: Kyessi, (2002), Lutta et, al, (2021)]



Fig. 3 – Location of Bagamoyo and relative position to Dar es Salaam. [source: [https://www.viamichelin.co.uk/web/Maps/Map-Tegeta--Dar\\_es\\_Salaam-Tanzania](https://www.viamichelin.co.uk/web/Maps/Map-Tegeta--Dar_es_Salaam-Tanzania) accessed on 2nd November 2022 at 10 am.]



Fig. 4 and Fig. 5 – Bagamoyo pictures. [source : Lutta, 2022]

### ULUGURU MOUNTAINS IN MOROGORO

We visited the Morogoro region as a part of learning about different kinds of natural resources as part of the element that drives the Tanzanian economy. Those pictures (Fig. 6 and Fig. 7) show parts of Uluguru mountain situated in the city of Morogoro 300km from the city of Dar es Salaam. They are one of the most touristic attractions in Tanzania but mainly a key place for agriculture. It has the peculiarity to be inhabited by matrilineal communities.



Fig. 6 and Fig. 7 - One-site picture taken during a guided tour through the Uluguru Mountains. [source: Alessandra Bonelli for KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

### MIKUMI NATIONAL PARK

Mikumi (Fig. 8 and 9) is the fourth-largest national park in Tanzania. It's also the most accessible from Dar es Salaam. It can take less than 5 hours to drive from there. It was seen to be among of other economic drivers in Tanzania.



Fig. 8 and Fig. 9 - Pictures of the Mikumi National Park. [source: Alessandra Bonelli for KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]

### ZANZIBAR

As part of learning also visited Zanzibar Island, which is the main island in the Tanzanian archipelago of Zanzibar. Stone Town, part of Zanzibar City, is an old trade centre, with mosques and winding lanes. Nowadays, \historical centre is marked by Arabic architecture heritage is one of the main touristic attractions (Fig. 10). Lodges, hotels, restaurants, and hostels largely occupy the beaches of the islands thus increasingly privatised and places for local economic activities (Fig. 11)



Fig. 10 – Street building (with Arabic architecture) [source: Alessandra Bonelli for KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]



Fig. 11 – Jambiani beach [source: Alessandra Bonelli for KU Leuven Summer Internship – Global Minds – VLIR-OUS project, (2022)]