

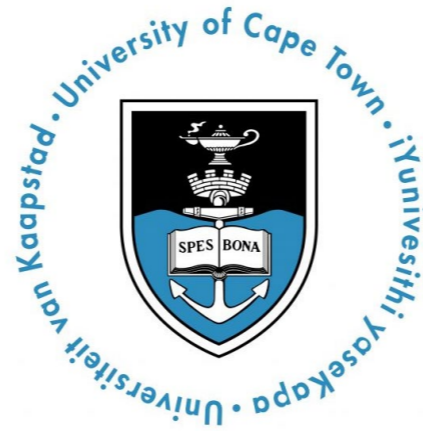


DISRUPTIVE ADAPTATIONS:

An Urban Design Approach to Youth Socio-economic Resilience
A Case of Havana in Katutura, Windhoek - Namibia

SOINI EN NANGULA - NNGSOI001 - 2023

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DISRUPTIVE ADAPATATIONS:
An Urban Design Approach to Youth Socio-Economic Resilience
A Case of Havana in Katutura - Windhoek, Namibia

Research project submitted in partial fulfilment of the Master of Urban Design Degree (60 credits).

In the School of Architecture, Planning, and Geomatics

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DEDICATION

This thesis is dedicated to all individuals who may discover value in its contents. For everyone like me embarking on the same path I did: allow yourself to learn, trust yourself a little bit more, and use your voice—just a little bit more.

ACKNOWLEDGMENT

Here I am, at the very end of this journey.

As challenging as it has been, I am grateful to the individuals who constantly showed up for me throughout.

I would like to acknowledge my supervisor, Dr. Kathryn Ewing, as well as Hedwig Crooijmans and Jani Truter, who have been guiding me throughout the year.

I would like to thank Gaby Hansen for her valued input and support.

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My grandmother, who has been the biggest advocate for my education, and my family, who have sacrificed so much for my education and supported me through it all.

I would like to acknowledge all my friends for being my biggest cheerleaders and support system and for assisting in everything I needed during this period.

I will not forget my classmates; you have made the journey a little bit easier - Thank you. I would like to thank everyone who has been a part of this village. Your assistance and efforts are highly appreciated.

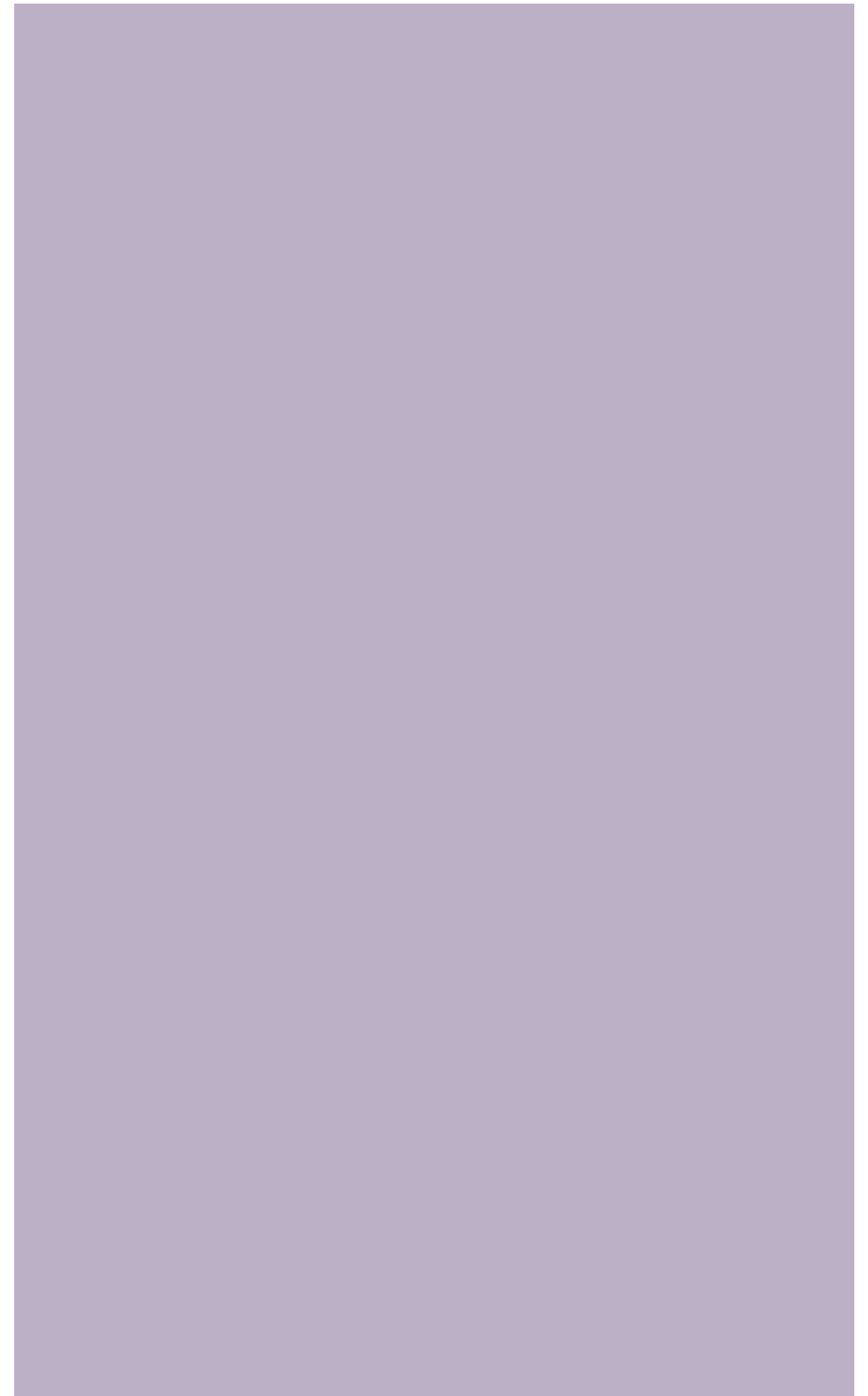
Above all, I would like to thank the Almighty God, who has ordered this path, for the strength He continuously gives, the guidance, and always providing for me. He has seen me through it all, time and time again.

ABSTRACT

The youth in marginalized communities, such as Havana in Katutura, grapple with substantial unemployment due to limited formal opportunities. To sustain their livelihoods, they resort to the informal economy, working as street vendors or establishing small survivalist enterprises for income. Through a qualitative research methodology, this study delves into the stories of informal youth vendors to understand the innovative strategies they employ daily as they navigate the challenges they face, how they appropriate public spaces to meet their needs, and how they create socioeconomic opportunities for themselves, even though these may not be sufficient.

The analysis and exploration of the study bring to light aspects related to the negotiation of space in highly contested spaces, as well as the power dynamics inherent in urban design, planning policies, and urban developments. Havana, as an urban informal settlement, is experiencing rapid growth accompanied by the complexities that come with urban expansion, including a lack of basic services, inadequate sanitation, improper waste management methods, and insufficient infrastructure and public spaces, particularly youth-centered.

This study seeks to address the question of whether urban design can serve as an effective approach to creating improved socio-economic opportunities for the majority of residents in Havana Informal Settlement. The approach adopted is incremental, and through the design process of this study, an adaptive urban design framework has been developed—one that is flexible and adaptable to address the identified challenges. In conclusion, the study presents a set of spatial guidelines that can be implemented in similar contexts.



*Informal settlements are a 'wicked problem that requires a wicked solution', Uchendu Eugene Chigbu says.
(The Namibian Newspaper, January 28, 2022)*

*"The removal of street vendors may be due to concerns about traffic congestion, hygiene, and sanitation issues in specific areas. Additionally, the city might have zoning regulations that restrict street vending in certain zones to maintain the overall cityscape," Akwenye says.
(The Namibian Newspaper, August 24, 2023)*

*"There will be no survival in Havana without the street vendors. This open market is everything to us; it is the heart of Havana. We, the sellers, have no other place to operate from, and I'm sure wherever they take us, there won't be as many customers as we had here," she said.
Rosalia Leonard, The Namibian Newspaper (August 31, 2023)*

Informality in Katutura, Windhoek - Namibia
Pictures: (IUDW - 2023)



MEANING OF WORDS & ABBREVIATIONS

COW: City of Windhoek

IUDW: International Urban Design Workshop, 2023

Kapana: meat cooked on an open fire and served while hot, or any form of cooked meat prepared and ready to be served to customers

Omuramba: riverbed



Pictures illustrating street vendors at Okuryangava Stop N Shop and Havana Fourway.



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disruption

“Change is inevitable, and the disruption it causes often brings both inconvenience and opportunity.”

disrupting
existing systems
to unlock
possibilities.

confronting
powerful
systems.

transformative
possibilities
may arise

Identifying
opportunities
for disruption.

Develop a
strategy to
navigate
disruption.



perspective



integration



connection



adaptation



shifting



accommodation



ethereal

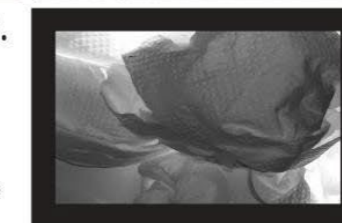
Disruption requires shifting, reshaping, navigating, and adapting.

After all, it is to connect, identify, observe, and explore the existing to discover new opportunities.

Responses can be nurtured. There should be evidence of disruption to experience change.

Extremely ethereal disruptions are debatable; regardless, the vision is for survivalists to engage, to not shrink away in isolation, and to take up space in the in-between.

Disruption requires courage and design is boundless.



boundless



It is a process; walk through it, engage, and learn. Innovation is based on new knowledge. Otherwise, what are you changing? Also, everything you need is within reach; look around.

PART ONE: INTRODUCTION

1. 1 INTRODUCTION

The United Nations Population Fund (UNFPA) report from 2021, Namibia has a relatively youthful population. Most of this sector of the population is unemployed as a result of a lack of opportunities, and the unemployment rate continues to be alarmingly persistent (Winschiers-Theophilus et al., 2017).

The challenges of securing employment are even more serious and complex for the youth from marginalized communities (United Nations, n.d.), as in the case of Havana in Katutura, Windhoek. The majority of the youth in Katutura are unemployed and on the streets trying to make a livelihood. With limited employment possibilities in the formal sector, the youth turn to the informal economic sector, where they start survivalist enterprises (Winschiers-Theophilus et al., 2017) with the goal of earning an income to sustain their livelihoods. Considering the state of infrastructure in Katutura, the uneven capitalist spatial developments, and the poor or lack of services, these enterprises often fail or don't reach their full potential.

This study delves into Havana, an informal settlement neighborhood in Katutura that is currently experiencing the dynamic complexities of urban growth, and the youth inhabitants are at the center of it all.

This study also recognizes the need for socioeconomic interventions to tackle economic disparities and the lack of or limited access to resources. Acknowledging the resilience of the youth in Havana, the research explores design strategies through the approach of disruptive adaptations to create better socio-economic opportunities.

1. 2 DEFINITION OF TERMS IN THIS STUDY

The Namibian National Youth Policy (2020–2030) defines the youth group as individuals between the ages of 15 and 35.

Disruptive adaptations in this study refer to innovative and transformative approaches that challenge formal or regulated approaches to urban design. Disrupting the existing limiting systems within the urban environment. These adaptations involve challenging the current urban design and planning policies implemented in contexts like Katutura, where they fail to adequately enhance the built environment to better accommodate the youth operating outside formalities.

Spatial appropriation, on the other hand, in this study refers to the act of marginalized youth as they intend to creatively transform and adapt the public spaces within the urban fabric to meet their emerging needs. It is also important to note that the marginalized youth in this study are unemployed and are working as street vendors. They face marginalization within socioeconomic spaces because the state does not formally recognize their livelihood activities and due to their backgrounds.

Socio - economics refers to the combined involvement of social and economic factors (Merriam-Webster, 2023). In this study, the use of socio - economic spaces refers to the spaces where social and economic activities interweave. Economic activities thrive due to social vibrancy, and conversely, social interactions are fostered by economic activities in a space.



1.3 RATIONALE OF THE STUDY

The residents of Havana, who are predominantly within the youth age group, are struggling with unemployment, with many turning to the informal economic sector, where they operate as street vendors. Havana Fourway, in this study, is the most prominent socio-economic space in the community, where youth street vendors sell their goods on the side of the road. This year, the initiation of the construction of the Enias Peter Nanyemba road, intersecting through the street market at the Fourway street market, poses a threat to the livelihoods of the street vendors who operate at the Fourway street market.

The development of this road entails the relocation of the dwellers living within the 40–50-meter road reserve as it is transformed into a dual carriageway. This study recognizes the positive impact of creating a transport system connected to the bigger city system; however, the negatives persist as the road is not accommodating to the youth and the community at large, especially those who operate as informal street vendors.

The Havana informal settlement, characterized by socio-economic and infrastructure marginalization, particularly lacks basic services such as sanitation, water and electricity. Additionally, the lack of supporting systems hampers the ability of the youth residents to access better opportunities to earn an income and improve their living standards.

Lastly, the rationale for this study arises from the challenges faced by the residents of Havana as an informal settlement in a developing city marked by a history of apartheid and persisting inequalities. The challenges are multifaceted and complex, hence the need for an urban design approach to develop strategies that can enhance socioeconomic prospects and the living conditions of the youth and the community at large.

YOUTH STREET VENDORS AT STOP N SHOP OKURYANGAVA IN KATUTURA
Pictures: (IUDW - 2023)

1.4 RESEARCH POSITION

People residing in low-income settlements exhibit remarkable resilience and creativity in addressing the challenges they encounter. However, their efforts are often not enough due to the complexity of these challenges, which are intensified by financial constraints. Living in these 'grey areas' renders them particularly vulnerable, making their settlements prime targets for interventions.

Regrettably, many of these interventions do not recognize them as the primary users of public space or acknowledge the specific conditions they are enduring. Instead, they tend to align with the broader urban vision of the city. It is therefore important for interventions to recognize these individuals as active users of these spaces and make sure they serve their significant emerging needs when intervening.

1.5 RESEARCH QUESTION

MAIN QUESTION:

1. How can disruptive adaptations be effectively employed as an urban design approach to create enhanced socio-economic opportunities for the youth in Havana?

SUBSIDIARY QUESTIONS:

1. How can existing hard and soft infrastructure be adapted to support the youth socio-economically in Havana?

2. What are the basic services required to support the youth socio-economically, and how can they be integrated into the development of public spaces in Havana?

1.6 RESEARCH AIMS

1. To do an analysis of the existing urban design interventions and spatial layouts that contribute to the challenges faced by the youth in Havana.

2. To assess the existing hard and soft infrastructure in Havana and identify how it can be adapted to support the socioeconomic development of the youth.

3. To understand the essential basic services for youth socio-economic development and how they can be integrated efficiently within public spaces.



YOUTH STREET VENDORS AT HAVANA FOURWAY MARKET
Pictures: (IUDW - 2023)



Picture: Author

PART TWO: METHODOLOGY

2.1 RESEARCH METHODOLOGY

Open-ended interviews

With this approach, the data was collected through open-ended conversations, interviews, and storytelling because it considers not just “what” individuals think, which applies to phenomenology, but also “why” they think that way about the current socio-economic spaces. Through these conversations, I got some insights on how the built environment affects the youth traders, as well as heard their input on the changes they would like to see made to it that could possibly create more opportunities for them.



OBSERVATIONS

I walked around, observing the participants in their natural settings. All of this is to observe their daily lives and interactions as street vendors, and the data was recorded on sketches, photographs, voice, and video recordings.



DATA ANALYSIS

To analyze the collected data, the intention is to use GIS data from the City of Windhoek as well as from their website. Maps from Google Maps, Earth, and Open Street Map will also be used. Data may also be collected from relevant online publications.



INTERNATIONAL URBAN DESIGN WORKSHOP

Through this workshop, I was able to collect data from the activities for the workshop. This includes the group activities and discussions, the input lectures, and site visits where we had discussions with community leaders who are part of the Shack Dwellers Federation of Namibia.



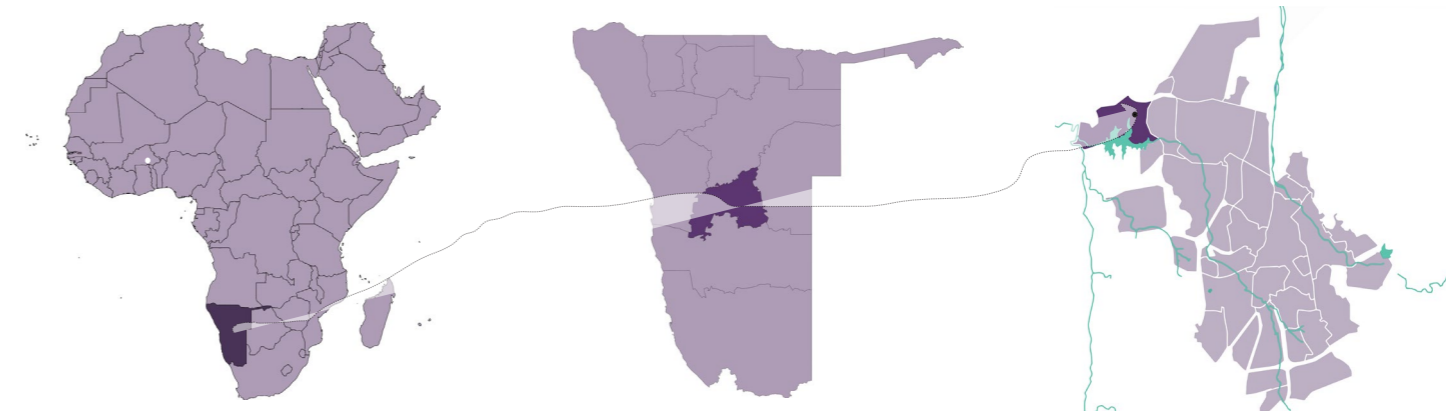
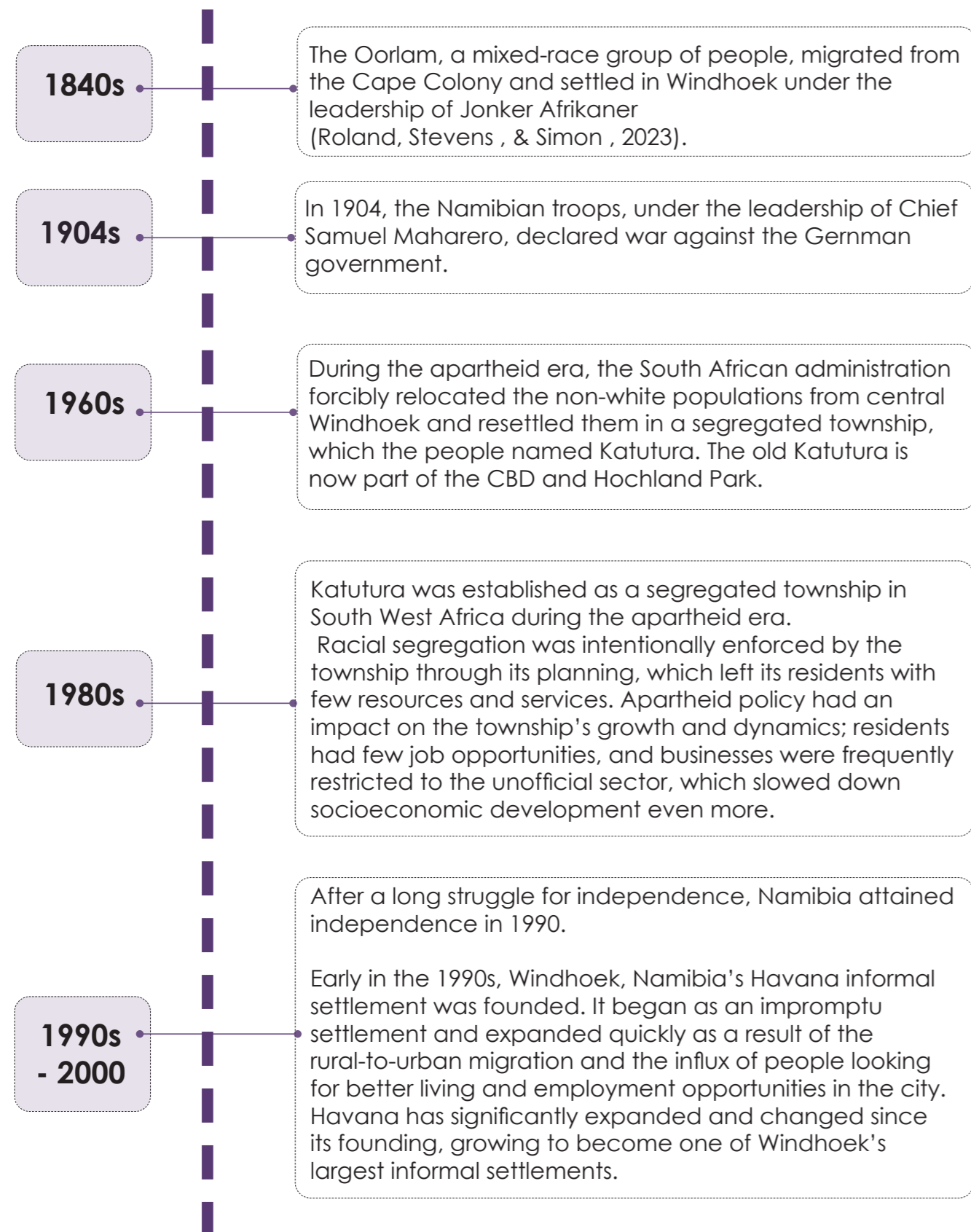
DESK RESEARCH

Desk research involved collecting data from secondary sources such as newspaper articles found on the internet, blog reports, and publications to get statistics and data that I couldn't get from the field. I sought information from various sources and did not limit it to the above-mentioned sources.



PART THREE: UNDERSTANDING THE CONTEXT

3.1 HISTORICAL TIMELINE OF WINDHOEK, NAMIBIA



AFRICA - NAMIBIA - WINDHOEK, HAVANA

Windhoek, as Namibia's capital city, serves as the destination for most of the economic activities in the country. This includes the informal economic activities that take place in Katutura, a township on the outskirts of the city, where the majority of more than half of the city's population lives (Frayne, 2007). This part of the city is home to informal settlements, low-income neighborhoods, and the marginalized communities of the city.

It is important to note that Katutura refers to both the formal and informal areas of the township (Frayne, 2007). As a result of the economic status of most of its residents, the township has a high concentration of unemployed youth, making it a suitable site to investigate the challenges and experiences of the youth who partake in the informal economy, starting survivalist enterprises and working as street traders, as well as those who are on the quest for better socio-economic opportunities.

Katutura, as a township in Windhoek, has a rich history of apartheid and struggles with spatial injustices, making it relevant in terms of urban design and planning policies that need to be disrupted as they are not quite effective when it comes to addressing the emerging needs of marginalized youth within this context. However, in Katutura, over the years, some matrons. Hence, this study chose the Havana informal settlement as a study area. There is recognized agency for marginalized youth and a need for inclusive placemaking strategies that could possibly enhance economic opportunities for the youth.

3.2 MAPPING - CITY SCALE

NAMIBIA:

2,642,000
14 REGIONS
825,418.0 km
3.0 people/km

2023, POPULATION ESTIMATE (Britannica, 2023)

Windhoek is located in the Khomas region - Central Area

Desnsity

WINDHOEK:

477,000
3.47%

2023 METRO AREA POPULATION
INCREASE FROM 2022

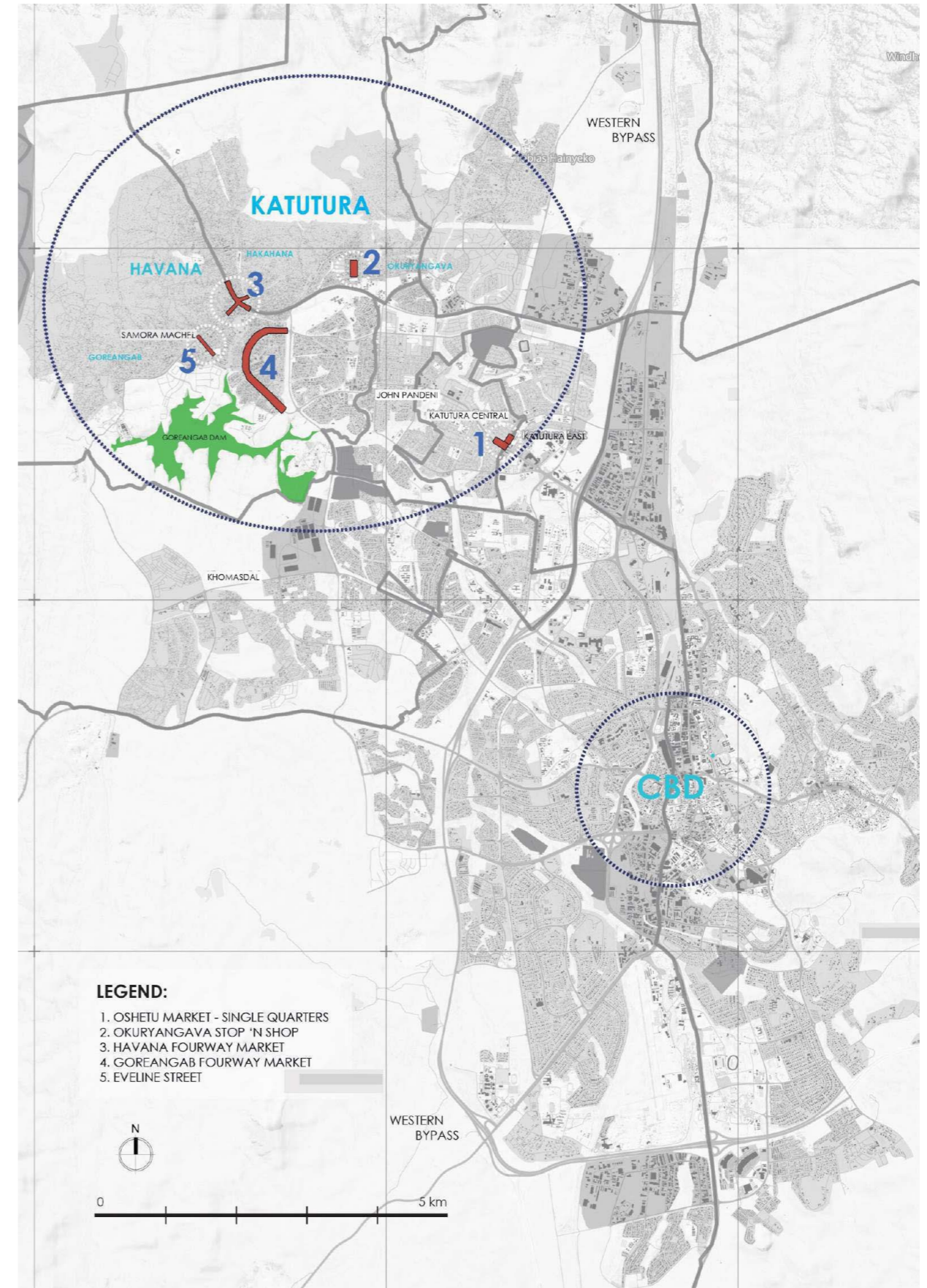
REF: (Metrotrends, 2023)

KATUTURA:

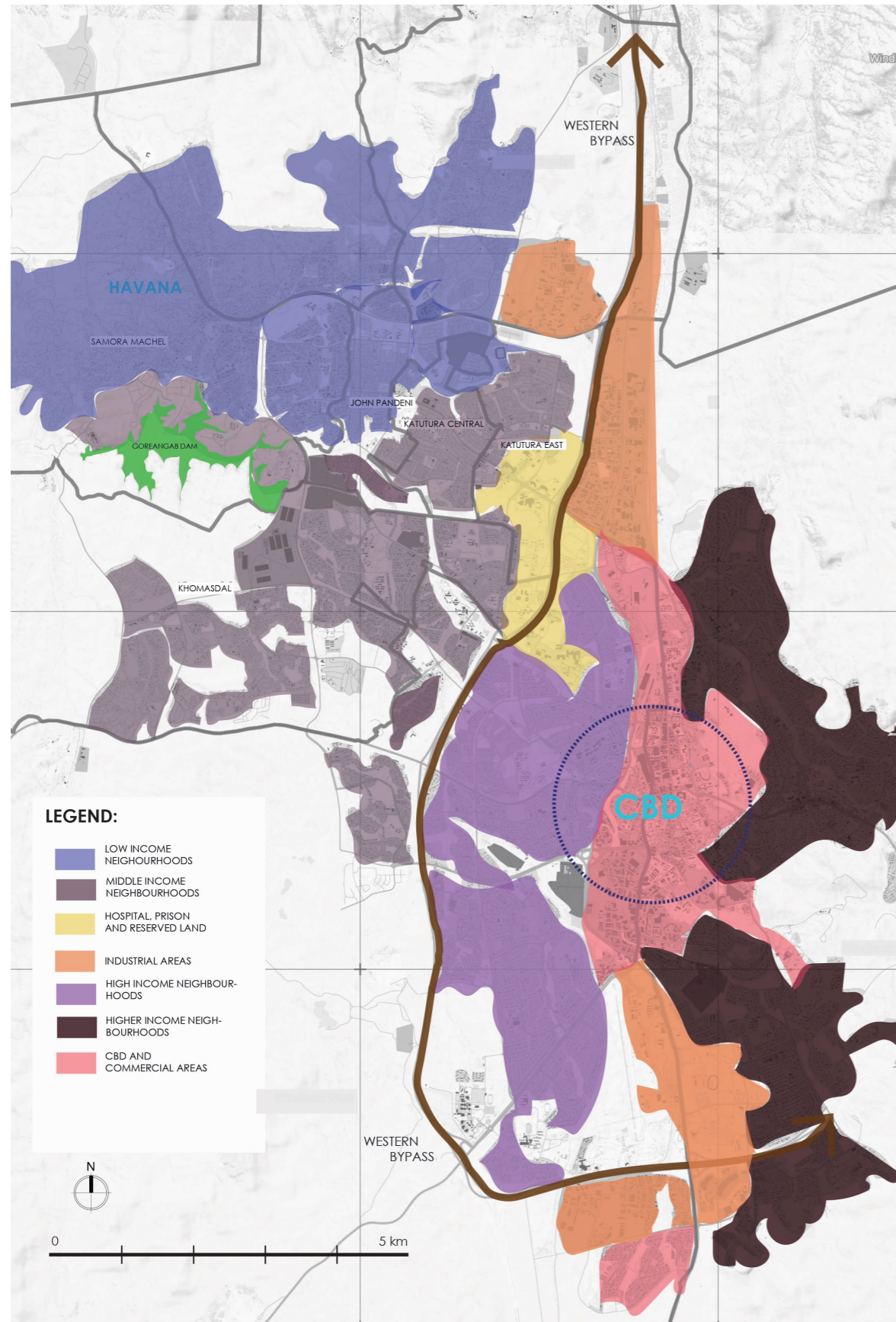
1961
21,243

THE CREATION OF KATUTURA
2022 POPULATION OF KATUTURA

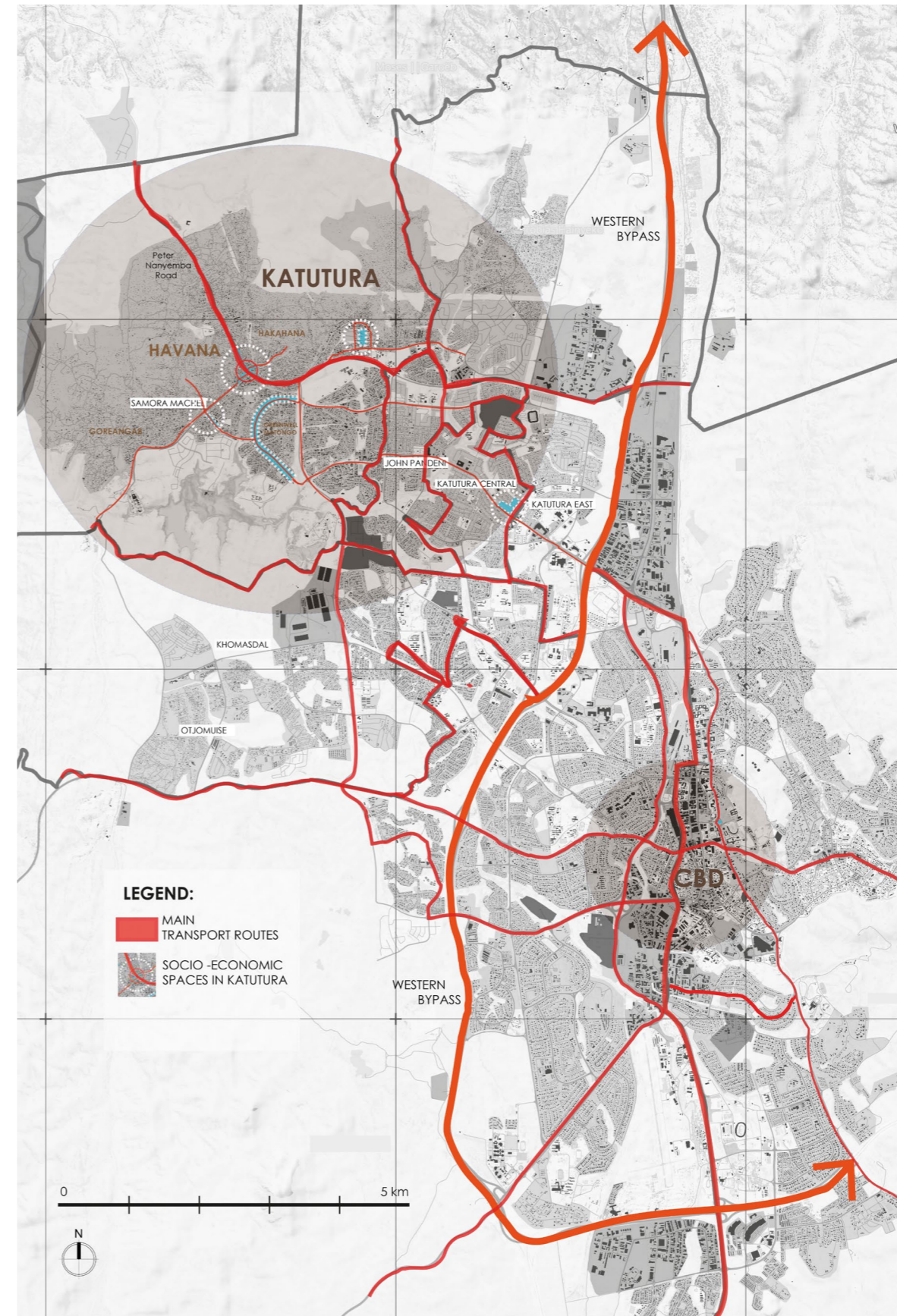
SOURCE: PLACES IN THE WORLD, 2023



SOCIO - ECONOMIC SPACES IN KATUTURA
BASEMAPS: (IUDW, 2023)



SOCIO - ECONOMIC DEMOGRAPHICS
 BASEMAPS: (IUDW, 2023)



ROAD NETWORKS AND CONNECTIVITY

3.3 UNDERSTANDING SOCIO - ECONOMIC SPACES IN KATUTURA



The socio-economic spaces are integrated with the main movement routes in the city.

Along major transit routes, street vendors and trading areas are positioned strategically to improve accessibility, reach the target market, and reduce costs through efficient logistics. This has led to the development of lively socio-economic spaces. In addition to the politics of infrastructure developments and spatial distribution in Katutura, historical and cultural factors also influence the creation of these spaces.

The majority of these socio-economic spaces are trading markets designed by COW, which over the years have evolved into street markets due to congestion or the inability of the vendors to pay the required user fee.

Source: Author

1. Oshetu Community Market

The Oshetu Community Market, also known as Single Quarters, is a bustling public market that acts as an important social, cultural, and economic hub. Small-scale business owners and informal traders can sell their goods and make money at the market. There are numerous vendors selling traditional foods, fresh produce, crafts, clothing, and household goods.

The main attraction is the kapana, which is meat that has been grilled over an open fire, chopped in small pieces, and then sold while still cooking. Both locals and tourists go there because it has evolved into a bustling gathering place rather than just a market. Infrastructure problems and vendor financial instability are difficulties. Males make up most of the vendors in this market, who are within the age group.



Photo credits: Nella Shikemeni - Gondwana Collection The Oshetu Community Market

2. STOP 'N SHOP OKURYANGAVA

The 'Okuryangava Stop N Shop' serves as a significant socio-economic location for this study. Previously, the vendors operated out of a market; however, due to overcrowding, people have begun to occupy space outside of the market next to the road.

Photo credits: (IUDW, 2023)



3. GOREANGAB FOUR WAY

Next to the Fourway is the Goreangab Woermann Brock, which is the only grocery store in the location. Due to the high movement of pedestrians and taxis, the traders have accumulated in front of the shop and towards the intersection of the road.

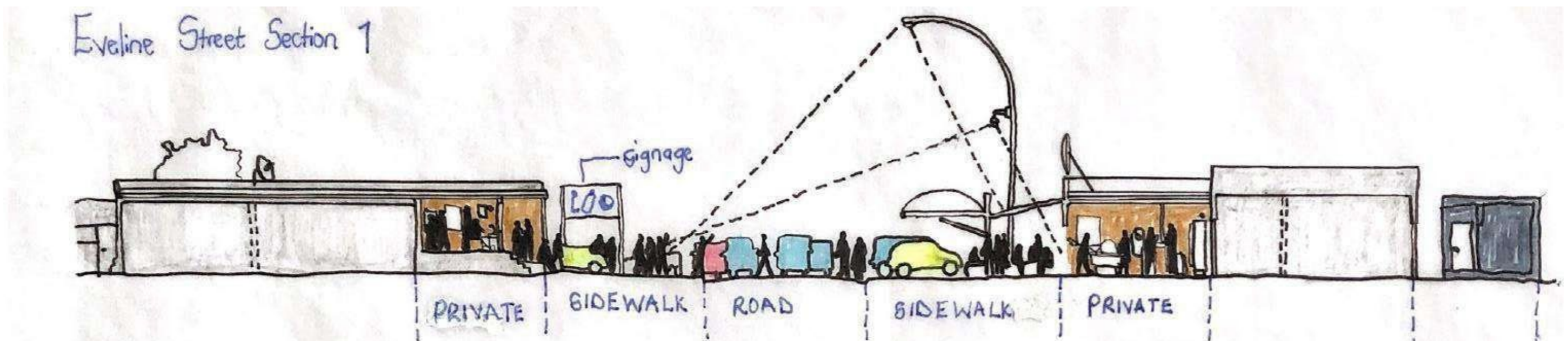
The vendors sit under makeshift shelters that they pack away at the end of the day, as they do with all their belongings. The place is bustling with activity, with vendors selling different goods. Through observations, they are often mobile, seeking customers across various spots, in contrast to the older vendors, who tend to remain stationary and wait for customers to approach them. Lacking proper infrastructure, these traders operate in an exposed environment, making them susceptible to varying weather conditions that affect them negatively.



Woermann, Brock - Goreangab

4. EVELINE STREET

The vibrancy Eveline Street fuels innovative responses to challenges, with entrepreneurs employing unconventional strategies to establish their enterprises. The physical space is creatively repurposed by vendors as they extend their reach beyond conventional boundaries, taking up space on sidewalk trading zones.



Sketch by author, adapted from (Emergent City, 2016)

PART FOUR: THEORETICAL FRAMEWORK

4.1 INTRODUCTION

In this theoretical framework, a deliberate focus has been placed on key themes instrumental in shaping the research question. Given the nature of this study as a design project, the exploration encompasses themes closely linked to design principles and those associated with the re-spatialization of informality. Given that Havana is one of Namibia's informal settlements, this theoretical framework delves into some of the key themes related to complexities in these contexts.

The theoretical framework has framed the design project, drawing from theories mainly in the Global South and those in the realms of urban development and youth socioeconomic empowerment. This is a way to look at existing studies done in similar settings to build a conceptual model for Havana. Recently, urban areas in Namibia and particularly in Windhoek are developing into dynamic spaces in which individuals within communities challenge existing standards and take action to reshape socioeconomic landscapes to meet their emerging needs.

The youth of Katutura-Windhoek are the change agents in this study, as they have used disruptive adaptations to spatially appropriate socioeconomic spaces and redefined their space as informal vendors operating within the urban fabric. It is within the scope of this study to investigate the theoretical foundations that frame the understanding of this phenomenon, giving emphasis to the complexities of the social, economic, and spatial layers.

Lastly, this theoretical framework has been developed from the perspective of investigating the youth as informal street vendors, and the themes from these theories have been guiding the design project.

Conceptual models: exploration of the word disruptive as the research guiding word. These models were made at the beginning of the research process



4.2 UNDERSTANDING THE RESPATIALIZATION OF INFORMALITY

Kamalipour (2016) defines informality as urban activities existing outside of state regulations. The complexities of cities in the global south are increasing with rapid urbanization, and Windhoek, being the urban center of Namibia, is experiencing similar transformations. These cities are marked by their vibrant street economies (Lindell, 2019). The dynamic streets reflect the challenges that comes with urban growth and informality.

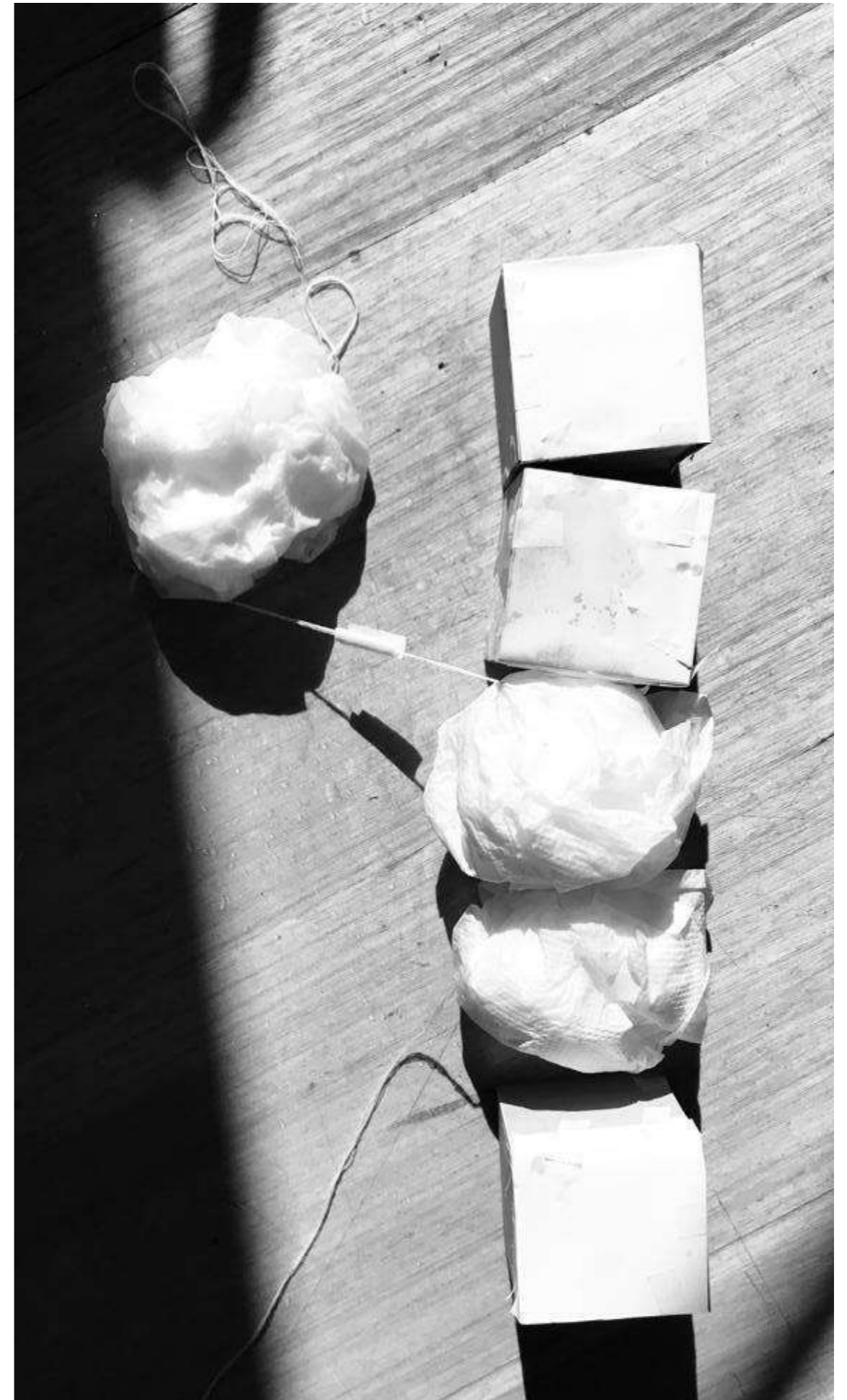
Kamalipour (2016) mentioned that the emergence of informality is a manifestation of numerous 'generative processes of self-organization and incremental adaptations' employed by the people. Marginalized groups of people over time appropriate and produce urban spaces as they see fit for their socio-economic practices (Lindell, 2019). With the production and appropriation of these spaces over time, they develop their livelihoods, which consequently results in a sense of ownership and belonging to the place (Lindell, 2019).

These appropriations are many, but in this study, we focus on the socio-economic appropriations. However, these appropriations are what attract authorities, as they go against the 'envisaged socio-spatial order' of the city and become prime targets for intervention (Lindell, 2019). These interventions are formal and aim to eradicate instead of upgrade, which is what most informal settlements desperately need (Kamalipour, 2016).

Upgrading these settlements often involves a portion of basic services and infrastructure, which is often far less cheap and easier than state-aimed interventions for those spaces. Kamalipour (2016) further emphasized how there is a need for an analysis and understanding of the informal settlement morphologies, which can lead to better upgrading and micro-scale design solutions. This is further supported by Lindell (2019).

Conceptual models: exploration of the word disruptive as the research guiding word. These models were made at the beginning of the research process

Picture: Author



4.3 IDENTITY AND YOUTH IDENTITY

Identity is referred to as a strong resemblance to affinity. In placemaking, there is a unique set of characteristics that distinguishes one place from another. Through various design activities, experiences are created and communicated to connect people to a certain place (SEGD, 2014). The identity of a place is informed by its inhabitants and the complexity of its built environment (Ujang & Zakariya, 2014); thus, it is an experiential process.

Ujang & Zakariya (2014) mention that to understand the identity of a place, one needs to look beyond the physicality and imageability of the existing place because its significance lies in its people and their needs. That is why this study seeks to understand the youth's identities, considering their intersectional identities and considering how factors such as age, educational background, gender, and socio-economic background shape their identities as youth informal traders and how that can contribute to the spatial appropriation of socio-economic spaces in Katutura.

Many of the youth traders spend their days in the streets, searching for customers or metaphorically using the concept of the street as a social place where the youth participate in the hustle culture. The streets are a site for spatial appropriation and one of the spaces that need to be disrupted and adapted to accommodate the needs of youth traders.

Along major transit routes, street vendors and trading areas are positioned strategically to improve accessibility, reach the target market, and reduce costs through efficient logistics. This has led to the development of lively socioeconomic spaces. In addition to the politics of infrastructure developments and spatial distribution in Katutura, historical and cultural factors also influence the creation of these spaces.

4.4 STREETS AS PLACES



Streets can play a crucial role in the design and planning of many cities, but they are typically only seen as transitional areas that don't necessarily allow for them to function as public spaces, places for activities, or gathering places. (Thomas, 2016). Practically, placemaking entails the transformation of physical public spaces into places that promote human experiences and well-being, economic opportunities, and overall, places that cater to the needs of the users. Streets are central figures in placemaking, highlighted as debated unclaimed spaces in the urban fabric.

Streets as places is a concept that pivots around placemaking, focusing on the reinvention of streets as places that contribute and add value to city life (Project for Public Spaces, 2015). The idea of streets in this study metaphorically refers to the physical city street, a place that is animated by people's social, cultural, and economic characteristics and one that is highly shaped by the hustle culture that is practiced by the youth in the informal economic sector.

This concept is explored by Jahn Gehl and Ashley Secunda, who look at how streets could be transformed to be more than just for transporting people and goods (Public Spaces, 2023). To the youth traders, the streets are places of freedom where they can flexibly practice those entrepreneurial activities temporarily, where they can creatively test their enterprises free of charge without paying for rent or paying for services such as water and electricity. The streets are a neutral place where they can step outside the boundaries. In this study streets are to become important as it is where majority of the appropriation by the youth will take place.

4.5 UNDERSTANDING SPATIAL APPROPRIATION AND PLACEMAKING

Spatial appropriation refers to the process by which individuals exercise asset control over spaces, transforming them to meet specific needs, values, and aspirations. In this study, youth informal traders found that spatial appropriation played a critical role in establishing their businesses, creating market-places, and fostering economic activity within the community. Appropriation of public space is a widespread trope of informal urbanism that is attributed to supporting community bonds and economic livelihoods (Oostrum, 2022).

Oostrum (2022) expressed how appropriation is still confined to acclamations of their flexibility or castised as encroachments without understanding of how or why they appear in urban conditions. The existing narratives that link appropriation to ambiguous demarcations, regulatory restraints and spatial affordances are ultimately insufficient.

The understanding of the factors that contribute to appraisals is often misunderstood, oscillating between praise for their adaptability and critiquing them as instruments without fully comprehending the factors that led to their emergence in the specific urban context (Roy, 2005).

Roy (2005) expressed how it is important to further explore the underlying dynamics that drive these appropriations and shape their outcomes in different urban settings. In this study, the focus is on youth informal traders, who are often the most active participants within the urban context. Their engagements within socioeconomic spaces are quite disruptive, as they do not conform to the regulations. Their appropriations within these spaces are loud and visible, even to the lawmakers.

Placemaking is a process that is centered around people and their needs and aspirations and strongly relies on community participation (Moreira, 2021). The placemaking process inspires people to collectively reimagine and reinvent public spaces (Project for Public Spaces, 2020). Placemaking as an urban design methodology facilitates paying attention to the cultural, social, and physical identities that define the place capitalizing on the needs of the community.

The principles of placemaking have become powerful tools for designing and building better communities that are connected. Streets as unclaimed spaces seemed to be central figures in the debates around placemaking in public space. Placemaking is a powerful methodology as it shows all involved stakeholders a collective vision. According to the Project for Public Spaces (2020), it is both a process and a philosophy, as it involves observing, listening, and asking questions of the people who live in a particular space to understand their needs and collectively find a solution.

In the context of Katutura, where spaces have been ordered, transformed, and shaped by the Modern Movement as applied by the apartheid system, Even after 33 years of independence, 'space-making practices continue to work in line with this inherited spatial fabric' (Müller-Friedman & Friedman, 2023), which makes the spaces monofunctional and lacks consideration of the emerging needs of those who use the space. Placemaking in this study will be used as an urban design principle to improve existing spaces and infrastructure or create new ones that support youth and enhance the urban environment for all users.

4.6 NAVIGATING INFORMAL ECONOMIES AND YOUTH TRADERS AS SURVIVALISTS IN SOCIOECONOMIC SPACES

According to Derek Thomas (2016), opportunities for economic activity should be created within the system of social spaces. These social spaces frequently have the potential to play an important role in informal and occasionally important activities within the urban fabric, such as public meetings, periodic markets, etc. (Thomas, 2016). Although urban informality has frequently been linked to socioeconomic problems, precarity, and marginalization (CatComm, 2014), Namibia's informal sector employs 150,000 people, contributing 12% to GDP (Economist, 2022).

Charman, Peterson, & Govender (2020) give insight on informal businesses. post-apartheid, investigating microenterprises and economic activities in townships, and give emphasis on how power is a tool that dominates, controls and consequently constrains the equal distribution of opportunities (Charman, Peterson, & Govender, 2020). There are different traders within these socio-economic spaces, and their needs differ. When it comes to survivalists, they invest in maintaining the social infrastructure, where they often must negotiate space with the landowner for storage of their goods, water, and electricity when it comes to maintaining their businesses. Youth traders are often more flexible when it comes to their trading spaces because they are not always fixed. They scout for their trading space according to their needs and the cost of trading there.

Charman, Peterson, and Govender (2020) mention that gender often plays a major role within socioeconomic spaces. Most survivalists are women, while microentrepreneurs are often men. Female traders are often compelled to trade from home or within the neighborhood due to family duties, issues of safety, or other gendered social burdens.

Further on, Derek Thomas (2016) also highlights the importance of creating opportunities within the system of social spaces to foster economic activity. Havana Four Way serves as an activity node within the urban landscape, encompassing a range of informal interactions that are integral to urban life. Street trading, as an informal activity that supports the livelihood of individuals, finds a conducive environment to thrive within social spaces. Integrating economic activities within the system of social spaces simultaneously contributes to the overall vitality of the urban fabric, which fosters a sense of place and community identity (Thomas, 2016).



Youth informal vendors at the Havana Fourway Street Market
Pictures: (IUDW, 2023) BY AUTHOR

PART FIVE: PARTICIPANT STORIES

These stories are from two of the socioeconomic spaces in Katutura that were analyzed: Okuryangava Stop 'N Shop and the Havana Fourway Market.



PARTICIPANT 1: ANNA – MARIA NAKWEENDA VENDOR AT HAVANA FOUR WAY

Anna-Maria is a 27-year-old trader who manages her father's tuckshop. On the side next to the tuckshop, she sells second-hand clothes to supplement her income from the tuckshop; the clothes cost as little as N\$5.00. She's originally from Okalongo, Omusati Region (Northern Namibia), and has gone to school until grade 7. She has never been formally employed in her life. Their business sits on their family plot, where their house used to be, but has now been relocated to another part of Havana. She buys her clothes from other vendors who sell them for cheaper, and the tuckshop products are from different grocery shops.

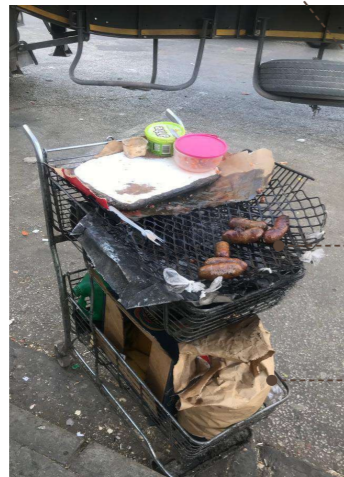
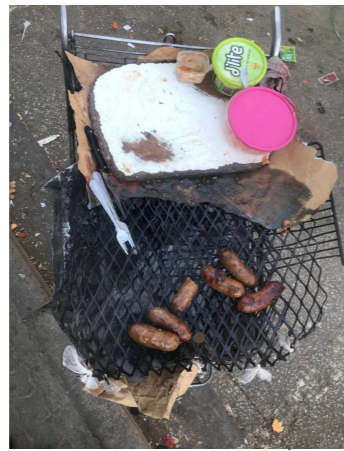
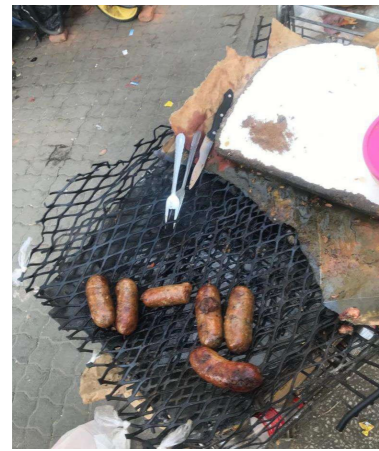
Pictures: Author



Frans's Workshop at Havana Fourway
Pictures: Author

PARTICIPANT 2: FRANS FIXED TRADER AT HAVANA FOUR WAY

Frans has owned a joinery solution shop for 6 years now, ever since he resigned from his carpentry job 4 years ago. His workshop is at the Havana Fourway, where he makes cabinets from different materials. He always wanted to work on his own and now employs six people to help him make and sell the cabinets. He delivers the cabinets to other places in Windhoek if they are ordered by customers. His business sits on a family plot; therefore, he doesn't pay rent. He spends about N\$1000 on electricity every month. He's afraid that the formalization of the area might affect his business because it is on the side of the road.



Pictures: Author

PARTICIPANT 3: TANGENI AMADHILA* VENDOR AT HAVANA FOUR WAY

Tangeni is a 25-year-old man, originally from the Ohangwena region in the North. He started selling in 2017 because he couldn't find a job. He sells wors that he buys from a butchery at Stop 'N Shop and sells them in front of the Pep Store.*

A designated spot that the store manager allocated for them. He mostly gets more customers during the week because there are more people moving. He would like to sell from a place with a braai area or stand that shelters him from the weather. He doesn't want to sell inside the market because he doesn't get customers. He doesn't know anything about the participation process and doesn't want to be a part of it.

- Pork bangers (a form of kapana)
- Modified braai stand - uses coal and boxes to make fire
- Trolley, where he keeps everything he is selling, including the meat - through the day.

PARTICIPANT 4: HENDRINA SHEKUNZA VENDOR AT STOP 'N SHOP OKURYANGAVA

Hendrina is a 22-year-old with a Diploma in Accounting that she got two years ago and has been unemployed since.

She started the business of selling 3 months ago. Sometimes she sells braai'ed chicken gizzards and feet, and on this day, she was selling raisins. They sell outside their home near Stop 'N Shop. She complains that they don't always get customers, especially during the week, and would like to sell at the market.

However, the market is full, and the stalls inside the market are expensive. She gets the grapes from people who go to farms. During the weekend, her mom takes some of the stock along to work to sell there. She is currently looking for employment and would prefer to be formally employed because of the benefits. She would like to be a participant in any design process.



Pictures: Author



Pictures: Author

PARTICIPANT 5: KACHANA SIMASIKU*
VENDOR AT STOP 'N SHOP OKURYANGAVA

She is a 30-year-old woman who sells sugar cane. She's originally from the Zambezi region and has been unemployed, but she started the business this year because her husband lost his job. She has a JSC Grade 10 certificate. Her suppliers are from Zambia, where they farm sugar cane.

She has no opinion on participation processes. And she would prefer to sell at the market so that she doesn't have to carry her sugar cane every morning. And have a shelter where she can trade because of the weather.

PARTICIPANT 6: MARTHA KOMEYA
VENDOR AT HAVANA FOUR WAY

Martha is a 33-year-old accounting and auditing degree holder who has been unemployed since she completed university in 2018. She has been looking for employment, and when she couldn't find any, she started selling different products to earn an income and get money to spend on printing and sending applications in the hope of getting formal employment, as it is her desire. If she gets employed, she would like to employ someone to keep her stall running.

She would like to operate from a more formalized market where there is order and where there are storage facilities where they could leave their things because right now it is very costly to travel with the stock to and from home every day. Her business gets more customers when the month ends.

She would like to be a participant in any design process and give her opinions. Some of the challenges she receives daily are customers complaining about the soaring prices of products, the weather (too hot, too cold, or too windy), and wanting to have a better shelter. It is also costly to buy the stock from the wholesale shops. She mentions that most of their customers are taxi drivers.



Disassemblable table that she carries every day to her trading spot.

Pictures: Author

PART SIX: STUDY AREA

6.1 HAVANA

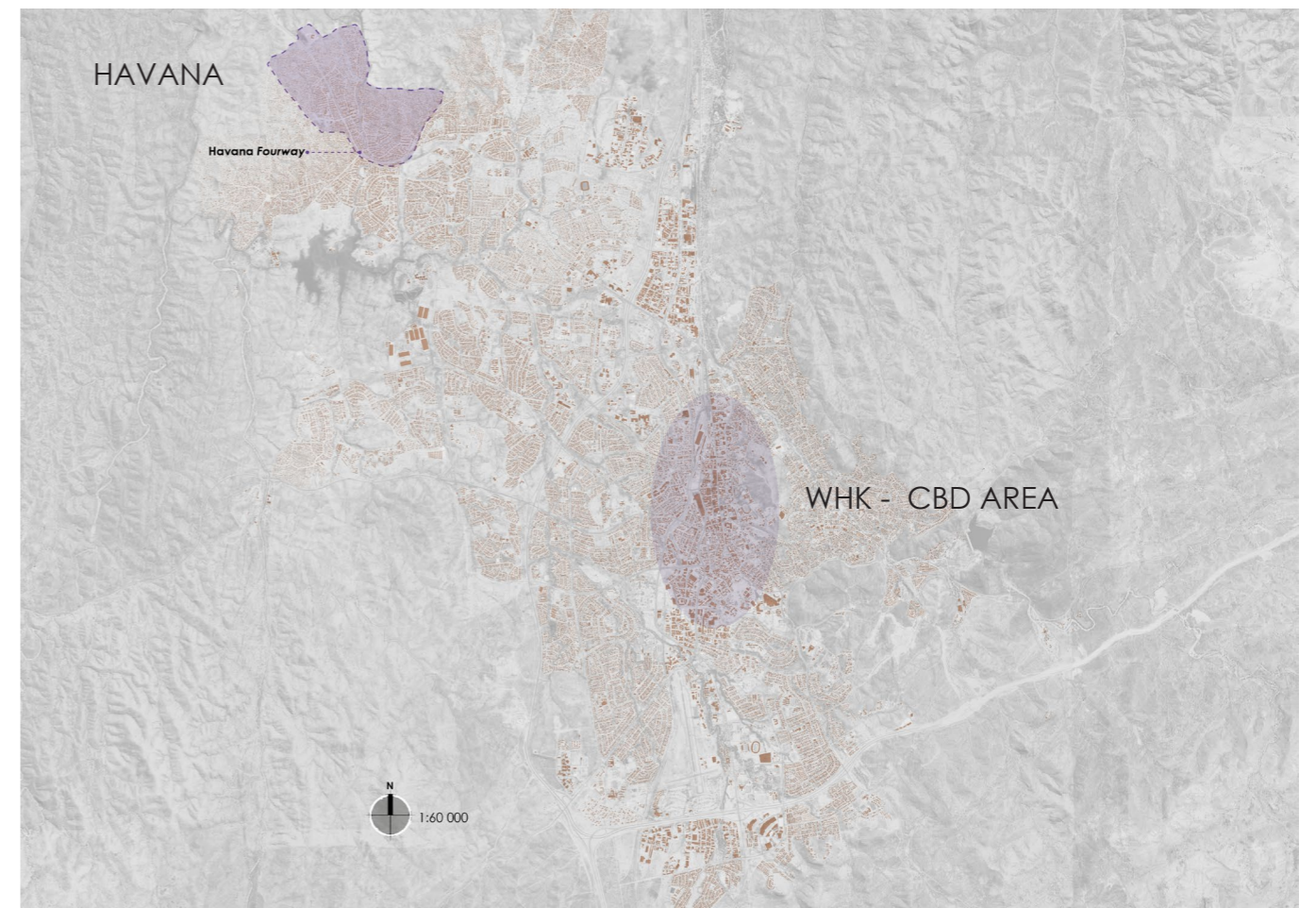
Havana, a peri-urban area in Windhoek, Namibia, was initially established by the city as a temporary reception point for rural-urban migrants from Northern Namibia (Weber & Mendelsohn, 2017). However, due to continuous rural-urban migration, these areas have become permanent residences for many in the capital city. Namibia is undergoing a transformation from a predominantly rural to an urban society, a shift particularly visible in places like Havana.

Havana, named after the capital city of Cuba, is an informal settlement on the outskirts of the city, inhabited by low-income families. A significant challenge faced by these settlers is the lack of land ownership, leading to the absence of essential services such as water, electricity, and proper sanitation.

The majority of the residents of Havana do not own the land on which they live, and consequently, the 'regulatory obstacles' (Banks et al., 2020) deprive them of getting the basic services and infrastructure. The absence of public infrastructure in Havana has created an environment where youth do not have limited opportunities to sustain their livelihoods.

Consequently, many of the youth turn to the informal economy, starting small enterprises from their homes. Others resort to street vending, where they set up makeshift structures along main transportation routes for whatever products they get their hands on. The informal economy, while a representation of their resilience also highlights the urgent need for support systems and social and material infrastructure (Lindell, 2019) that can enable the youth to have better opportunities in their community. This study mainly focuses on the Enias Peter Nanyemba road, which is currently under construction into a dual carriageway.

This road passes through the informal settlement and serves as the space where informal vendors sell their goods. This place is famously known as the Havana Fourway, named after the intersection, as traders cluster around the intersection due to the high movement of people and traffic. The intersection is at Enias Peter Nanyemba Road, previously known as Monte Cristo Road, and Matshitshi Street. These two routes serve as the main transportation routes in and out of Havana, as well as the neighboring settlements of Goreangab, Hakahana, and Greenwell Matongo.



HAVANA INFORMAL SETTLEMENT IN WINDHOEK, KHOMAS REGION - NAMIBIA
MAP: Author



HAVANA INFORMAL SETTLEMENT

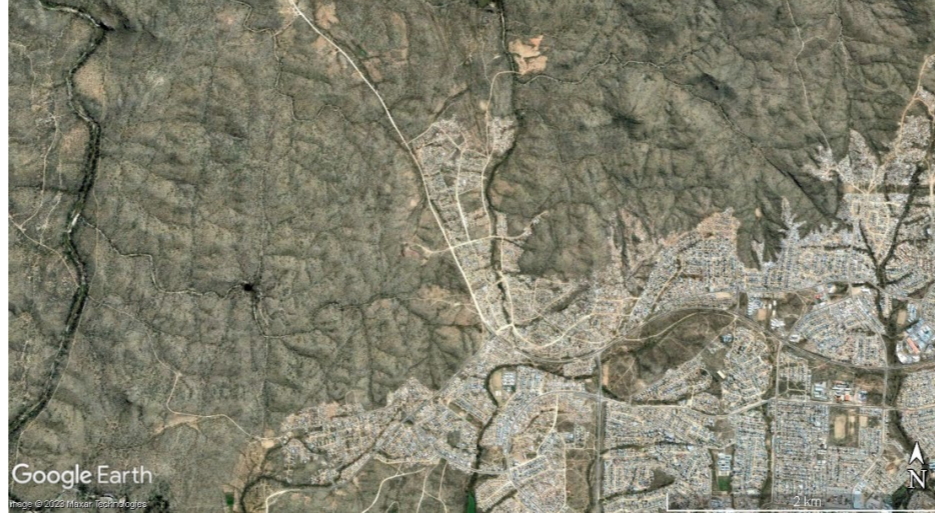
PICTURE CREDIT: (IUDW, 2023)

6.2 THE GROWTH OF HAVANA OVER THE YEARS

The urban sprawl due to the high influx of people into the settlement.



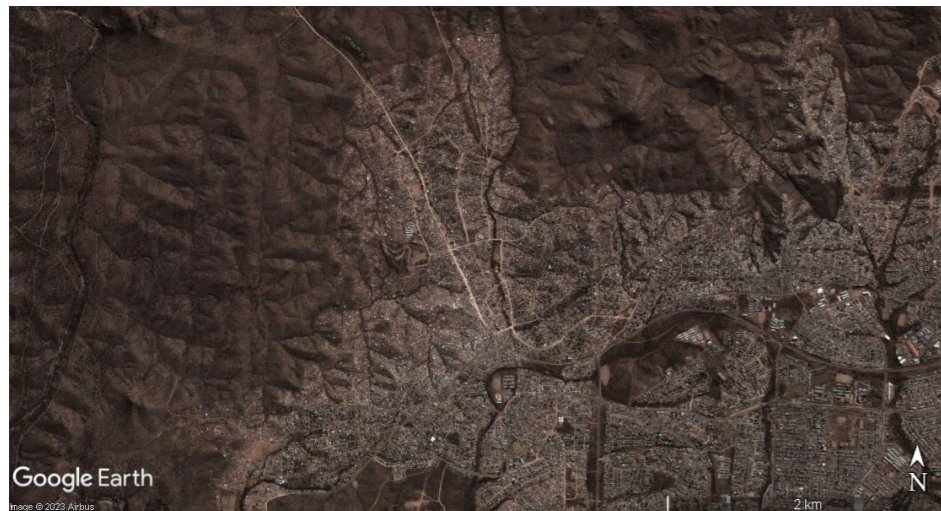
2004



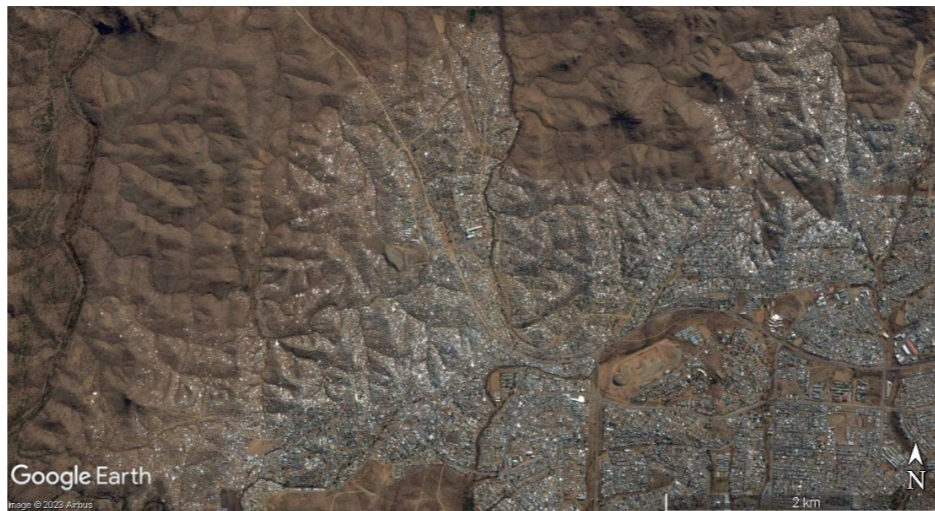
2005



2010



2012



2016



2023



2005



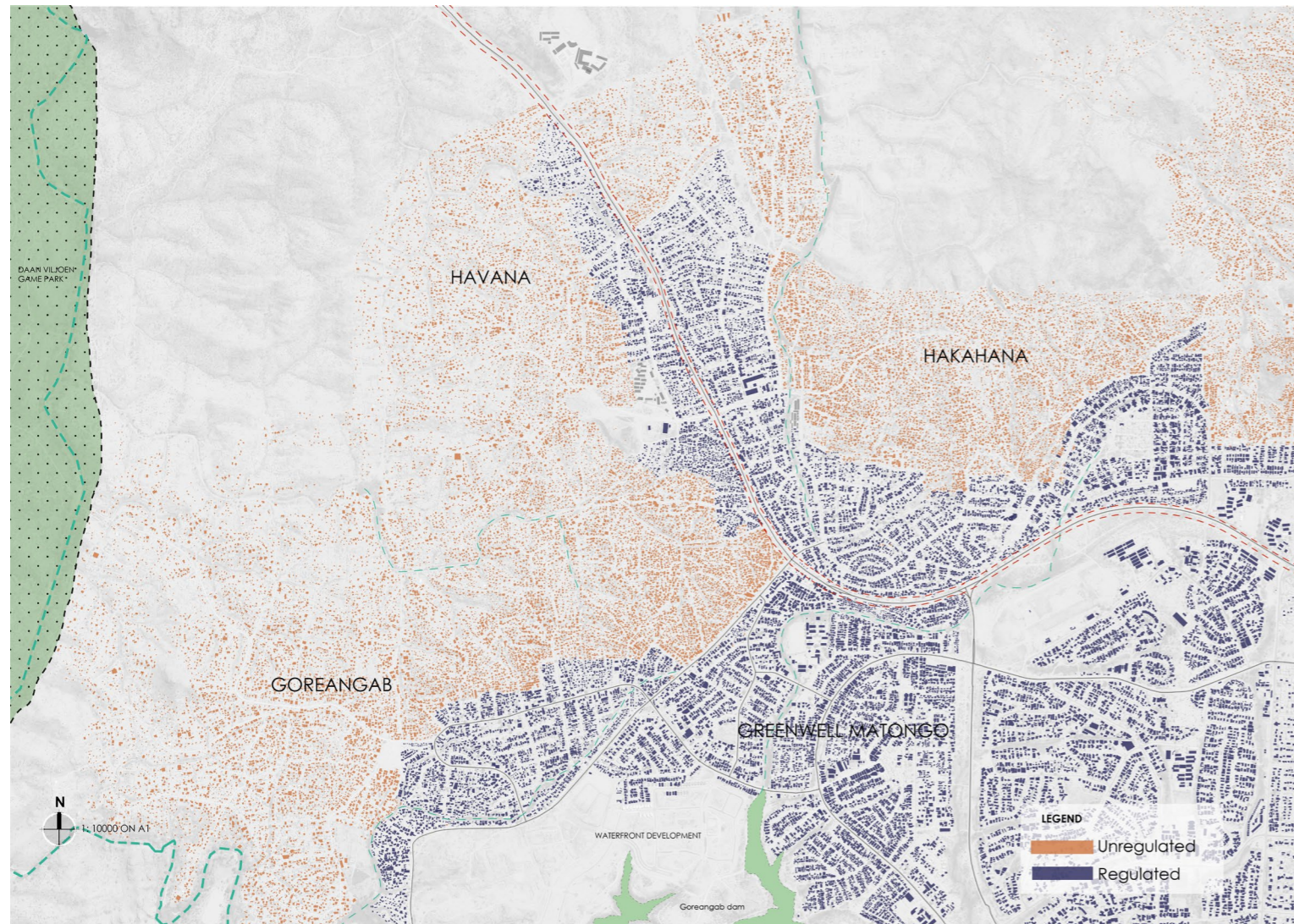
2013



2020

Source: (Google Earth, 2023)

6.3 REGULATORY STATUS OF THE RESIDENTS



Map showing the land ownership of residents.

Residents owning their own land gives them security over those who do not. The security allows them to live permanently informally over those who do not. Those who live illegally on municipal land are often targets for evictions when new developments come up. Land ownership also means the residents can get basic services that they wouldn't have otherwise and are able to build permanently.

Map: Author

1. Semi- public washrooms
2. Public meter tap water points in the community
3. Public spaces created by vendors
4. Tires used as a preventive measure against soil erosion
5. Lack of waste management
6. Usave Shoprite: the only grocery/wholesaler store in the area

6.4 EXISTING CONDITIONS

PICTURES: (IUDW, 2023)

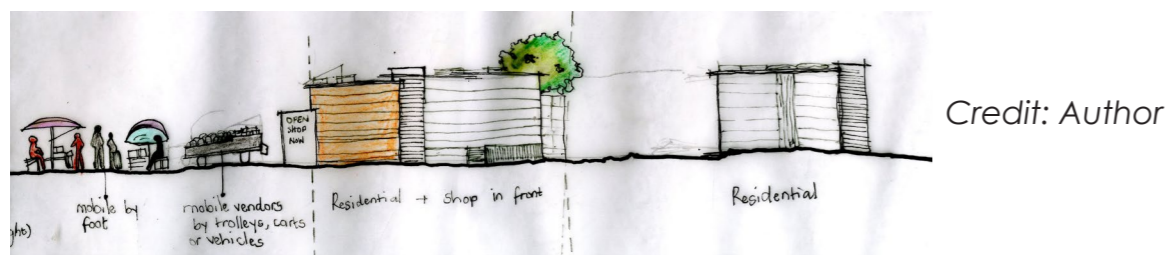
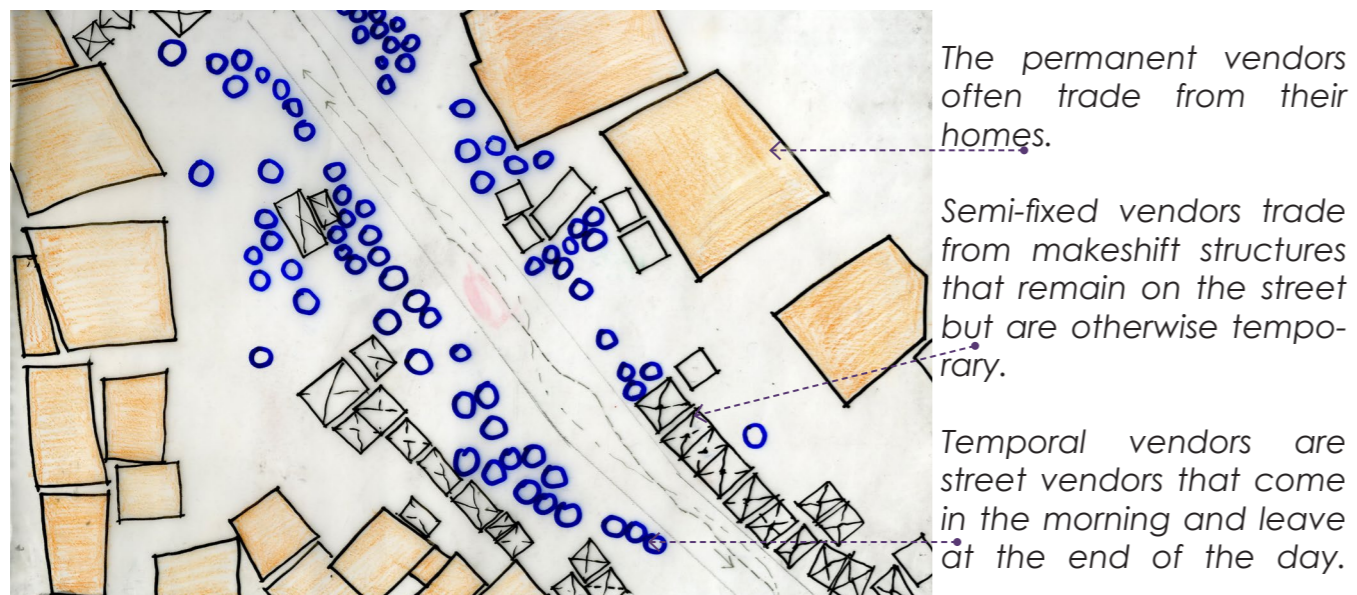
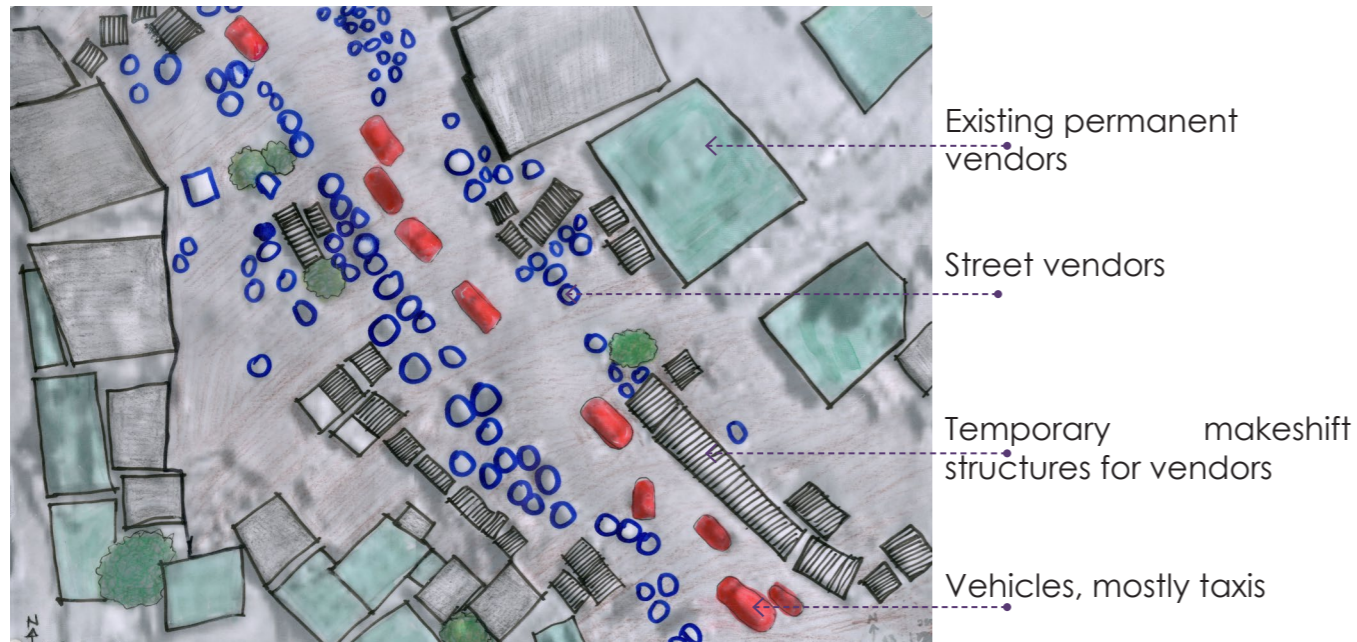


6.5 THE HAVANA FOURWAY MARKET

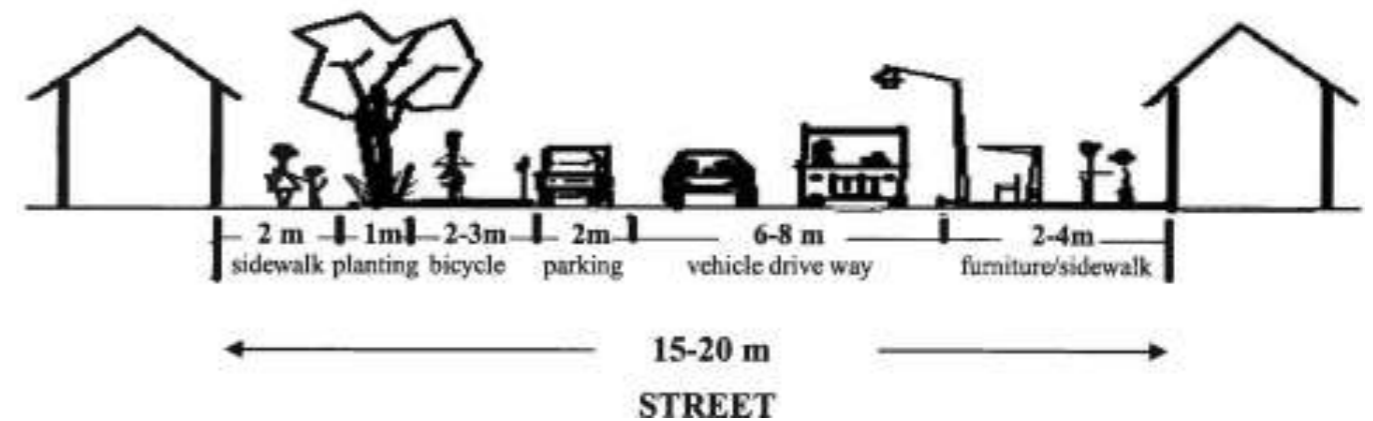
The Fourway Market as a socio - economic space in the Havana community.



6.5 HAVANA FOURWAY MARKET



6.6 POLICY IMPLICATIONS AND URBAN GOVERNANCE



Credit: Namibian Town Planning Standards and Urban Design Guidelines

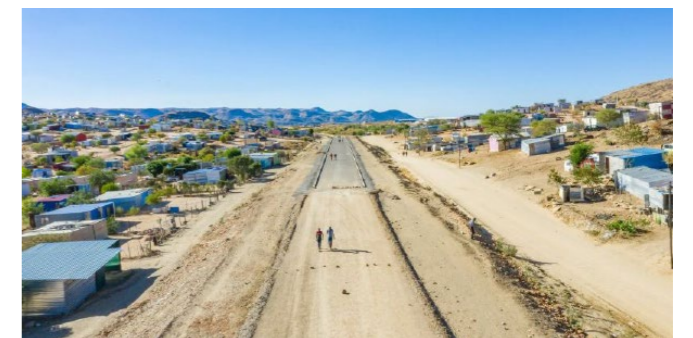
According to the Namibian Town Planning Standards and Urban Design Guidelines For Principal Layout plans, A (2) the street layout and street widths only outlines the necessary urban services infrastructure in such a way that promotes safety and convenience.

In the context of Havana, since the vendors are not accommodated and designed for, this means that they are also left out of certain advantages such as proper infrastructure, sanitation services, water, and electricity. A critical lens for analysing the dynamics between marginalized street vendors and formal urban planning regulations is Henri Lefebvre's "Right to the City" theory (Seixas, 2021).

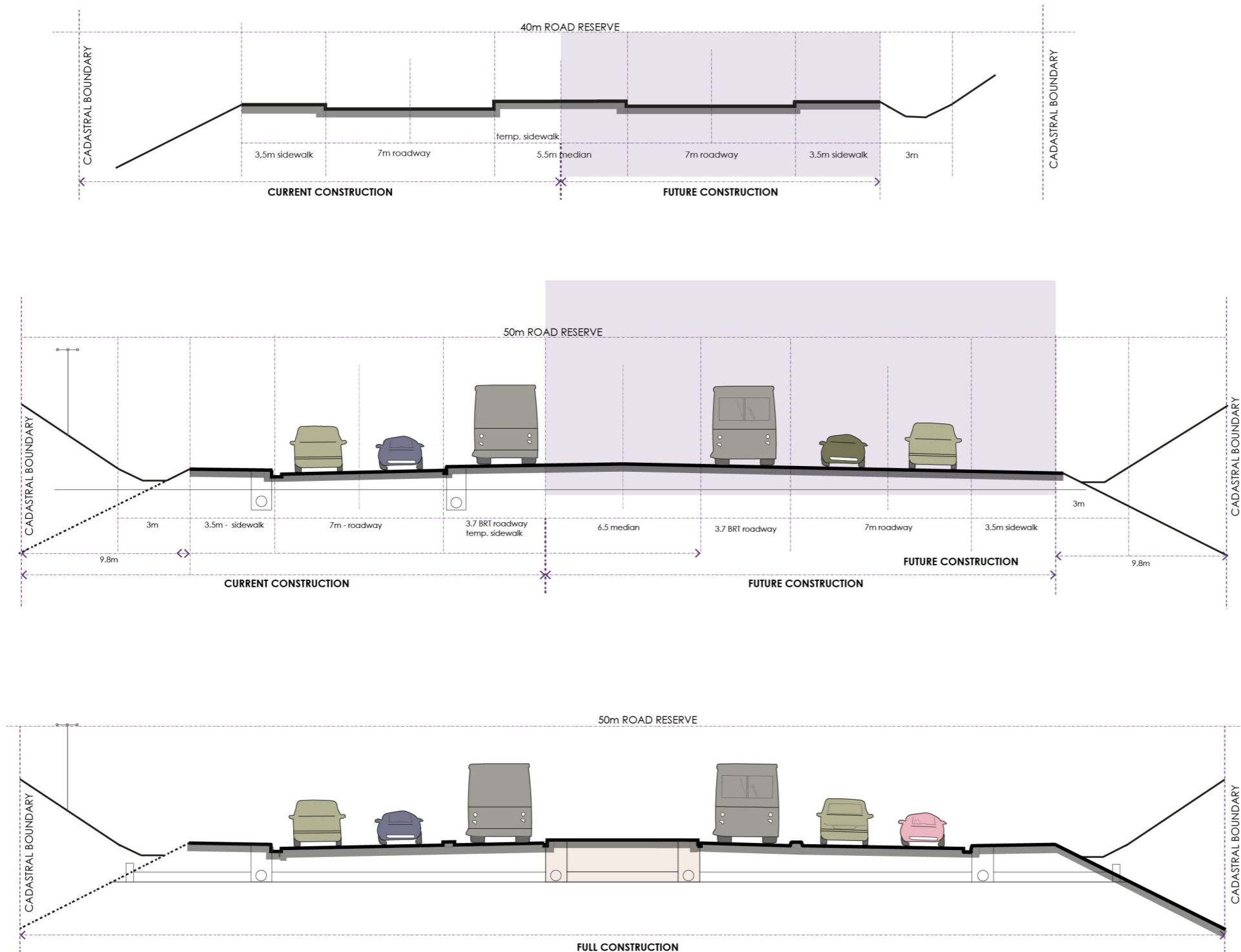
Lefebvre's theory emphasizes the idea that urban spaces are social products that are shaped by the people who live in them as well as physical entities. Their presence highlights the social and economic value that public spaces add to the city and challenges the traditional view of them as nothing more than thoroughfares. They have a right to spaces in the city that meet their needs as citizens, regardless of how much they contribute to the economy.

6.7 CONSTRUCTION OF THE ENIAS PETER NANYEMBA ROAD

The construction of this road goes through the Havana Fourway Street Market, the major socio-economic space in the community where all the vendors carry out their economic activities. The new design of the road, as a new development in the community, is an engineering project that has been designed purposely to accommodate vehicles and not necessarily the people, who are the majority users of the street space—their place of trading and their livelihood.







Credit: (Ongos Valley Development LinkedIn, 2023)



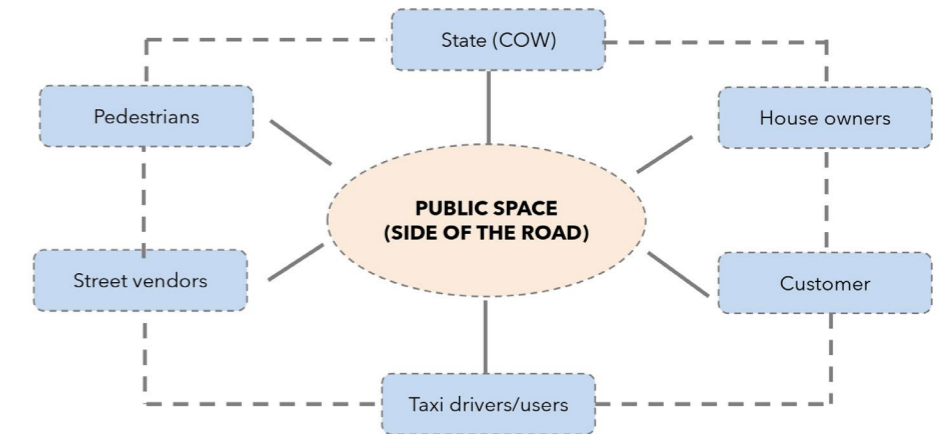
6.8 'NEGOTIATION OF STREET SPACE'

TYPES OF STREET VENDORS AT THE FOURWAY MARKET

	DESCRIPTION	PRODUCTS
MOBILE	 <p>1. Wheelbarrows 2. Trolleys 3. Pushcarts Their products are for customers who are on the go</p>	Food Drinks Newspapers
	 <p>Vehicles These traders sell from the back or the boot of their cars. They can carry products in batches and sell at a wholesale to other traders.</p>	Fruits and vegetables Firewood
	 <p>These traders sell they layout their products on the ground and often do not have any shading elements/ or use umbrellas or makeshift shade.</p>	Fruits and vegetables Clothes Gadgets Blankets/textiles Household items
STATIONARY	 <p><i>Kambashu</i> (corrugated iron) structures Tuckshops These traders operate from a more permanent place.</p>	<ul style="list-style-type: none"> • Mini convenience shop • Household products • Snacks and fast food • Cell phone accessories

Credit: Author

DIFFERENT ACTORS WITHIN THE STREET SPACE AT THE HAVANA FOURWAY MARKET



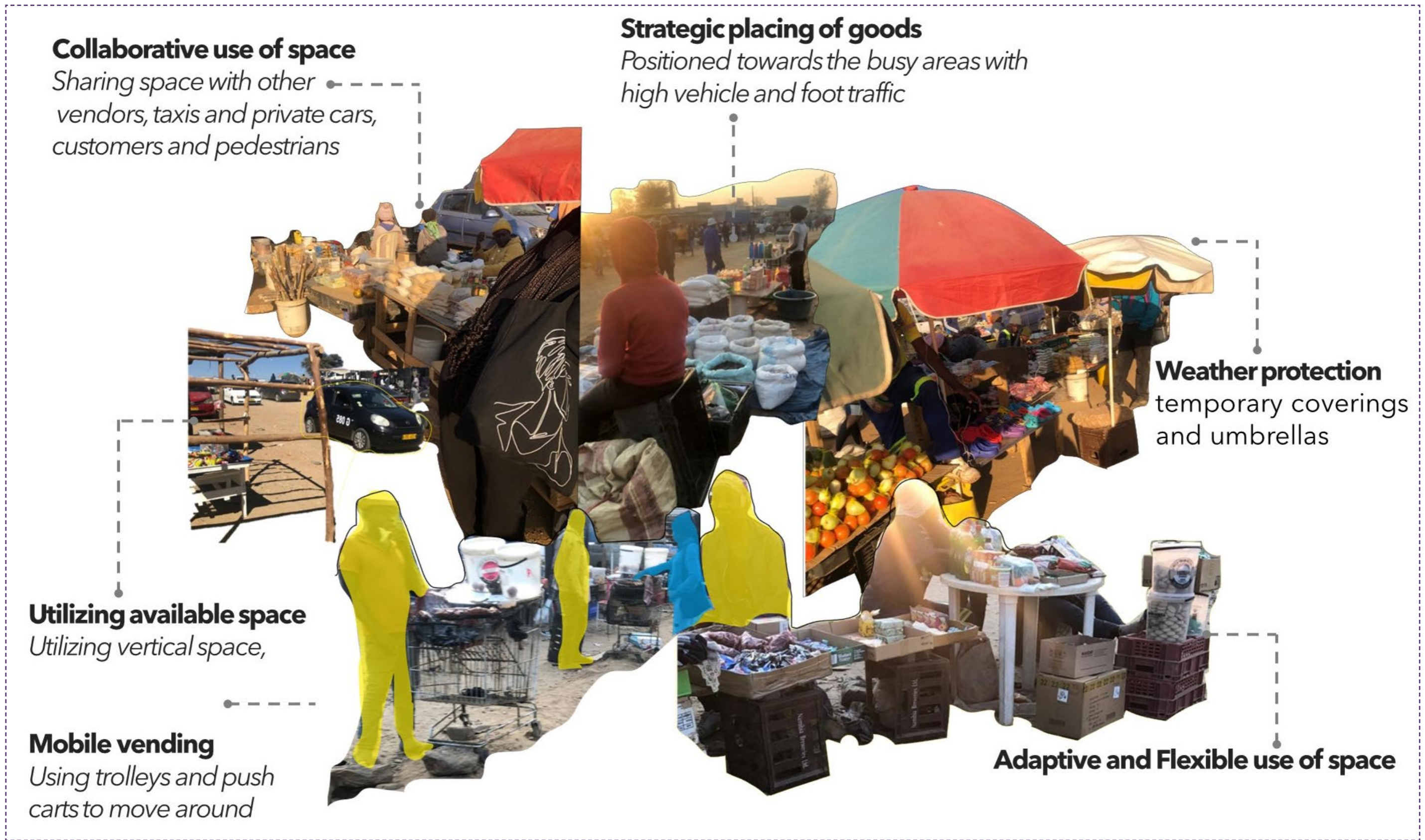
Credit: Author

'Negotiation occurs between the individual and the space' (Pready & Neate, 2008).

In this study, negotiation of space refers to the interactions and dynamics through which different individuals seek to secure, use, or influence specific areas within the street market in an urban environment. Unpacking this is to understand the complexities in the interactions that shape the spatial organization and functioning of the space.

- Identifying the main actors in the space and the interactions between the different stakeholders
- The spatial arrangements are how the vendors position themselves,
- How negotiations drive innovation and adaptation among vendors
- Power dynamics in play and community engagement with the market

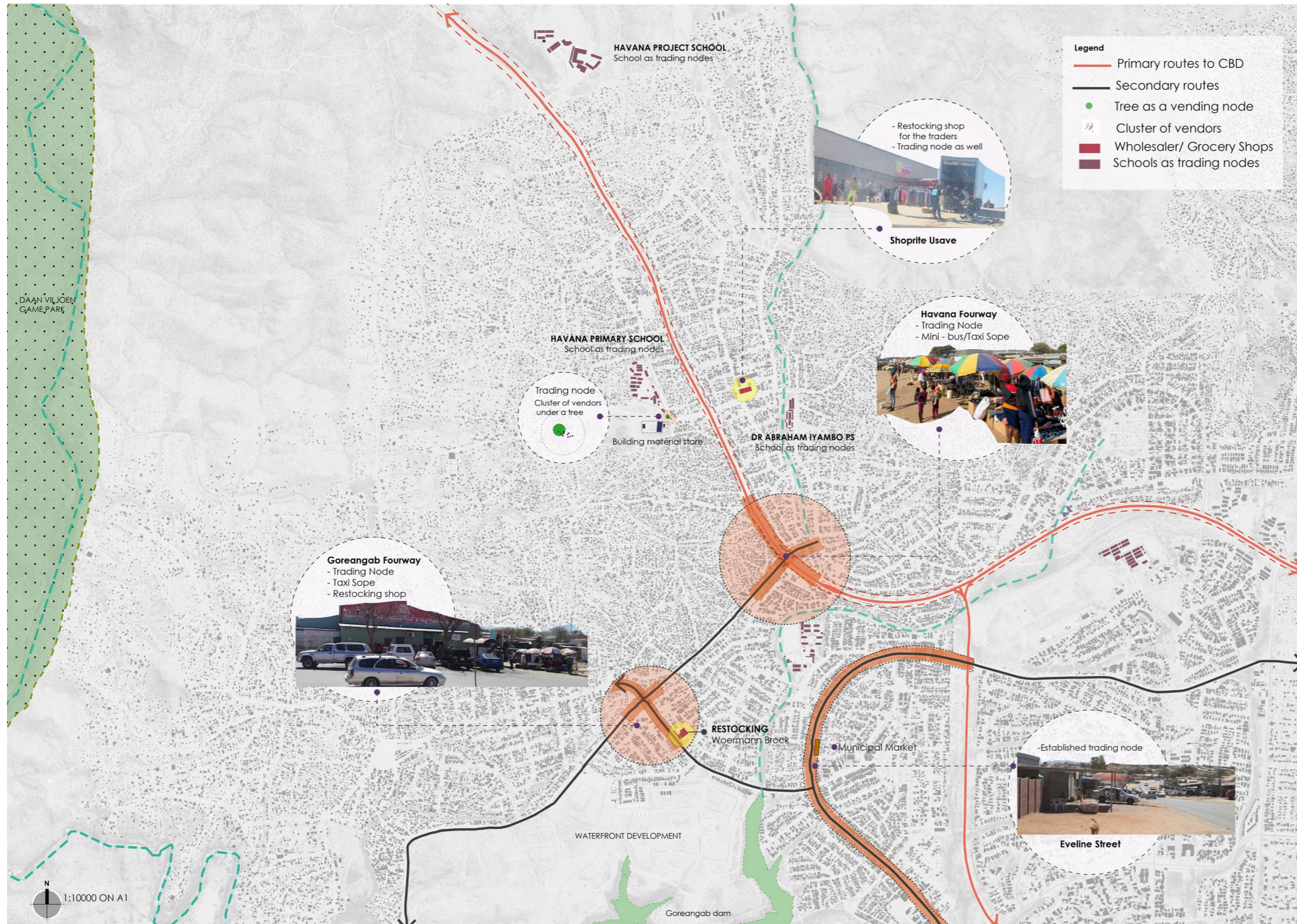
6.9 ADAPTIVE STRATEGIES AS EMPLOYED BY STREET VENDORS AT THE FOURWAY MARKET



6.10 MAPPING - NEIGHBOURHOOD SCALE

SOCIO - ECONOMIC SPACES

The youth are the highest demographic among informal vendors in Havana. Due to the fact that they do not have formal employment, street vending is their way of sustaining their livelihoods.



Apart from the Havana Fourway itself being the main socioeconomic space in the community, it is in close proximity to two other socioeconomic spaces where youth traders navigate every day.

Goreangab Fourway

Similar to Havana Fourway, here the contestation of space is much lesser. The traders are there due to the high movement from the taxi and target the users of the Woermann Brock store.

Eveline Street

The dynamics of Eveline Street are quite dissimilar to those of Havana and Goreangab. The street is more established and mainly occupied by homeshop owners (bars, restaurants, etc.) and mostly mobile vendors who are targeting the customers at those homeshops.

These spaces are significant to the community as well, as they provide them with everyday necessities

INFRASTRUCTURE: HARD AND SOFT SPACES FOR THE YOUTH



Credit: Author

ENVIRONMENTAL CONDITIONS

RIVERBEDS, DUMPING SITE & SOIL EROSION



Credit: Author



Credit: (Ongos Valley Development LinkedIn, 2023)

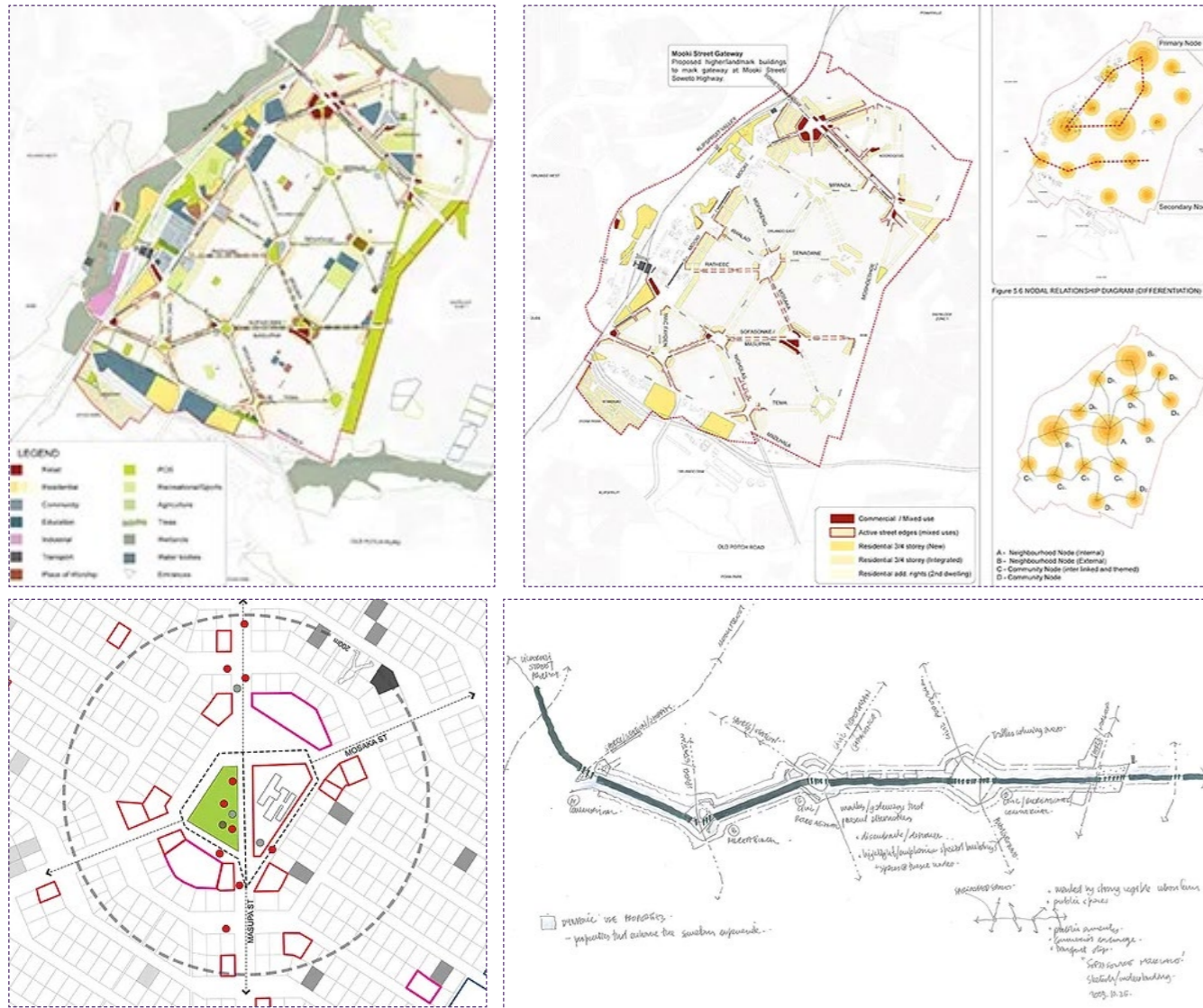
design development

PART SEVEN: DESIGN DEVELOPMENT

7.1 PRECEDENT STUDIES

1. ORLANDO EAST URBAN DESIGN FRAMEWORK - Orlando East, Soweto

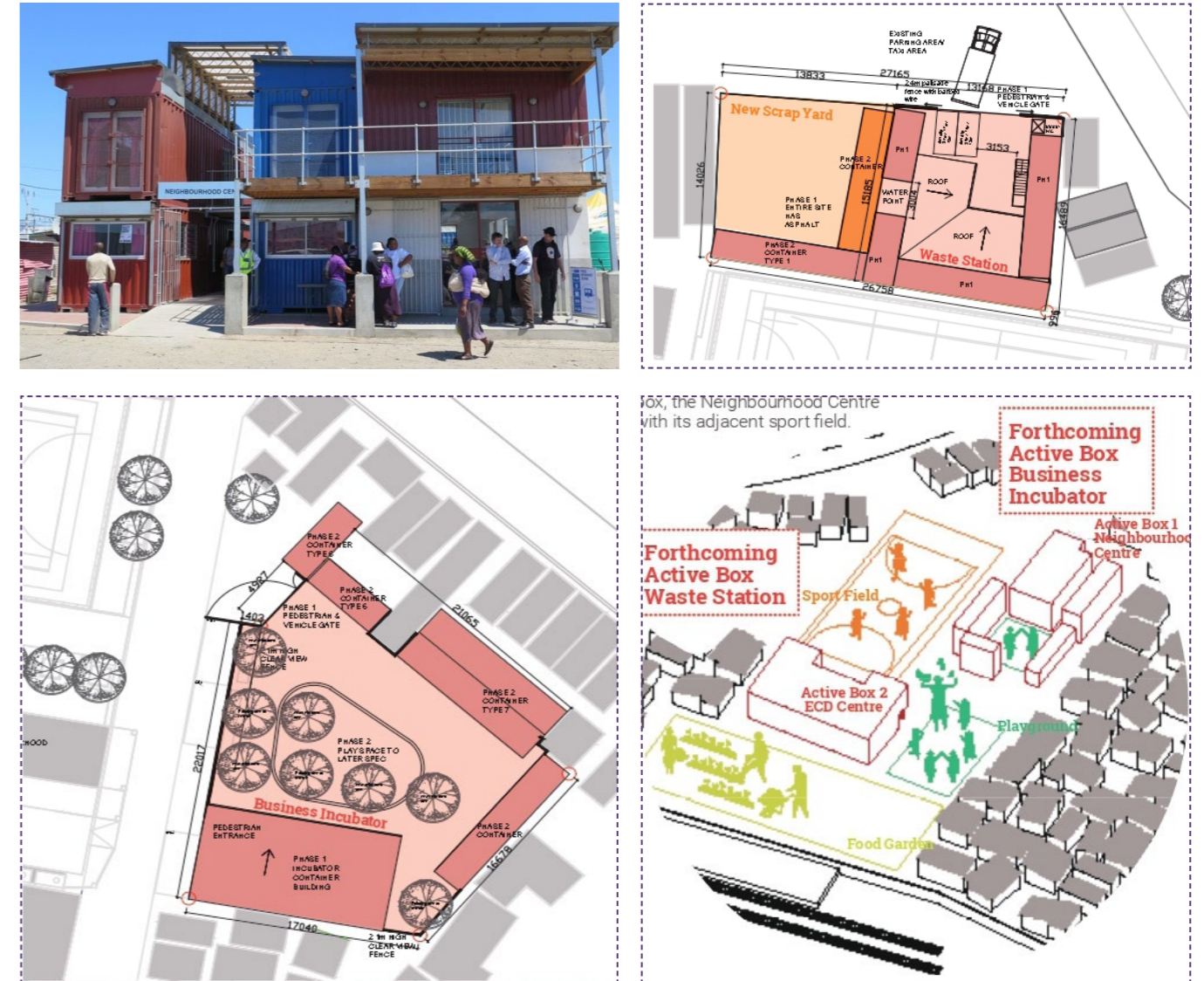
Credit: (UrbanWorks, 2023)



There was a need for a development framework for one of the oldest townships to provide integrated development guidelines and spatial vision. This framework aimed to respond directly to the role of this community in the country's history, the bustling street life, the unequal distribution of public facilities, and lastly, considering the natural system, the Klipspruit Valley (UrbanWorks, 2023). This project framework illustrates the design of a high street or an activity corridor that serves the entire neighborhood. The principles they applied to link the high street to the smaller nodes in the neighborhood inspired me to do the same for Havana.

2. Lotus Park Precinct Upgrade - Cape Town, South Africa

Credit: (VPUU, 2020)



As a pilot project of the City of Cape Town's Informal Settlement Transformation Program, the Lotus Park neighborhood underwent gradual upgrading in 2011 (VPUU, 2020). This project used an incremental strategy to work with the current settlement without moving the residents in order to create a safe and integrated community. Mapping the crime hotspots, creating leadership teams and training, repairing community toilets and taps, and creating vital social amenities—the active boxes—were all part of the precinct upgrade. To improve the community's general health and safety as well as to promote social and economic opportunities, the project also included waste management and business incubation centers (VPUU, 2020). For the development of Havana in this project, these concepts serve as a model.

7.2 CONCEPT DEVELOPMENT



Credit: Author

Concept:

An adaptive framework - creation of an urban ecosystem

The concept was to transform the street currently under construction into an activity corridor that allows vendors to continue trading flexibly, as well as to link this high street or activity corridor to the rest of the neighborhood.

7.3 URBAN DESIGN PRINCIPLES

1. PROVISION OF BASIC SERVICES

Providing basic services, such as water and electricity, for the street vendors as well as the entire neighborhood. This includes increasing the number of shared taps and toilets in the community as well as erecting street lights for visibility to make the public spaces much safer at night.

2. WASTE MANAGEMENT

There is poor waste management in the community; there should be an emphasis on waste management services. This includes waste collection points in the neighborhood, waste bins, and waste recycling facilities to create a clean and healthy environment.

3. PEOPLE-ORIENTED SPACES

This project is centered around people, so all the solutions to the problems identified should prioritize people.

4. MULTI-FUNCTIONAL SPACES

The creation of spaces that are heterogeneous and allow multiple users makes the spaces safer and accommodates different residents at once.

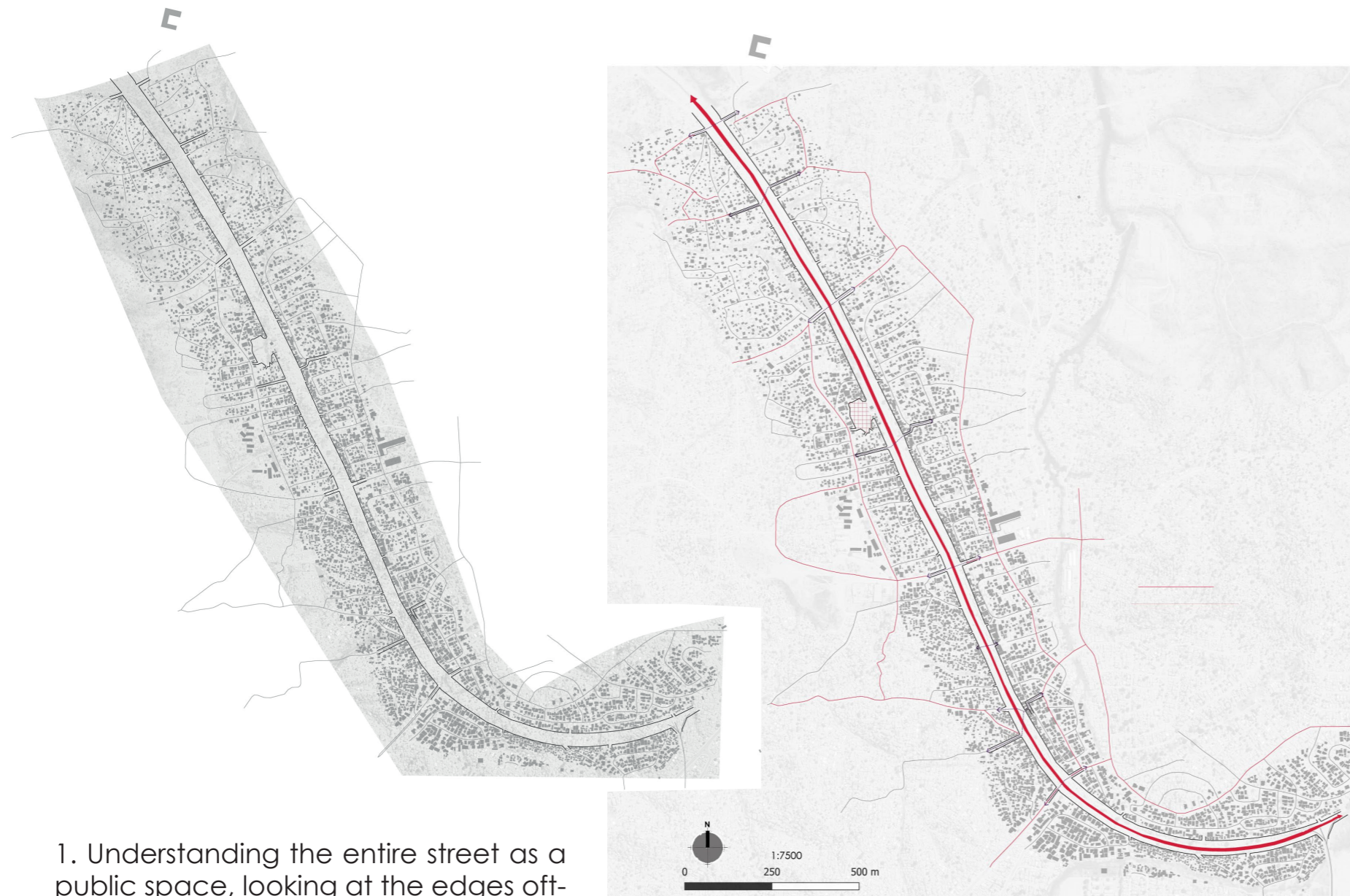
5. FLEXIBILITY AND ADAPTABILITY

Creation of spaces that can evolve with time and be modified as users need to over time.

6. PLACEMAKING

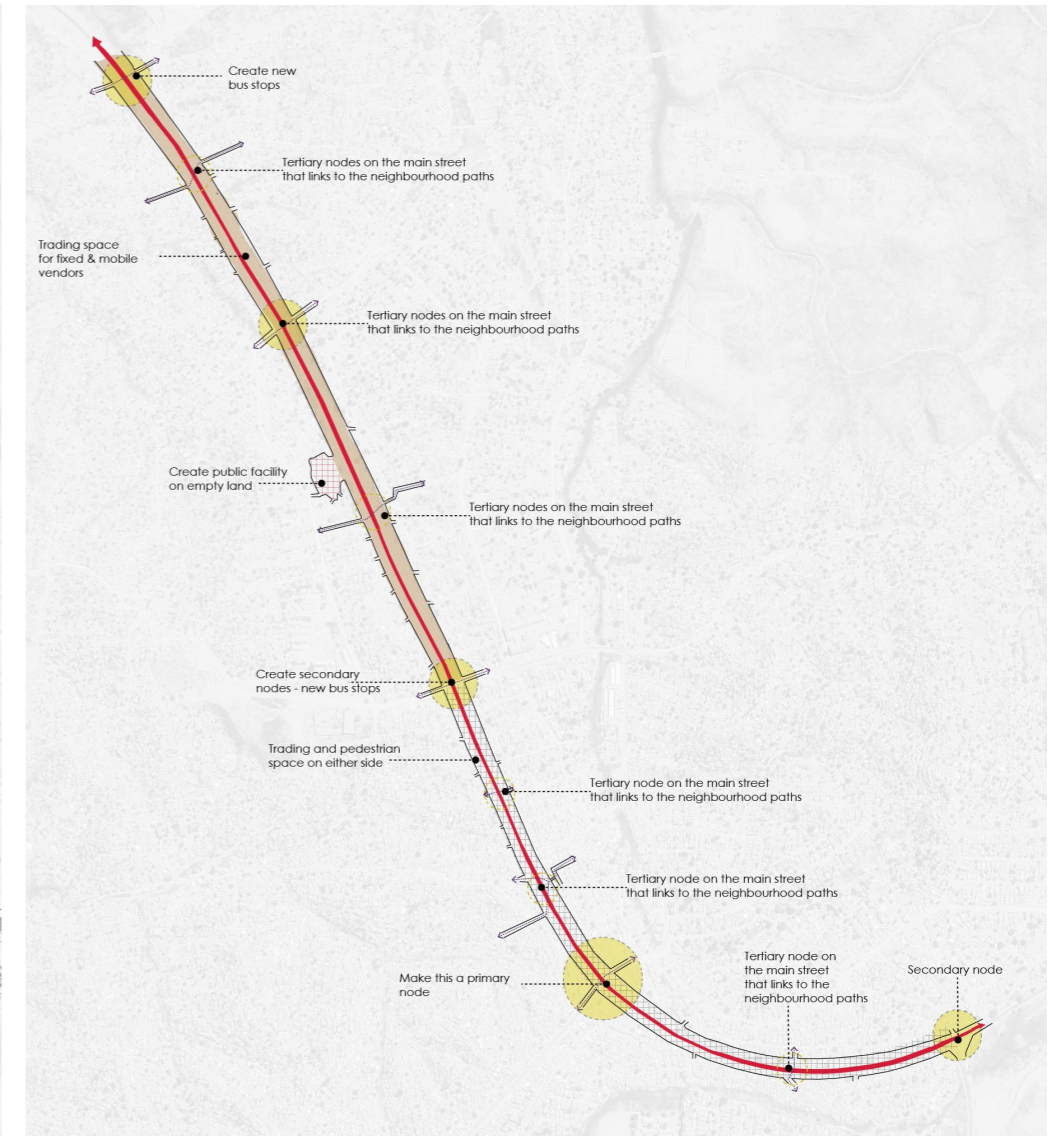
Design places to improve the overall well-being of the urban environment and people.

7.4 DESIGN STRATEGY FOR THE ENIAS PETER NANYEMBA STREET



1. Understanding the entire street as a public space, looking at the edges off-the street and how they affect the street and the overall experience of the people. Due to the recent road construction, the street space (road reserve) is 40m wide.

2. Understanding the main movement routes highlighted in red that act as linkages to the rest of the neighborhood from the main street. The strategy is to transform the main street into an activity corridor designed for people and accommodating the informal vendors who would be disadvantaged by the new road construction.



3. To transform the main street into an activity corridor that is flexible and adaptive, the strategy is to also integrate with public transport. Along the activity corridor, nodes will be created—taxi and bus stops that are anchored by some of the facilities that are needed by the vendors, such as storage facilities, care hubs, water points, and toilets.

7.5 URBAN DESIGN FRAMEWORK

Towards an urban design framework

A) Environmental Framework



This framework focuses on the improvement of the green spaces in the neighborhood, which are mostly riverbeds.

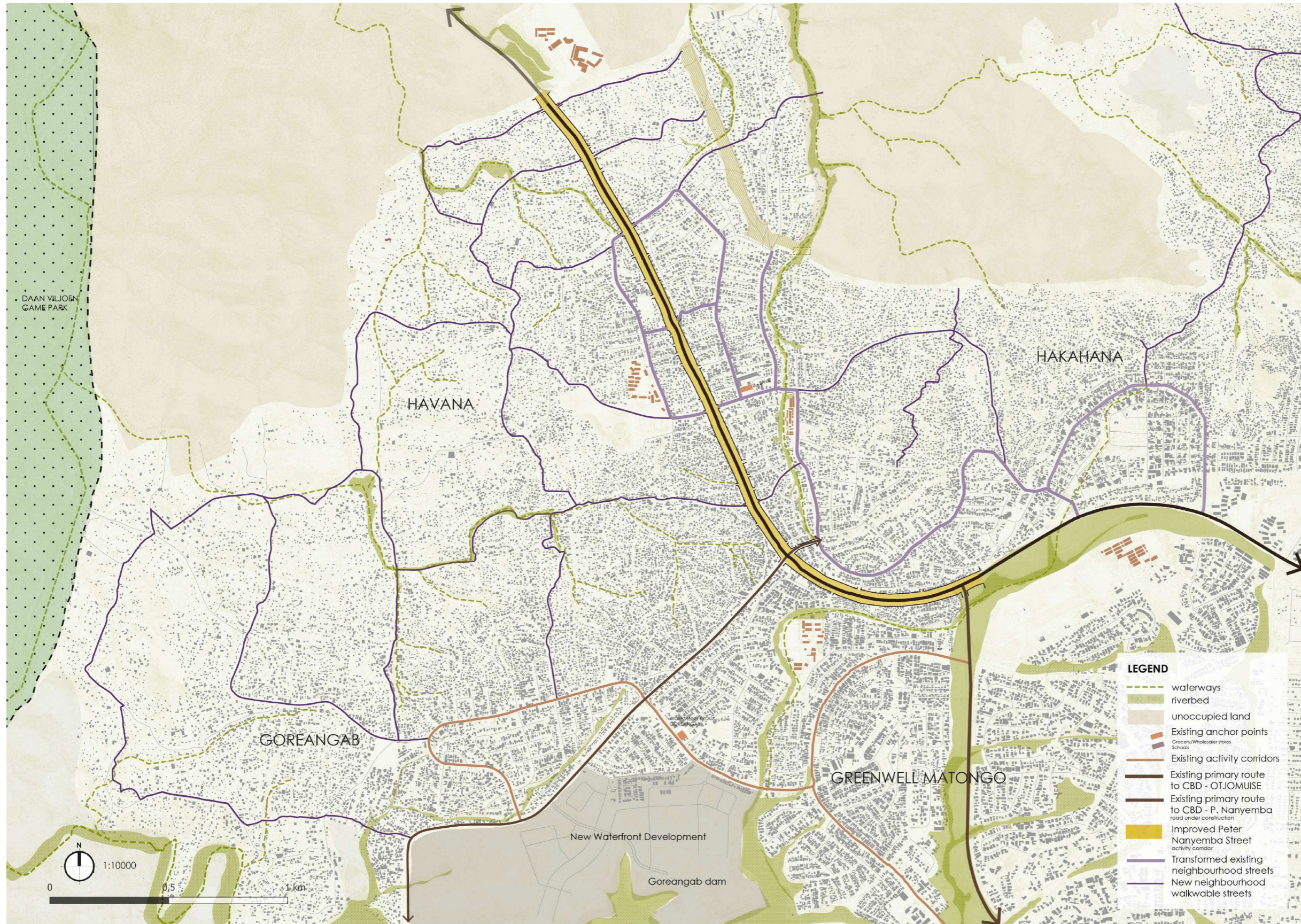
Clearing the riverbeds, especially where there are walkways, to make it safer for the people.

as well as adding safe crossings along the riverbeds that people can use during the rainy season.

This also includes a new community park on an existing dry riverbed.

CREDIT: AUTHOR

B) CONNECTIVITY & ACCESSIBILITY FRAMEWORK

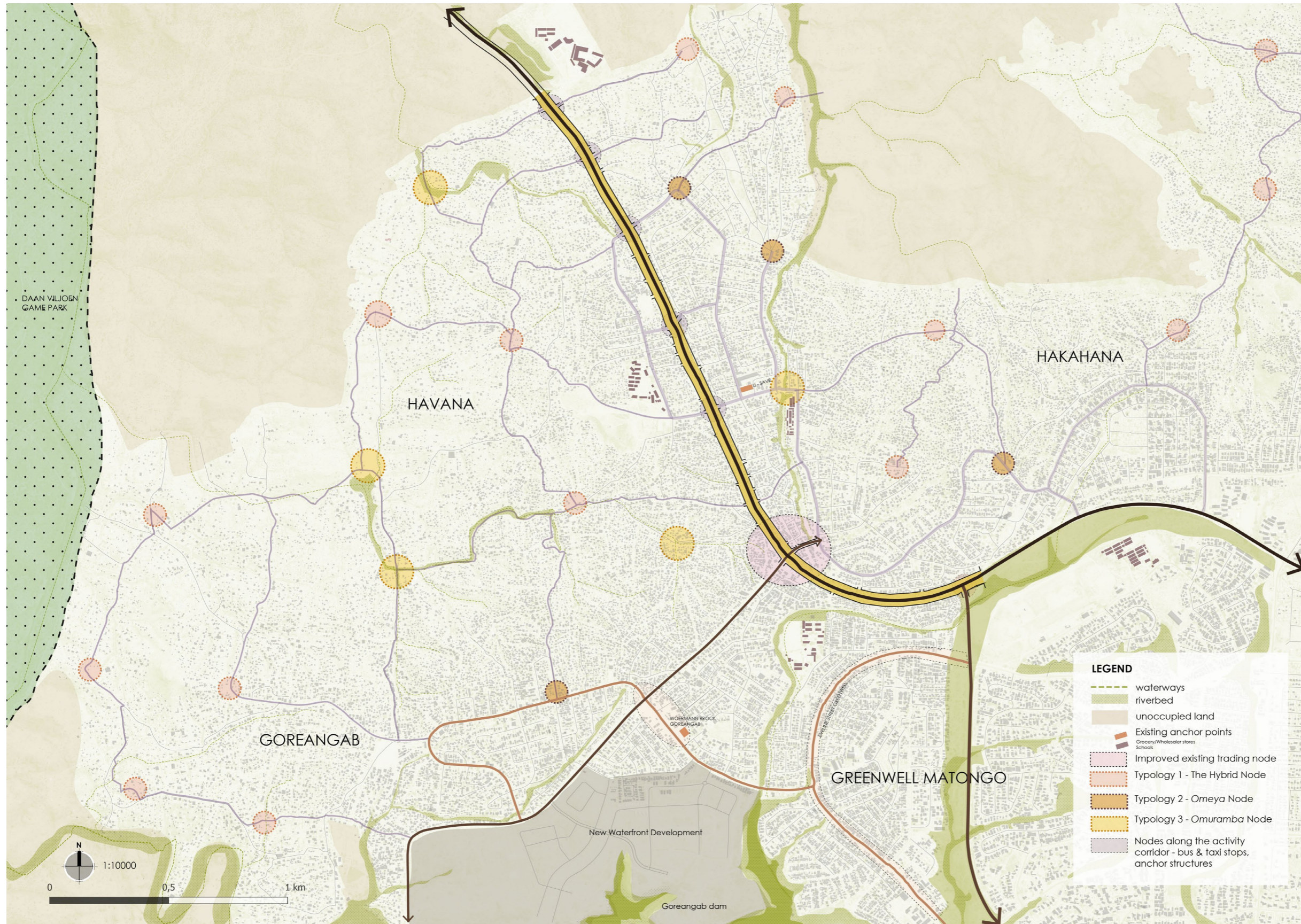


Improving the existing walkways into walkable streets that allow taxis to move through.

These improvements include adding streetlights to enhance visibility at night.

CREDIT: AUTHOR

C) FRAMEWORK: A NETWORK FOR PUBLIC SPACES IN THE NEIGHBOURHOOD



Creation of active social nodes in the community.

These nodes are spaces in the community where there are basic services shared by the residents, such as water taps, toilets, and solar lights.

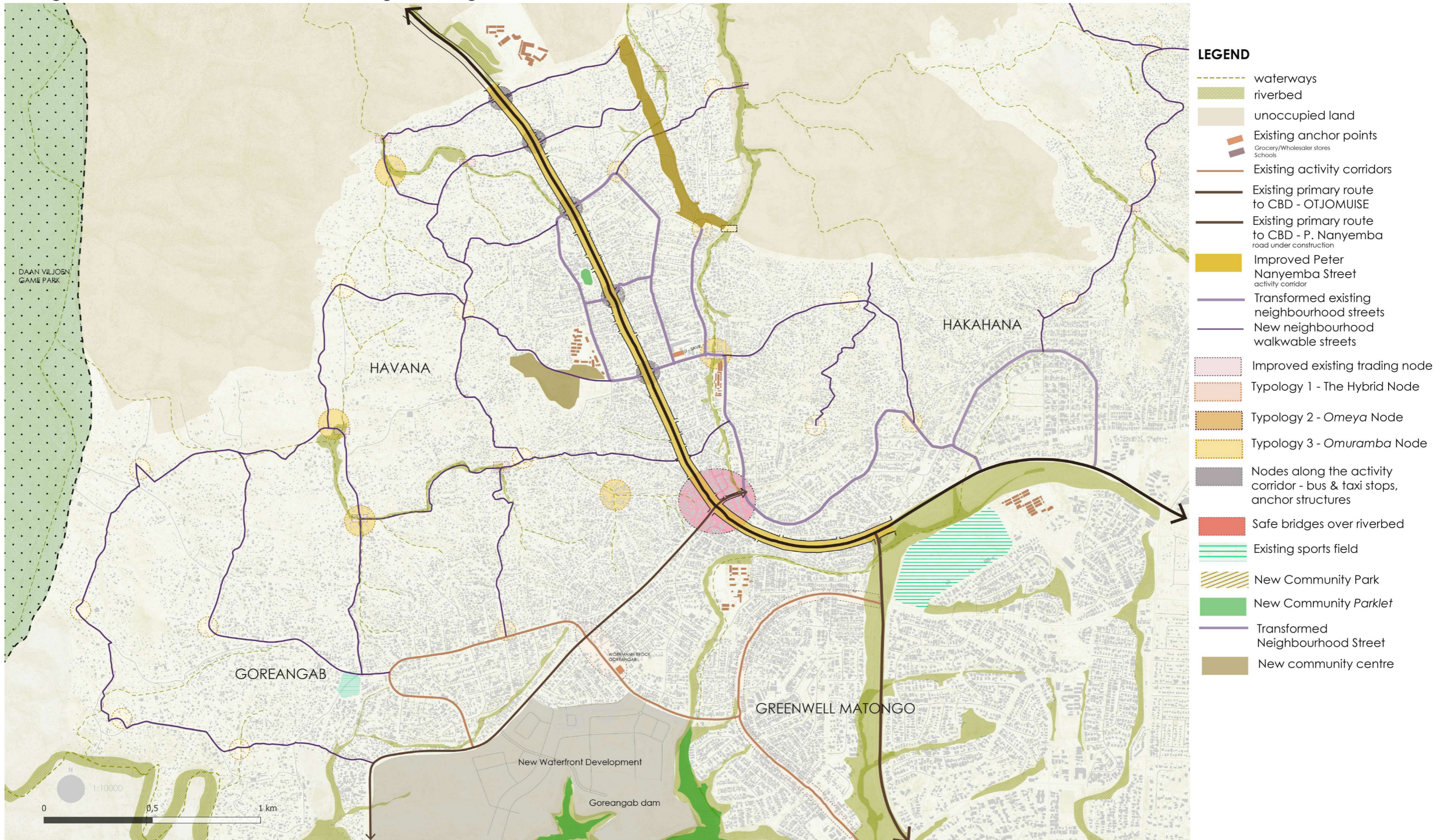
In addition, these spaces are spaces where taxis can stop, an exit from the main activity corridor. These spaces also become safe spaces in the community where youth street vendors can carry out their economic activities away from the main activity corridor.

These nodes are active spaces in the community with anchor spaces to hold the space and allow the continuation of it as a public space over time.

CREDIT: AUTHOR

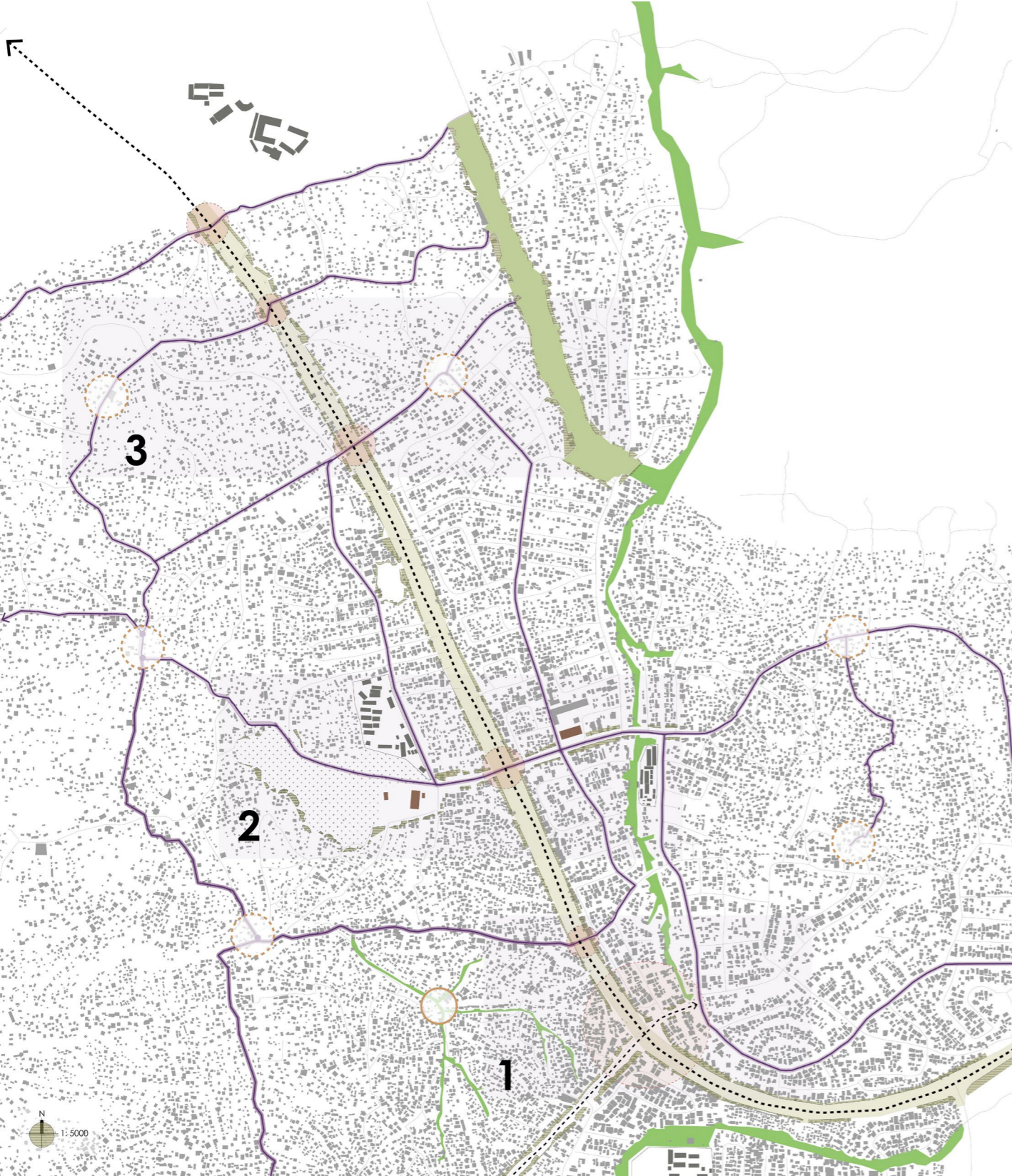
D) AN ADAPTIVE FRAMEWORK

This framework is adaptive to effectively navigate Havana's (and the surrounding neighborhoods) complex, dynamic urban environment. This is done by allowing the framework to be flexible and responsive, addressing ever-changing conditions, fostering resilience, and ensuring the relevance of an urban design intervention in the face of evolving challenges.



CREDIT: AUTHOR

7.6 PRECINCTS



1. Street transformation - 2. COMMUNITY CENTRE
3. NODES: PUBLIC SPACES IN THE COMMUNITY



HAVANA INFORMAL SETTLEMENTS
CREDIT: AUTHOR

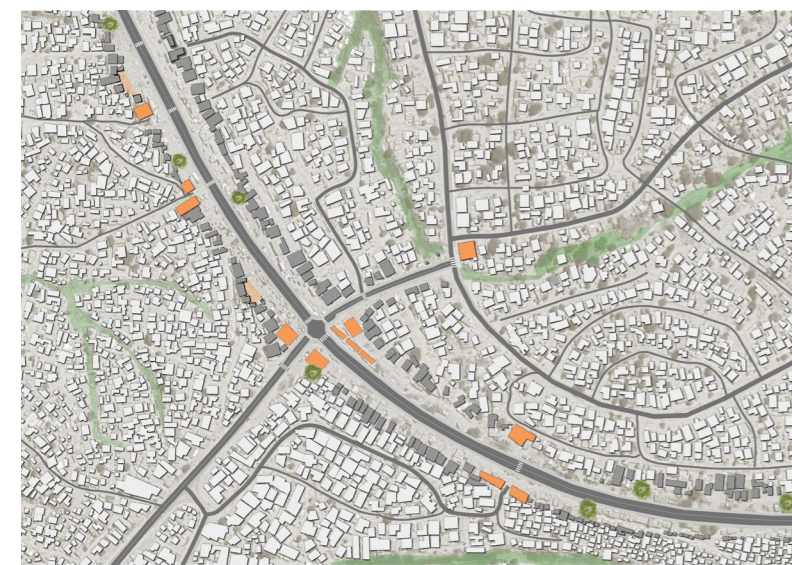
AN ADAPTIVE FRAMEWORK

1. TRANSFORMATION OF THE ENIAS PETER NANYEMBA STREET

These design strategies aim to transform the street to accommodate informal street vendors who have been operating from the Fourway before the new road construction.



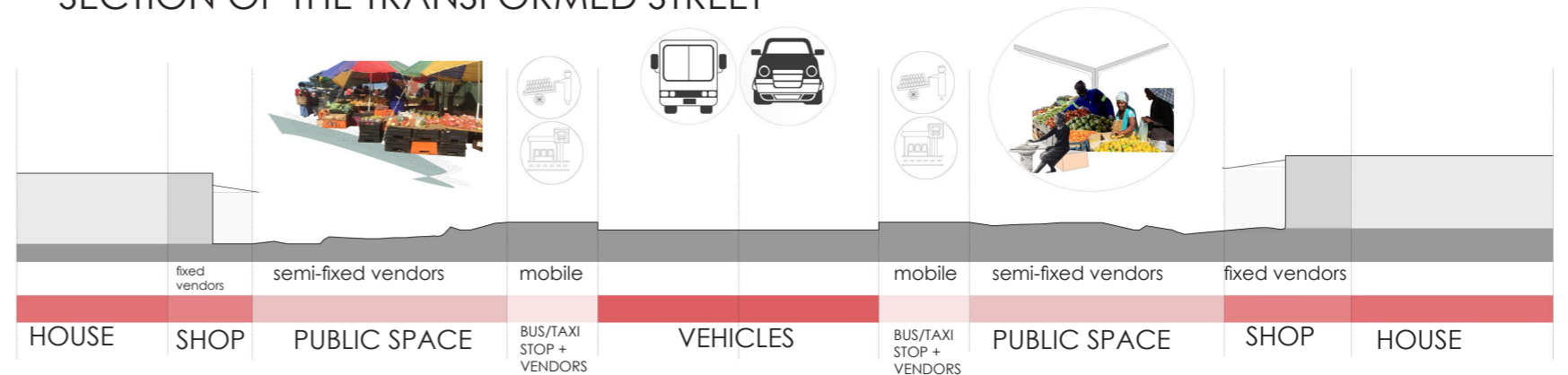
Process drawings illustrate the conceptualization of transforming the street adaptively through an incremental approach. Negotiating the spaces to be made permanent or temporary. To maintain temporarily fixed facilities, they are placed there, acting as anchor spaces such as supporting centers and storage facilities for the traders.



Credit: Author



SECTION OF THE TRANSFORMED STREET



Picture credit: 1, 2, 3 (Republikein, 2023) 4. (Wiego, 2023)
Icons: (The Noun Project, 2023)

LEGEND

1. Public spaces surrounding small enterprises with trees for shading
2. New tactile surface suitable
New bus/taxi stop area
3. New Parklet with sitting and planters
4. Support hubs for vendors
5. New storage facility for the vendors
6. Trading spaces with shade
7. Public facilities toilets+water points
8. 8m road (shared - public + private)
9. 3.5m side walk + bus/taxi stop area

SCALES OF TEMPORALITY

PERMANENT

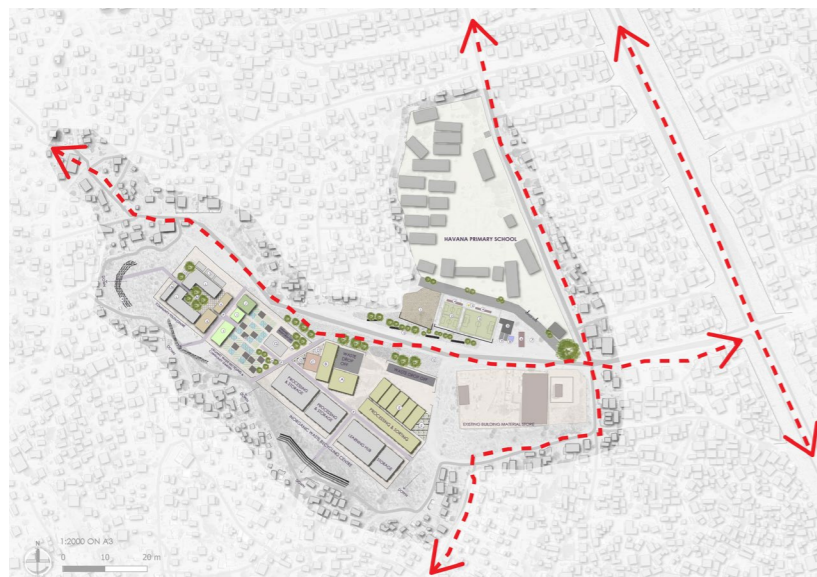
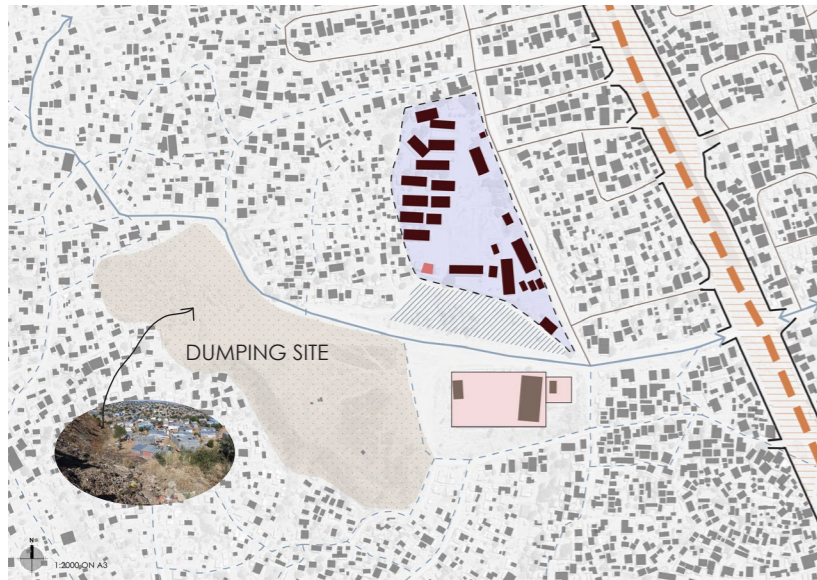
TEMPORAL

cleared public space

proposed traffic calming

2. COMMUNITY CENTRE: TRANSFORMING THE DUMPING SITE INTO A YOUTH COMMUNITY CENTRE AND RECYCLING HUB To create better opportunities and contribute to youth capacity building in Havana

PROCESS:
CURRENT CONDITIONS

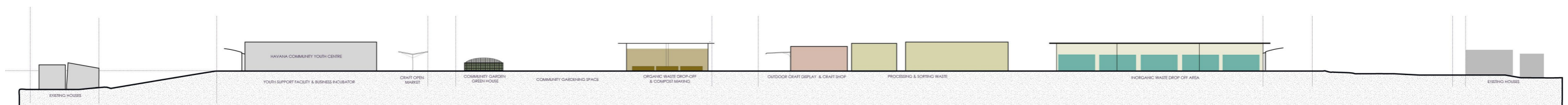


COMMUNITY CENTRE PRECINCT



- LEGEND:
1. Children's play area
 2. Sports courts
 3. Multifunctional sports court
 4. Sitting area with shade
 5. Solar light at 50m radius
 6. Shaded area for sitting
 7. Space for mobile clinic and openzela
 8. Water point
 9. Toilets and changing rooms
 - *openzela: when people get their grant from the government.
 10. Youth cafe
 11. No vehicle street with shade and sitting
- A & B. PROCESSING AND SORTING
 C. CRAFT SHOP
 D. Craft shop display area
 E. Sorting rooms (glass, plastic, paper & cardboard tins & cans, fabric & textiles etc.
 F. Open sitting space
 G. Organic waste processing
 H. Garden area
 I. Green house
 J. Garden store room
- K. Youth trading stalls
 L. Youth centre facilities
 M. Courtyard with shade & sitting
 N. Study rooms
 O. Business incubator hubs
 P. Outside working space with sitting & shade
 Q. Walkways through the facility
 R. Community shared garden
- I) Taxi/bus stop area with shading
 ii) Gabion walls as retainers
 iii) Walkable street with planted trees for shade
 iv) Proposed traffic calming
 v) New small enterprise
 vi) Support facilities for vendors
 vii) Transformed EPN Street

SECTION THROUGH THE RECYCLING CENTRE

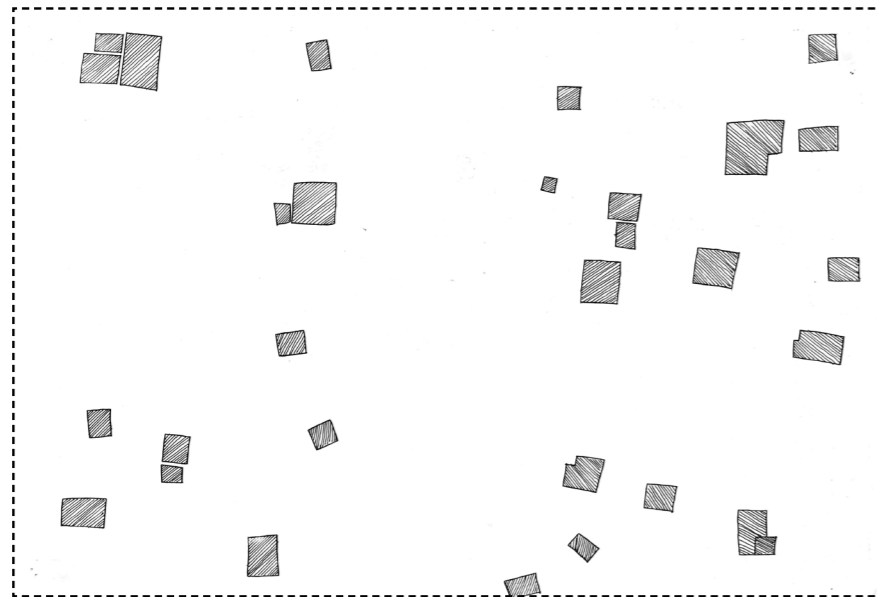


3. NODES: PUBLIC SPACES IN THE NEIGHBOURHOOD

In creating places, socio-economic opportunities for the youth arise, whether through vending, starting small enterprises at these places, or introducing facilities in these spaces. A place attracts people, activities are created, and this, in turn, generates socioeconomic opportunities for the youth.

TYPOLOGY ONE: THE HOTSPOT

This typology has a pavilion that acts as a gathering space for community members.



- LEGEND**
- 1. EXISTING HOUSES
 - 2. STREET LIGHT WITH NETWORK CONNECTION
 - 3. OPEN SPACE
 - 4. OPPORTUNITY FOR NEW BUSINESS
 - 5. NEW SITTING AREA WITH TREES FOR SHADE
 - 6. EXISTING MOVEMENT ROUTE
 - 7. EXISTING WALKWAYS
 - 8. PAVILION STRUCTURE, FOR SHADE & AS AN ANCHOR SPACE
 - 9. TOILET & WATER TANK + TAP
 - 10. TREE + SOLAR STREET LIGHT + WASTE COLLECTION POINT EVERY 50M
 - 11. YOUTH SUPPORT CENTRE

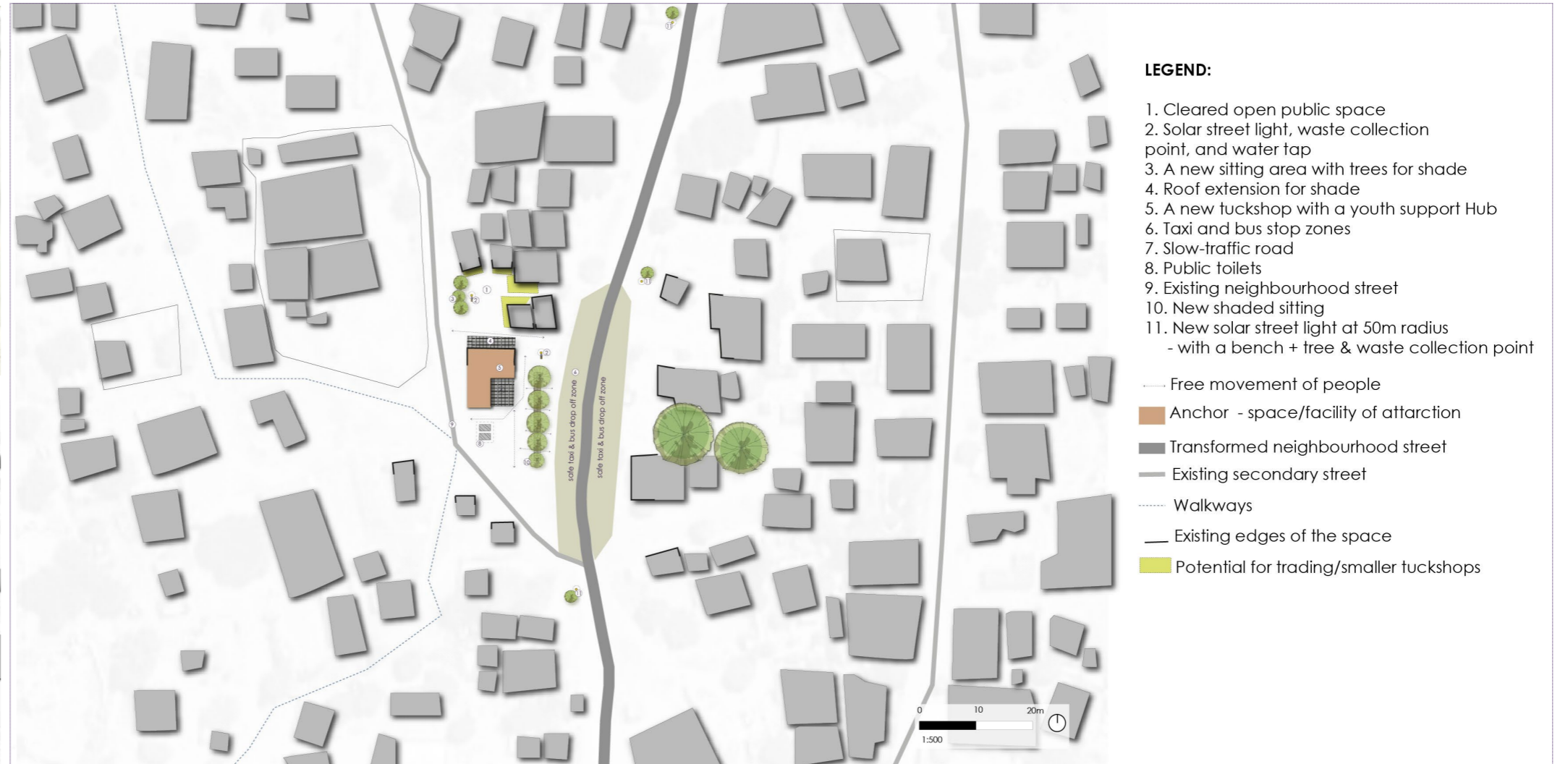
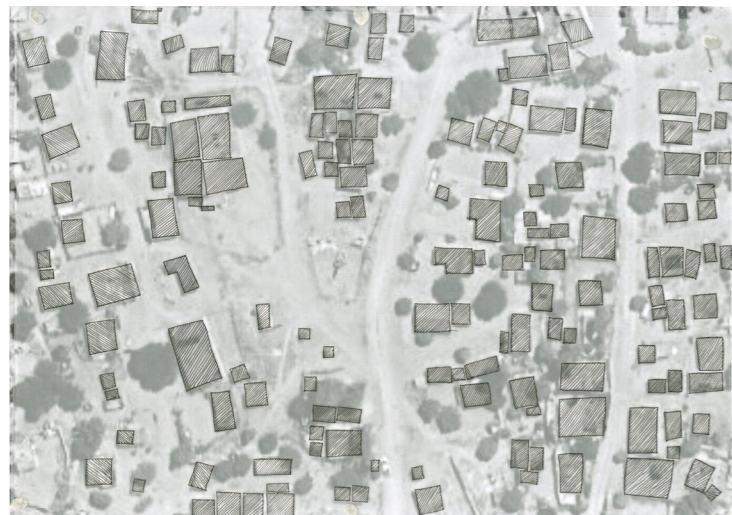
Process: Adding a pavilion as the anchor space holds the space and allows all the other activities to happen around it.



EXAMPLE
Credit: (Archdaily, 2023)

TPOLOGY TWO: OMEYA NODE

Creating a public space through the provision of basic services.



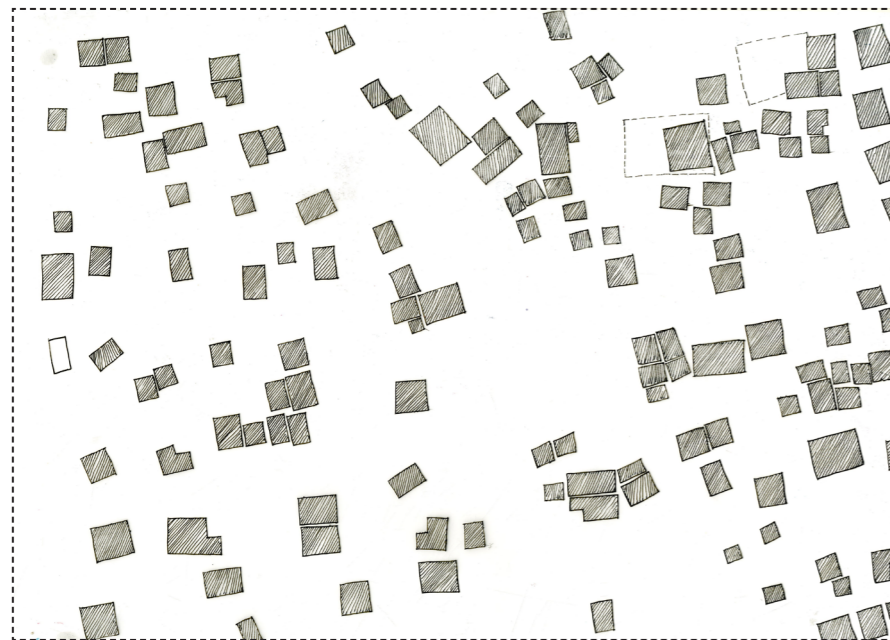
Process

The community taps and toilets are usually some of the most public spaces in the community; this node is an example of that, as well as adding anchor facilities. This space also becomes a taxi or bus stop in the community.

TYPOLOGY THREE: OMURAMBA NODE

Creating Community Public Spaces Along Riverbeds: Addressing Environmental Conditions for Shared Community Use

Activating public spaces along the riverbeds contributes significantly to enhancing safety in the area. The activities not only deter potential security concerns but also foster a sense of surveillance.



PROCESS: The aim is to create activity along the riverbed to make this area more usable and safer, especially for residents who move by foot, while also creating a node that is connected to the public transport system and bringing basic services closer to the people.

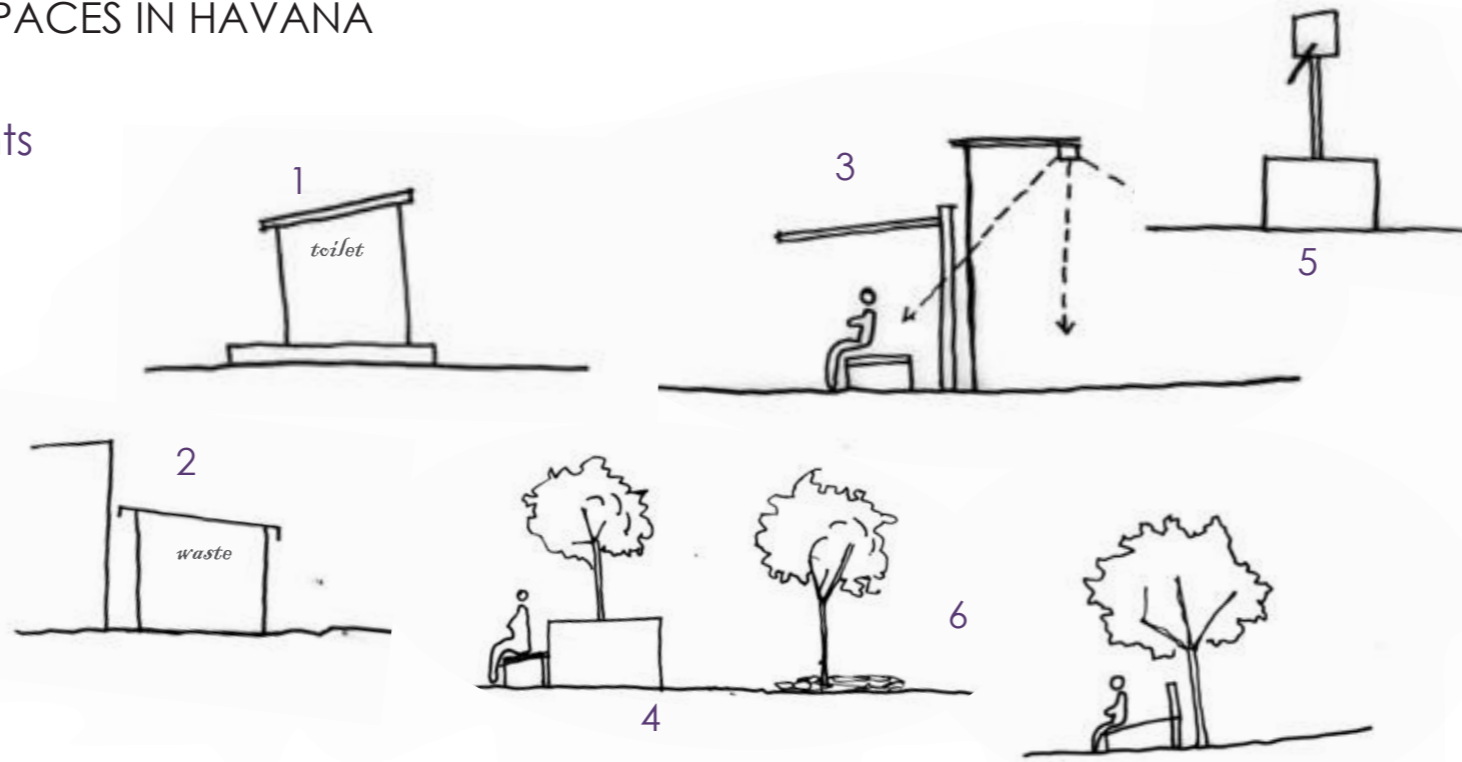
LEGEND:

1. Existing riverbed
2. Existing walkways along the riverbed, cleared out to make them walkable
3. A new street light with a 50-meter radius
4. New trading spaces with shade & tactile surface
5. New youth support centre
6. New public toilets
7. New water tank
9. Existing trees with sitting blocks
10. New trees with sitting
12. A new washing area with watertap and basin + New hanging lines
13. New taxi and bus stop
14. New street lights at 50m radius + waste bins
15. New small scale enterprise with sitting area
16. Tertiary route to main street
17. Walkways
18. Gabion walls with planters acting as retainers

2. CREATION OF NEIGHBOURHOOD PUBLIC SPACE: THE ACTIVE NODES

TOOLBOX FOR PUBLIC SPACES IN HAVANA

1. Public toilets
2. Waste collection points
3. Multifunctional amenities, e.g., taxi stops at street lights
4. Shaded sitting areas
5. Trees to hold spaces and help prevent soil erosion.
6. Shared water taps
7. Anchor space: pavilions for social gatherings
youth community hubs
Youth centers or incubators
community mini shops



Nodes and walkways along the riverbeds:

1. Gabion walls as retaining structures to prevent further soil erosion
2. Clear out the walkway areas.
3. Use stones to define the walkways.
4. Add solar street lights for visibility at night.
5. Add activity along the riverbed to create constant movement of people and make these walkways safer.

PRECEDENT

House of the Pink Spot
by Frankie Pappas International

An example of an active social public space in the community



Credit: (Archdaily, 2023)

PART EIGHT: IMPLEMENTATION PLAN

Project 1: STREET TRANSFORMATION

STAKEHOLDERS

1. Taxi drivers and taxi users
2. The street vendors
3. The residents
4. Private developers
5. Road engineers
6. City of Windhoek
7. Built environment specialists

ACTIONS:

These steps are to be taken before the second phase of the construction of the Enias Peter Nanyemba road is done (not in order).

1. Design the main road in a two-lane way.
2. Add sidelanes (3.5 m) that serve as sidewalks for pedestrians and mobile vendors pulling their carts, as well as bus stops.
3. The bus stops should be shaded and have sitting for the users.
4. Add trading spaces—open roof structures for shade for the vendors.
5. Add street lights every 50 meters and waste bins.
6. Create anchor facilities that have public toilets and water taps.
7. Plant trees around public spaces for shade.

TIMEFRAME:

1-5 YEARS

Actions are to be taken according to the negotiations among stakeholders, the availability of funds, and the feedback from the community.

Project 2: COMMUNITY CENTRE

STAKEHOLDERS

- | | |
|----------------------------------|--------------------------------|
| 1. The vendors | 8. Community organisations |
| 2. The residents | 9. Private investors |
| 3. Private developers | 10. Waste management expertise |
| 4. City of Windhoek | |
| 5. Built environment specialists | |
| 6. Havana Primary School | |
| 7. Kambashu Institute | |

YEAR ONE

- Clear existing waste.
- Treat the land.
- Seek expertise for the project.

YEAR TWO - THREE

- Construct the waste recycling facility.
- Introduce waste collection points in the neighborhood.
- Construct the community center.
- Treat the land for the community garden.
- Implement a pilot planting project.
- Construct the multifunctional sports field and children's playground.
- Introduce learning hubs and business incubator centers.

YEAR FOUR - FIVE

- Handover to community organizations for maintenance.
- Upgrade public spaces with more seating, shade, and lighting.
- Establish a fully functional community center.

Project 2: THE NODES

STAKEHOLDERS

1. The vendors
2. The residents
3. City of Windhoek
4. Built environment specialists
5. Community organisations

YEAR ONE-TWO

- Construction of the water taps and toilets + waste collection points
- Planting trees for shade
- Introducing small enterprises
- Introduce the bus and taxi stops with sitting and shade
- Clear out walkways along the riverbed and add activity
- Apoint community leaders
- Introduce street lights at the nodes

YEAR THREE-FOUR

- Annual maintenance of the toilets
- New trading areas that are shaded and have sitting
- Upgrade the small enterprises into bigger facilities that become anchors.
- Add water tanks.
- Upgrade the youth hubs & support centres.

YEAR FIVE

- Improve the place according to the needs of the community at that time.

PART NINE: DATA MANAGEMENT PLAN

The data was collected through storytelling, semi-structured conversations, or interviews with participants. observations, notes, and sketches taken on site. All participants signed consent forms, and the study was fully explained to them.

After collection, the data was scanned and transcribed into notes and sketches. This included creating folders for the different types of information collected, such as interview transcripts, field notes, and observational records. Data collected through interviews, audio, and video recordings was transcribed into written format, maps, and sketches to make the analysis process easier. The information was analyzed, interpreted onto maps, graphics, and sketches, and organized according to themes and patterns.

After analyzing the data, it was saved to folders on Google Drive and One Drive and backed up on a secured external flash drive.

The folders are secured with strong passwords to protect the work. Anonymity and confidentiality were prioritized throughout the study. The data was not shared, and the participants' identities were protected throughout the research process according to their signed consent forms.

After my studies, the data will be archived securely, considering the ethical requirements of the University of Cape Town, as well as archived to ensure accessibility and preservation of the data for future reference. During the data collection process, I adhered to ethical guidelines and obtained all necessary approvals, informed consent from participants, and ethical clearance from UCT.

This ethic was maintained throughout the study's data analysis, design, and final stages.

PART NINE - ONE: ETHICAL CONSIDERATIONS

I acknowledge that the research methods that I intended to employ before going to the site required me to uncover and retell real-life stories and required discipline from both me as the researcher and the participant to be successful. I expected the participants to be hesitant about telling their life stories, but they were more willing to tell their stories than comment on the existing issues or the design of the environment in which they trade.

I was also aware of safety issues when I was collecting the data because my chosen research method required me to be near the participants.

I was only able to visit the site for 3 days, so I had to speed up the conversations with the participants, and I couldn't get as many participants as I wanted to. I was also unable to carry out a focus group design workshop as I intended to.

I had to collect some of the data digitally, relying on my friends to record video recordings of the street spaces for me, which was a bit limiting as I was not present. I was unable to keep in contact with the participants as I intended to; participants were skeptical of providing their contact details. I also relied on the City of Windhoek website for information about the study area that I found on the internet, as well as Google Earth, Maps, and Open Street Map data.

PART TEN: CONCLUSION

This study commenced with an investigation of the main street in Havana, Enias Peter Nanyemba Street, which is the main socioeconomic center in the community. Over the years, this space has become the place where youth informal vendors sustain their livelihoods, the majority of whom are in the youth group of the city's population. Hence the focus on the youth, in particular. The intention of the study was to understand the socio-economic spaces in the city, to understand how the youth navigate these spaces, and to understand the efforts they make to appropriate these spaces to meet their needs and reclaim the public spaces as they are the primary users of them.

As the investigation progressed into the design phase, the study shifted from only focusing on the socio-economic aspects of Havana and the surrounding neighborhoods to a holistic perspective that included an analysis of the environmental conditions, the absence or inadequacy of basic services, and the need for youth-centered infrastructure and public spaces. The focus was to contribute to the empowerment of the youth, both socially and economically, by designing spaces that enable them to thrive, whether through their street vending activities or the better job opportunities that come with the developments.

The research question grapples with the notion of disruptive adaptation as an urban design approach in the creation of socio-economic opportunities for the youth in a marginalized community like Havana. The complexities of an informal settlement, one currently undergoing significant change, serve as the motivation for this study (Lindell, 2019), emphasizing the great need to re-spatialize urban informality, not by clearing them out but by designing with consideration of their contexts and conceptualizing approaches that are tailor-made for the residents.

The ability to create urban spaces is, of course, not evenly distributed (Lindell, 2019) to this day, but it is in cases like Havana where there is a need to re-spatialize correctly. Disruptive adaptations as an urban design approach in this context challenge the existing urban policies in Namibia that facilitate infrastructures that are not people-centered, such as the Enias Peter Nanyemba road, despite the fact that majority of users of the space engaged in informal activities.

10.1 LIMITATIONS OF THE STUDY

This study, like any other, has its limitations. The analysis was shaped by the researcher's perspective on space in Havana, an informal settlement undergoing significant change, and the narratives of participants, primarily street vendors. A notable limitation is the small sample size of participants, consisting only of street vendors. It would have been beneficial to include the perspectives of those who are not street vendors within the settlement, as the experiences of only six vendors may not serve as a broad foundation for the entire design project.

Another limitation was the fact that I am in the same age group as the participants. A power dynamic arises due to class distinctions, given the researcher's role and academic background, which may have influenced perceptions of space and the overall outcome of the study. I cannot dispute my passion for social development, which may have interfered with the research project.

Another difficulty I experienced was that the scope of the study broadened in the design process, and time constraints affected the outputs of the design project. The study also lacked participation from the participants in the design process. The lack and inadequacy of documented data in Namibian informal settlements, coupled with the absence of documentation on any urban development undertaken in these areas, complicate the analysis process. These limitations indicate the necessity for further studies in this context as well as improvements for future studies.

At the very end of this study, I recognize the need for a change in our urban planning policies that govern the development of spaces, especially in informal settlement settlements. It is due to planning policies that developments such as the construction of the Enias Peter Nanyemba can be implemented as an engineering system designed for vehicles in a community where the majority of the population does not own vehicles. To conclude the study, I suggest 10 spatial guidelines that can be used to further improve Havana or other similar contexts in Namibia.

11 SPATIAL GUIDELINES

1. Implement flexible and adaptable zoning and urban development policies.
2. Prioritize the enhancement of public spaces.
3. Employ adaptive design principles that allow for incremental changes over time.
4. Improve connectivity and accessibility.
5. New developments should invest in capacity building and empowerment of the youth.
6. Provide people-centered infrastructure.
7. Provide basic services and better management methods.
8. Public spaces should be accommodating of informality.
9. Spaces should be multifunctional to maximize usability and foster community engagement.
10. Integrate green spaces and sustainable design principles.
11. Safety and inclusivity should be a priority.

Finally, disruptive adaptations involve the combined efforts of everyone involved in the placemaking process, disrupting any systems that may limit the development of urban spaces beyond formalities. Adapting disruptively means building upon the existing, improving it, and transforming it considerably.



1. The neighbourhood walkways in Havana
2. Self - made public spaces
Photo credits: (IUDW, 2023)

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APPENDIX A : ETHICS CLEARANCE

Full title of research project (No abbreviations to be used)

DISRUPTIVE ADAPATATIONS:

Spatial Appropriation of Socio-economic Spaces by the Youth of Katutura-Windhoek

Level of degree

Masters/Masters Dip

Type of ethics application

Engineering and the Built Environment Faculty Application

For proposal reference number (protocol)

EBE/00192/2023

Principal Investigator(s)

• Nangula, Soini

Supervisor(s)

• Ewing, Kathryn

Student Investigator(s)

• Nangula, Soini

Does your study cover research involving:

1. Children: No

2. Persons who are intellectually or mentally impaired: No

3. Persons who are HIV positive: No

4. Persons in captivity: No

5. Other vulnerable groups: No

APPENDIX B: CONSENT FORMS

SCHOOL OF ARCHITECTURE, PLANNING AND GEOMATICS
MASTER OF URBAN DESIGN

INFORMED CONSENT FORM

TITLE OF STUDY
Disruptive Adaptations:
Spatial Appropriation of Marginalized Youth Within Socio - Economic Spaces

This study explores the idea of disruptive adaptations and spatial appropriation strategies aimed at enhancing economic opportunities within urban socio-economic spaces. It focuses on the challenges faced by young informal entrepreneurs as they navigate the built environment and try to find their place as temporary traders in the city.

STUDENT RESEARCHER
Soini Nangula
soininangula@outlook.com

SUPERVISOR
Dr. Kathryn Ewing

This is a consent form to be given to every participant in this urban design research project.

I voluntarily agree to participate in this research study, and I am aware that I can choose to withdraw at any time or refuse to answer questions without any consequences. YES NO

Please indicate if you give your full consent on the following:

a) The use of your full name YES NO
b) Your voice being recorded YES NO
c) Being filmed, video recording, or the use of your image YES NO

Any comments or restrictions regarding the use of information, recordings, or images:

I read and understood the information provided and had the opportunity to ask questions. I understand that my participation is entirely voluntary, and that I may withdraw at any time without explanation or penalty. I understand that a copy of this consent form will be provided to me. I freely consent to participate in this study.

I hereby give my full consent.

Participant name: No participant name
Date & Location: Okunyangami Step 'n Step
Student name: S. Nangula Date: 15/07/2023

SCHOOL OF ARCHITECTURE, PLANNING AND GEOMATICS
MASTER OF URBAN DESIGN

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SUPERVISOR
Dr. Kathryn Ewing

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b) Your voice being recorded YES NO
c) Being filmed, video recording, or the use of your image YES NO

Any comments or restrictions regarding the use of information, recordings, or images:
Why did I choose to interview her?

I read and understood the information provided and had the opportunity to ask questions. I understand that my participation is entirely voluntary, and that I may withdraw at any time without explanation or penalty. I understand that a copy of this consent form will be provided to me. I freely consent to participate in this study.

I hereby give my full consent.

Participant name: Martha Komeya
Date & Location: Havana Fairway
Student name: S. Nangula Date: 20/07/2023

SCHOOL OF ARCHITECTURE, PLANNING AND GEOMATICS
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soininangula@outlook.com

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I hereby give my full consent.

Participant name: No name
Date & Location: S. Nangula Date: 15/07/2023

SCHOOL OF ARCHITECTURE, PLANNING AND GEOMATICS
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I hereby give my full consent.

Participant name: Aneia Maria Nakwerda
Date & Location: Havana Fairway
Student name: S. Nangula Date: 17/06/2023

SCHOOL OF ARCHITECTURE, PLANNING AND GEOMATICS
MASTER OF URBAN DESIGN

INFORMED CONSENT FORM

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Disruptive Adaptations:
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This study explores the idea of disruptive adaptations and spatial appropriation strategies aimed at enhancing economic opportunities within urban socio-economic spaces. It focuses on the challenges faced by young informal entrepreneurs as they navigate the built environment and try to find their place as temporary traders in the city.

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c) Being filmed, video recording, or the use of your image YES NO

Any comments or restrictions regarding the use of information, recordings, or images:

I read and understood the information provided and had the opportunity to ask questions. I understand that my participation is entirely voluntary, and that I may withdraw at any time without explanation or penalty. I understand that a copy of this consent form will be provided to me. I freely consent to participate in this study.

I hereby give my full consent.

Participant name: Hendana Shekunza
Date & Location: Okunyangami Step 'n Step
Student name: S. Nangula Date: 15/07/2023

SCHOOL OF ARCHITECTURE, PLANNING AND GEOMATICS
MASTER OF URBAN DESIGN

INFORMED CONSENT FORM

TITLE OF STUDY
Disruptive Adaptations:
Spatial Appropriation of Marginalized Youth Within Socio - Economic Spaces

This study explores the idea of disruptive adaptations and spatial appropriation strategies aimed at enhancing economic opportunities within urban socio-economic spaces. It focuses on the challenges faced by young informal entrepreneurs as they navigate the built environment and try to find their place as temporary traders in the city.

STUDENT RESEARCHER
Soini Nangula
soininangula@outlook.com

SUPERVISOR
Dr. Kathryn Ewing

This is a consent form to be given to every participant in this urban design research project.

I voluntarily agree to participate in this research study, and I am aware that I can choose to withdraw at any time or refuse to answer questions without any consequences. YES NO

Please indicate if you give your full consent on the following:

a) The use of your full name YES NO
b) Your voice being recorded YES NO
c) Being filmed, video recording, or the use of your image YES NO

Any comments or restrictions regarding the use of information, recordings, or images:
"You are welcome to take pictures"

I read and understood the information provided and had the opportunity to ask questions. I understand that my participation is entirely voluntary, and that I may withdraw at any time without explanation or penalty. I understand that a copy of this consent form will be provided to me. I freely consent to participate in this study.

I hereby give my full consent.

Participant name: AA Frans Joinery
Date & Location: Havana Fairway
Student name: S. Nangula Date: 20/07/2023

APPENDIX C: PLAGIARISM DECLARATION

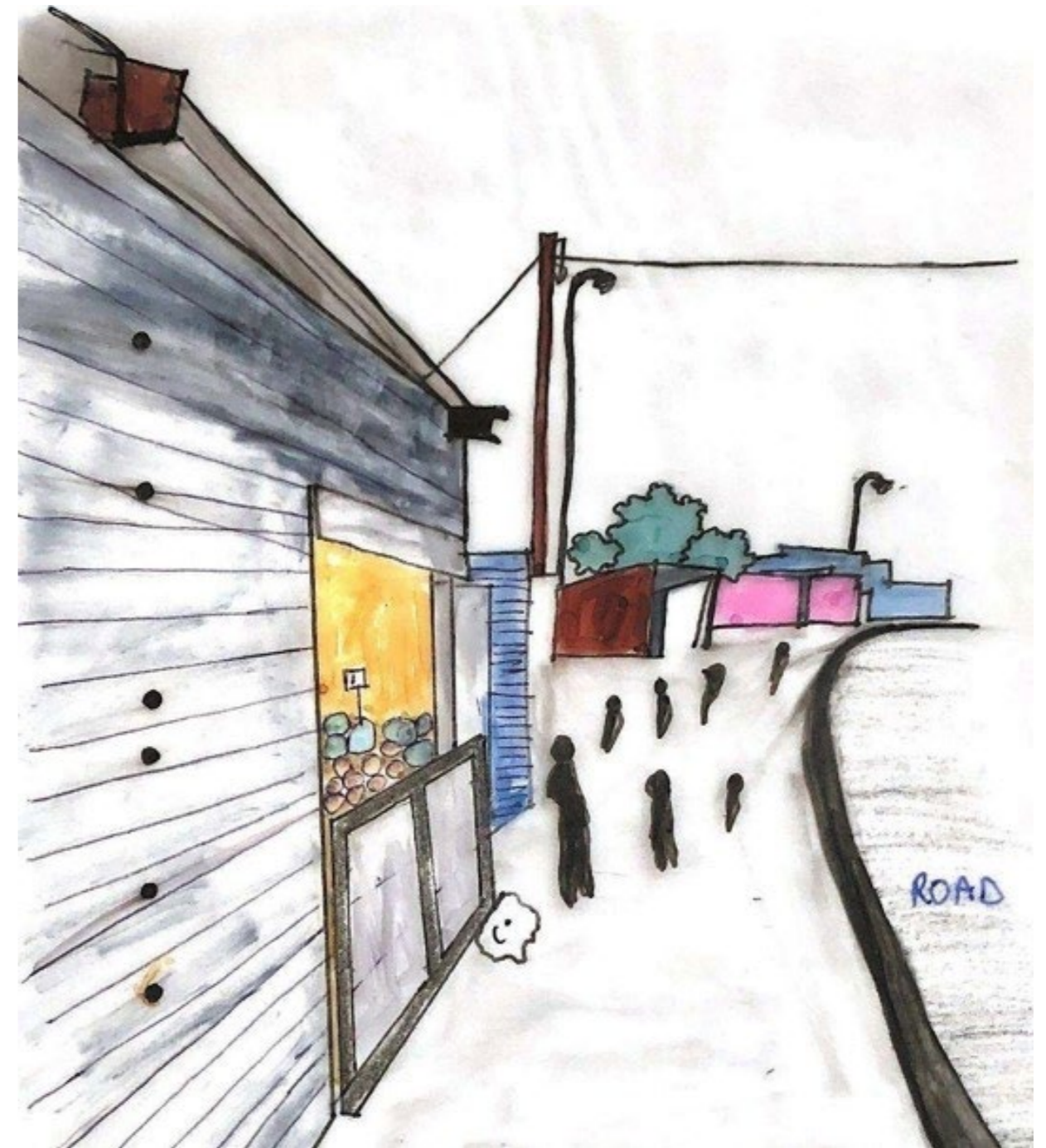
Declaration:

I acknowledge that plagiarism is unethical. Plagiarism involves using someone else's work and falsely presenting it as one's own.

I have adhered to the APA referencing convention for citation and referencing. Every contribution to, and quotation in, this study from the work(s) of other individuals has been appropriately acknowledged.

I affirm that this thesis is the result of my own efforts, and I have not provided, nor will I permit anyone to reproduce my work as their own.

Signature:



CREDIT: AUTHOR