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Community Centers as Models for Sustainability and Integration: Making a Case for Stjwetla, Johannesburg

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2025-09

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Selemena, Kolobetso Iponeng. (2025). Community Centers as Models for Sustainability and Integration: Making a Case for Stjwetla, Johannesburg. [Master's dissertation, University of the Witwatersrand, Johannesburg]. WIReDSpace. https://hdl.handle.net/10539/50035

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COMMUNITY CENTERS AS MODELS FOR SUSTAINABILITY AND INTEGRATION: MAKING A CASE FOR STJWETLA, JOHANNESBURG

University of the Witwatersrand, Johannesburg, South Africa

The Faculty of Engineering and the Built Environment

Master of Urban Studies in Urban Management

September 2025

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DECLARATION

I hereby declare that this thesis represents my own work submitted for the degree of Master of Urban Studies in Urban Management at the University of the Witwatersrand.



……

(Signature of candidate)

Date: 11/09/2025…….

ABSTRACT

Communities across cities of the Global South experience segregation and inequalities due to rapid urbanization and migration, affecting low-income communities in urban areas. This study investigates how the Stjwetla informal settlement in Johannesburg, can be integrated into wider society and how community centers can facilitate social and environmental sustainability. This study aimed to find out about existing community centers in Stjwetla and explore opportunities for integration with neighboring communities. The qualitative methods adopted in this study investigate various concerns, views, and recommendations by residents. While previous research on informal settlements focuses on housing and resilience, this study addresses the gap in investigating community centers in informal settlements. The findings reflect the presence of community centers in Stjwetla however the design and governance need improvement. The results of this study provide insight into how community centers can be mediums for bridging the gap between informal low-income and formal high-income neighborhoods.

Key words: Community centers, sustainability, integration, informal settlements

DEDICATION

I dedicate this work to my late father Kgotlaetsile Michael Dihutso who passed on right before I started my master's studies. His love and belief in me have been a reminder to persevere despite the challenges. My journey has been a rollercoaster of emotions, but I am grateful to have been his daughter.

I also dedicate this work to my precious nieces and nephews. I hope this inspires you to pursue your dreams and always aim for the best version of yourselves.

ACKNOWLEDGEMENTS

I would like to thank Wits – TUB- UNILAG Urban Lab for granting me a scholarship to study for my Master's in Urban Management. I am grateful the late Ms. Taki Sithagu, the programme coordinator as well as Ms. Zakiyyah Ayob for their unwavering support.

I thank my supervisor, Dr Paulo Moreira, for his guidance, patience and timely feedback throughout my research journey. Thank you Dr Moreira for giving me the opportunity to learn from you and for your contribution to my academic and professional growth.

I acknowledge and appreciate my mother and siblings for their unwavering support and encouragement. Being away from home, in a foreign country, facing intense academic pressure while processing the loss of my father was challenging. I am grateful for your love.

I appreciate my pastors, Prophet Boago F. Ramogapi and Pastor Kgalalelo Ramogapi for their encouragement to pursue higher education and for their spiritual guidance along this journey.

My heartfelt gratitude to my friend Katlego Keotshwaetse for being a constant moral support, cheering me on throughout my studies. Your friendship has been invaluable.

A special thanks to my Johannesburg Rivers church connect group members for being my family away from home.

Lastly, I thank all those who participated in my research process, colleagues in the School of Architecture and Planning, my lecturers and all the Stjwetla community members who availed themselves.

Above all, I am grateful to the Lord Jesus Christ for granting me the strength and opportunity to start and complete my studies. It would not be possible without His unwavering grace.

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LIST OF ACRONYMS

COJ	City of Johannesburg
SDGs	Sustainable Development Goals
CBOs	Community-Based Organizations
NGOs	Non- governmental organization
GCR	Gauteng City Region
RDP	Reconstruction and Development Programme
TRA	Temporary Relocation Area
SDF	Spatial Development Framework
IDP	Integrated Development Plan
UN	United Nations

CHAPTER 1: INTRODUCTION

1.1 INTRODUCTION

Rapid urbanization is a common phenomenon across cities of the Global South, including Johannesburg. The migration of people in search of better opportunities due to urbanization comes with both positive and negative impacts on the environment, economy, and social structures. Much research on informal settlements in South Africa has focused largely on housing interventions, disaster preparedness, and provision of basic amenities such as electricity, water, and sanitation. The literature examined in this study highlights the challenges faced by informal settlements and how community centers embody the essence of community by providing platforms for social structures and activities that are deeply embedded in the traditional way of life.

Community centers are not limited to physical spaces; rather, they serve as vital hubs for nurturing social connections, sustainability, and integration. They facilitate the sharing of knowledge, traditions, and cultural practices, promoting a sense of belonging and unity among community members. These centers play an important role in preserving and uplifting the rich heritage of communities, ensuring continuity for future generations especially in informal settlements. Huchzermeyer and Karam (2006), cited in Sonono (2021), argue that informal settlements are characterized by poor and inadequate infrastructure and basic amenities for health and sanitation, shortage of accommodation, unregulated densification of population and poor state participation. These challenges are common for informal settlements across South Africa and Stjwetla is not an exception.

According to Judin (2023), there is a three-way relationship between participation, empowerment, and sustainability in community projects, therefore the motivation for this study is to explore how community centers can promote social cohesion and sustainability in informal settlements. This study calls for action towards achieving Sustainable Development Goals (SDG) for improving the livelihoods of residents and their environment to ensure proper management of resources and land. These SDGs in focus are Goal No 3 - good health and wellbeing, Goal No 4 - quality education, Goal 8 - decent work and economic growth and finally Goal 11- towards sustainable cities and communities.

In the context of South Africa, Judin (2023) mentions that during apartheid, government-initiated community centers were built to provide social amenities for people of color in townships. However, as Judin (2023) explains, this initiative exacerbated segregation and limitations of black people because locating these community centers in racially designated areas isolated the black community therefore limiting their access to economic opportunities, social and communal facilities. In this research I discuss of effective models for promoting integration and sustainability of informal settlements through community centers in Stjwetla. This provides a basis for further

research in the Johannesburg setting, in particular the Stjwetla informal settlement. This research investigated potential projects or interventions that supports sustainable approaches to community engagement within Stjwetla.

1.2. BACKGROUND

Challenges of poverty in informal settlements are complicated and exist in many forms, as explained by the United Nations Human Settlement Program (UN-Habitat) Annual Report (2023). It continues to mention that unemployment among the youth in Southern cities is much higher compared to adults, and the report goes on to outline the challenge for achieving economic sustainability in informal settlements. Ballard et al. (2021) highlight that townships and informal settlements have the highest numbers of unemployed people, and most of the working urban population can only afford to live in townships. The challenge for this research was to investigate how community centers can offer solutions for environmental, social, and economic sustainability, and the integration of the informal urban population in Stjwetla. In this case, integration through creating opportunities for the Stjwetla residents to access services and facilities that connect them to neighboring affluent communities and the city.

Stjwetla is an informal settlement located near key nodal points in the City of Johannesburg. It is close to formal, high-income settlements such as Sandton, Kelvin, Marlboro Gardens, and the middle and low-income settlements of Alexandra, Extension 7 and Braamley. Industrial zones like Linbro Park and the major transport node, Marlboro Gautrain Station is within a walking distance from Stjwetla. This location offers better opportunities for job seekers and workers residing in Stjwetla, however the settlement is characterized by challenges of informality, poverty, poor sanitation, flooding, high levels of unemployment, and overcrowding. The challenge is that planning practices have caused segregation of people living in informal settlements from those in planned high-income communities and presumably formalized middle – income communities. The UN-Habitat (2023) notes that a large population in Sub-Saharan Africa lacked access to drinking water, sanitation services, and water in their homes. These conditions are relevant in Stjwetla as majority of residents live in shacks that have no access to water. Residents end up sourcing water for bathing, cooking, and drinking from communal water points or water taps

1.3. PROBLEM STATEMENT AND RATIONALE

Rapid urbanization has resulted in the migration of people into Johannesburg in search of economic opportunities therefore contributing significantly to the growth of Stjwetla settlement. Mushongera (2017) mentions that rapid urbanization poses challenges for local governments to effectively deliver services and accommodate the needs of communities living in poverty. Over the years, Stjwetla faced social, economic and environmental problems such as fires, water and sanitation shortages, high crime rates and flooding from the Juskei River. Sonono (2021:6) states

that “Stjwetla informal settlement exemplifies a community manifesting deep-rooted spatial and structural vulnerability that characterize South African human settlements.”

Spatial disparities occur between Stjwetla and its neighboring communities reflect the ongoing complexities related to informality, land occupation and it is not clear how the City of Johannesburg (CoJ) intends to solve these complex issues of congestion, unemployment, lack of housing and adverse living conditions. Housing and provision of basic amenities are the primary solutions that municipality offers. Sinwell (2011) opines that the South African government implemented the Reconstruction and Development Programme (RDP) to empower the residents living in poverty. However, Charlton (2014) cited in Mushongera (2017) observes that there are distortions in the housing sector where some people from poor backgrounds reportedly sell their RDP homes for cash and prefer to live in informal settlements. This may be influenced by various factors such as proximity of services and economic opportunities and better livelihoods. This observation highlights the complexities of informal low-income urban dwellers and suggests that informality is more than a housing issue. Informality encompasses spatial inequality, community dynamics and livelihood strategies.

Members of Stjwetla informal settlement are faced with problems of poor access to social services and amenities and poor skill transfer between the skilled, employed, vocationally trained or well of members and informal business owners, untrained, unemployed or underprivileged members of the community. Given that providing housing is a priority for the government, the community needs communal facilities towards integration, social cohesion and sustainability. In the conceptual framework below, I demonstrated the three main aspects related to my study and identify the relevant contributors for development of community centers.

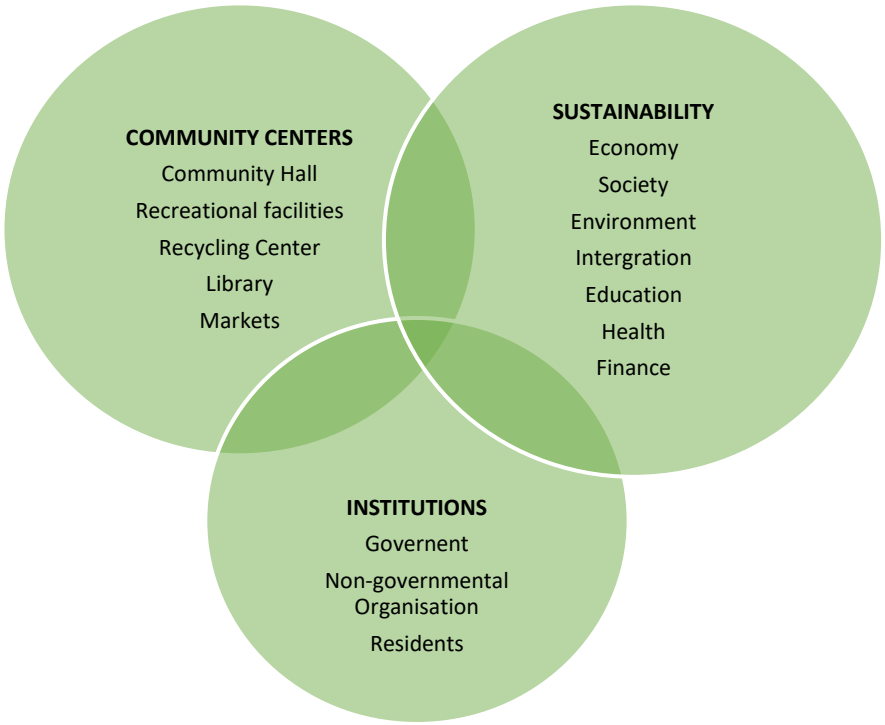


Figure 1: Conceptual Framework. (Source: Author's own construction)

1.4. RESEARCH AIMS AND OBJECTIVES

This research aims to contribute to optimizing the role of community centers in low-income and informal communities. It does so through the following objectives: (a) to establish the potential role that community centers play internally within low-income communities; (b) to understand the current roles and functions of the existing community centers in the Stjwetla informal settlement in Johannesburg; (c) to explore potential roles of community centers in achieving sustainability and integration of Stjwetla residents, including bridging the gap between Stjwetla and its neighboring, more privileged communities; and (d) to propose potential interventions for improving existing community centers.

1.5. RESEARCH QUESTIONS

1.5.1 Main research question

This research addresses the following as the main research question:

In what way do community centers facilitate integration and sustainability in Stjwetla, and neighboring areas?

1.5.2. Sub questions

The research addresses the following sub-questions:

- What are the existing roles and functions of community centers in Stjwetla?
- How do these community centers contribute to or hinder sustainability and integration within the community?
- How do community centers in Stjwetla support connections between residents and neighboring, more formal communities?
- What are the challenges and opportunities for improving community centers to meet the needs of Stjwetla residents?

1.6. EXPECTED FINDING

This research aimed to explore how community centers facilitate economic and social sustainability, as well as integration, bridging the gaps between informal settlements and affluent neighborhoods. Furthermore, the anticipated outcome is that community centers are multi-purpose, they link communities, contribute to economic resilience, skill transfer between residents and provide access to resources that are lacking in informal communities. The study aimed to find solutions that enable participation of informal dwellers beyond the existing social ills and barriers to the integration of informal communities into wider society. Lastly, it also seeks to identify existing community centers in Stjwetla and how they are managed to propose context-specific interventions to improve the existing structures.

1.7. RESEARCH METHODS

This research adopted qualitative methods for data collection inclusive of interviews, observations, drawing and mapping. Semi-structured interviews with key stakeholders in the Stjwetla community and representatives from local institutions such as the City of Johannesburg are used as a tool for site studies. The participants for this research are identified with the help from community representatives who have better knowledge of the informal settlement.

To study and assess the presence or lack of community centers in Stjwetla, site visits were adopted. Drawing and Mapping were used as tools to understand the spatial dynamics of Stjwetla and to identify potential locations for new community centers as well as possible interventions for improving existing ones

1.7.1. Data collection instruments

To study and assess the presence or the lack of community centers in Stjwetla, site visits and field observations were conducted. Mapping was used as a tool to understand the spatial dynamics of Stjwetla and identify context-specific interventions for community centers whether through

improving existing structures or proposing new ones based on the research objectives. Regular site visits were scheduled with assistance from the community representatives and patrollers. According to Crampton and Krygier (2010), mapping is a creative representation of how people use space; therefore, existing community centers were mapped and analyzed in terms of function, governance, and spatial arrangement.

The table below outlines the different tools that will be used per research method.

RESEARCH METHODS	TOOLS
Desktop Research	Books, online journal, articles
Interviews	Audio recording device Consent forms Interview guide
Observation	Photography Notebook for notetaking Site walkabouts
Drawing and Mapping	Site walkabouts Site analysis diagrams Photography

Table 1: Table showing research methods. (Source Author)

1.7.2. Sampling

The participant groups include ten members of the community between the ages of 18 and 65 years, two leader representatives, and one representative from the public sector. The community leaders and patrollers accompanied me on different days to the houses and informal sector stalls of the community members, and they introduced me to the residents before I interviewed them. The participants were selected based on their active involvement in the day-to-day life in Stjwetla, which offered more knowledge and insight based on the research objectives.

1.7.3. Analysis

This research adopted exploratory and comparative analysis. The analysis aimed to identify places in Stjwetla with existing community centers as well as informal common meeting points that may serve similar functions. These existing community centers were mapped and analyzed in terms of function, governance, and spatial arrangement. To locate these spaces, regular site visits were scheduled with assistance from the community representatives.

1.7.4. Ethical Considerations

Before conducting fieldwork, an application for ethics clearance was submitted in line with the University of the Witwatersrand requirements. I drafted sample questions for each participant group and provided consent forms. Where participants have low literacy, I implemented verbal consent. I handed the consent forms to the respondents before the interview and explained the contents in detail and proceeded only after they gave verbal consent and signed the forms.

Consent for taking photographs and conducting field observations was not required. I ensured not to take photographs in a way that anyone is recognized by avoiding close-up shots. I allowed people time to step aside in crowded and busy areas of the settlement before taking a picture.

1.7.5 Limitations

Working with the community requires trust and getting to know them. The one-year time limit to this research, therefore, was a challenge to get to know the people well and know their intricate needs. Secondly, the Ethics clearance certificate from the University was issued later in the year; therefore, sourcing approval from the City of Johannesburg to interview representatives was delayed. Some of the representatives were not forthcoming for scheduling interviews, as I was only able to interview one representative from region E. The interview was not successful and I could not gather the needed information because the representative did not have information on my study area. Language was a limitation for conducting interviews with residents who do not speak English, Tswana or Pedi and some of them declined to do interviews on that basis. Lastly, there was not sufficient number of published maps and other key documents with information available about Stjwetla and other informal settlements.

1.8 RESEARCH REPORT STRUCTURE

This report is structured into six chapters; following the introduction chapter is the literature review chapter on community centers, sustainability and integration highlighting key definitions and debates on informality in urban setting. The third chapter is a detailed study on Stjwetla followed by the fourth chapter on the findings and analysis of the key themes on the fifth chapter. The sixth and last chapter is the recommendations and conclusions that provide a summary to the research findings.

CHAPTER 2: LITERATURE REVIEW

2.1 INTRODUCTION

The literature in this chapter examines and discuss existing arguments on integration, public space, and sustainability in informal settlements. The intent is to discuss the nature of community centers, their benefits in society, and the current practices of managing these facilities. Case studies discussed in this chapter provide a basis for the implementation of community interventions in Stjwetla to bridge the gap between conditions in the neighborhood and surrounding communities.

2.2. SUSTAINABILITY AND INTEGRATION IN THE BUILT ENVIRONMENT

Various literature highlights that sustainability in Africa and Southern cities is a major concern. Suriyankietkaew et al. (2022) opine that the continent faces problems of climate change, inequality, environmental hazards, and political instability. Nations must align their efforts with sustainable development goals to ensure improved living conditions for future generations. The African Agenda 2030 through the Sustainable Development Goals, emphasizes the importance of integration and inclusivity with the goal to ensure no one is left behind.

Literature on sustainability is not to be confused with Sustainable Development. According to UNESCO (2002:412), "[s]ustainability depicts a paradigm that seeks to protect the planet's life support systems to ensure longevity for humans and other species." Sustainability is conceptualized in three different categories; ecological, economic and social. (Ibid…). UNESCO (2002) adds that ecological sustainability is about the planet and its carrying capacity and economic sustainability about the standard of living for people, and social sustainability refers to human relationships, well-being and inclusive community life related to accessibility, social justice. In addition, Suriyankietkaew et al. (2022) mentions the three pillars of sustainability as: people, prosperity, and the planet. This also translates to social goals, economic goals and environmental goals respectively. Social sustainability focuses on community engagement, participation and inclusion. To achieve sustainability, there is emphasis on the need to align the economic practices with socio –environmental responsibility.

In light of debates on the definition of sustainability, Bell and Cheng (2002) argue that major changes such as climate change, high levels of pollution and depletion of natural resources are impacting the society and if left unchecked will affect future generations. Sustainability in this case refers to meeting the needs of people, their quality of life without compromising the needs of future generations and minimizing environmental impact by addressing the environment, society and development problems.

The focus of this research primarily is social and economic sustainability related to communal centers. Sustainable development can be defined as the changes made to social systems and

institutions towards actualizing sustainability, (UNESCO 2002). These strategic changes need a plan of action towards addressing the present environmental and developmental challenges with a long-term goals in mind (ibid). Similarly, Jain and Jain (2020) refer to sustainable development as an improvement of people with consideration for the environment. It is about creating a balance between the economy, society and the environment. Visagie and Turok (2020:351) argue that "African cities cannot be expected to prosper while the majority of residents live in sprawling informal settlements with no prospect of improvement beyond the provision of basic services." Furthermore, Jain and Jain (2020) emphasize that actualizing sustainable development is a collective effort that requires the willingness of individuals, governments, leaders and the society and the same applies to achieving sustainability.

Adopting Green building conventions is one way of contributing to sustainability. According to Addy et al. (2022), green buildings offer more advantages than conventional building practices as they have low operational costs, lower energy costs, energy savings, bigger profit margin for investors, increased use of local materials and an increase in productivity. Government investment plays a major role and it should not only focus on providing services but consider the environmental and social implications to ensure improving the quality of life does not negatively impact the environment. Additionally, urban planning frameworks play a significant role on the environment. Cilliers and Victor (2018) cited in Huchzermeyer (2021) highlight that through planning, conflicts arising from politics and social demands for land can be resolved while considering the carrying capacity of the environment. It is important to ensure that the quality of life for informal dwellers is improved, however, consideration should be taken into account for environment.

Integration of informal settlements with affluent urban neighborhoods is a critical strategy to contributing to sustainability and resilience of communities. According to Hamza (2021), integration is a process that involves reciprocity between communities and active involvement from displaced communities and host communities. Vitus and Jarlby (2021) highlight that integration has four main components being participation in activities, education, employment, well-being, social relationships through mutual relationships, belonging with other people in the society, and competencies in language, information and knowledge about other cultures. Furthermore, integration is about mutual involvement or adaptation where groups from engage in building social cohesion and inclusion. Lefebvre's concept of the "Right to the City" (1968) highlights the importance of integration and agency for marginalized groups within the built environment and their active participation and visibility in decision making processes. Peter and Meyer (2023) emphasize this concept that every group has claims, uses and own vision for the city that should not be neglected. Furthermore, they add that in smart city initiatives should be sensitive to both the formal and informal integrated to guard against exclusion and promote integration. For the purpose of this research, integration is a process of enabling individuals and communities to relate with one another for participating in economic, societal and environmental dimensions.

As discussed by Hamza (2021), integration has different dimensions that includes housing, education, employment, culture and societal participation. This process requires intentional urban interventions that promote spatial justice, walkable neighborhoods, communal spaces and access to opportunities in cities. The concept of integration aligned with the objective of this research, promotes a collective right to the city and recognizes informal settlements as key contributors to urbanization. Meaningful integration can be achieved thorough mixed use buildings, participatory design walkable neighborhoods and accessibility to resources and markets. According to Doğan (2020), accessibility is essential for achieving sustainability as it enables communities to participate in opportunities that improve their quality of life and work. Informal settlements are not to be viewed as problematic and to this effect, urban development incorporate community centers to facilitate participatory planning, integration of informal communities with affluent neighboring communities towards sustainable urban livelihoods.

2.3 THE INFORMAL CITY

Informality in developing cities is amongst the debated topics in academia. Some people view informality as illegal and believe it should be eliminated while others advocate for it to be recognized. According to Visagie and Turok (2020), Informal settlements are generally characterized by unplanned clusters of cramped single-story shacks, spatial inequalities, congested public spaces and limited access roads for both vehicular and pedestrian circulation. They signify spatial segregation and a mismatch between the population and the infrastructure densification, lacking provision for mixed land use planning. According to Woodcraft et al (2020:298), “poor-quality city and settlement infrastructures undermine efforts to prosper and live well, regardless of the material resources households can deploy.” It is said that formal and informal settlements alike have challenges of sanitation whereas informal settlements are on the highest receiving end.

The World Bank (2022) cited in Madzaramba (2024) points out that close to 26% of the population in South Africa live in urban slums. This means that a significant percentage of the population lives in informal settlements. This is a result of rapid-urban migration that leads to residents looking for affordable and less costly solutions for accommodation in cities. According to Huchzermeyer et al. (2006:20) “informal settlements are an indication of a failure of the public sector, the legislative framework and the economy to provide conditions through which the poor may be housed formally.” Madzaramba (2024) further adds that informal settlement residents have poor access to social amenities compared to the people living in planned settlements. Additionally, Visagie and Turok (2020) emphasize that informal settlements face challenge of shortage of space for accommodation, transportation routes, and infrastructure networks that are essential for community centers to be established.

A key aspect of development is ensuring the wellbeing of the urban population. Abubakar, Romice and Salama (2019) opines that the majority of people living in cities have a better life but the living conditions differ according to affordability. People migrate to informal settlements near

developed cities for better living conditions but inequality exists. In most cases priority is given to private space over public spaces therefore is it rare to find open spaces in densely populated informal settlements. On the contrary, Williams et al. (2022), highlights that although informal housing is often spatially and legally insecure, it offers majority of the informal population access to spatially compact networks. This is to say that where people work, live and socialize are compact and in close proximity but this comes with the challenge of overcrowding and ultimately under-serviced settlements.

Inequality in allocation and development of land is prevalent in urban areas in South Africa. Concerning development of land in urban areas, Huchzermeyer (2017) argues that there are loopholes in the law and elite developers take advantage adding to the inequality of developments in urban areas. Coggin and Pieterse (2012) cited in Huchzermeyer (2017) advocate for the inclusive urban spaces that residents can identify as their own, in this case, building a case for developing community centers that residents can adopt as their own To this end, it can be argued that community centers play a role in the creating bridges for informal and the formalized communities to participate in decision making and have access to amenities. They facilitate connections and interactions between different sectors of the community and the surroundings.

The government has put measures in place to develop informal settlements through RDPs and the informal settlement upgrading policy as solutions for informal settlements but there are limited community centers serving the implemented government housing solutions. In my opinion, it may be that the focus lies solely on providing housing and basic amenities. Efforts for new housing developments are commendable but can be improved. Williams, Charlton, Coelho, Mahadevia and Meth (2022) highlight that the challenge of informal settlement relocation through the RDPs is marginalization, displacement from people's places of work, and increased travel time. However, Williams et al. (2022) argue that the focus on delivering housing, infrastructure and services to afford people decency is in line with the global standards for sustainability which is to leave no one behind and afford people the dignity of basic housing. Efforts to ensure sustainable human settlements are commendable but provision for public spaces and community centers should be embedded in informal settlement upgrading programs.

An identified gap in the COJ policies is that Johannesburg Land Use Scheme of 2016 has provision for affordable housing and none for community facilities. The purpose of the land use scheme according to the Johannesburg Land Use Scheme (2016:12), was to "promote economic growth, social inclusion, efficient land development; and minimal impact on public health, the environment and natural resources." In addition, the City of Johannesburg Land Use Scheme (2018:3), the scheme was also set to guarantee the right to sustainable cities. These points address several factors related to sustainability and integration however, they are not clearly defined and it leaves more room for interrogation. One of the main debates in informal settlement publication and discourse is the notion of 'the right to the city.' The Land Use Scheme

(2018: 8) ambitiously states one of the goals to "guarantee the right to sustainable cities" to address the right to public services, work, and leisure for future generations.

Informal dwellers in cities choose where to reside based on employment opportunities to support their livelihoods however these locations can be detrimental to their wellbeing. This is the case for residents that build shacks on dumping sites, river banks and flood plains yet they place themselves at the risk of flooding and damage to property. The City of Johannesburg has frameworks to manage land use but informal settlers continue to encroach and illegally occupy such areas. What was meant to be temporary settlements has now become permanent and have densified over the years due to urbanization. The city has the responsibility of providing basic amenities such as water, sanitation and electricity. The efforts are towards achieving sustainable development Goal 6 for clean water and sanitation, Goal 10 for reduced inequalities and Goal 11 towards sustainable cities and communities.

Community based organizations are a potential for accelerating the implementation of sustainable development goals and ultimately sustainability. Sherr et al, (2016) cited in Haag et al. (2022) argues that community-based organizations (CBOs) have been proven to cater for vulnerable and marginalized groups by providing them with social rehabilitation programs to improve their mental and physical wellbeing. Furthermore, Haag et al. (2022) elaborate that they found that the youth in CBOs have better access to healthcare, nutrition and funding for their projects. This highlights the importance of community projects such as public space upgrades, health, sanitation, and multi- stakeholder partnerships between government, private companies and the community in improving the livelihoods of residents in informal settlements.

2.4. INVESTIGATING COMMUNITY CENTERS

Johannesburg is expected to grow to the status of a mega city in 2030 (United Nations et al. 2014), implying a rise in the level of environmental pollution. Kimanuka (2015) cited in Oyakale (2018) emphasizes the need to re-echo sustainability as a pressing issue to be emphasized in the quests for economic growth and development. Regarding community services, Woodcraft et al (2020) argues that access to communal services such as settlement sanitation and water, free childcare, and healthcare is important for improved living conditions. Providing communal services in informal areas mitigates the lack of infrastructure regardless of the inability of an individual to afford basic services. Where residents are not able to afford basic amenities, stakeholders such as non-governmental organizations and the local government may partner to ensure that no one is left behind. Haywood et al. (2019) adds that multi-stakeholder platforms are an important contributor towards achieving the SDGs and supporting the leadership to reach targets.

Research on community centers shows no single definition but a broad category. Stetsky and Kamagina (2021) describes them as social institutions that include multiservice, health, recreational, youth, elderly, and media centers. Tanner (2015:17-1) highlights them as

"multipurpose buildings" serving diverse functions such as meetings, childcare, cultural events, sports, education, and leisure. Essential requirements are flexibility and multifunctionality, accommodating sport, recreation, education, health, social, and service needs.

Focusing on the nature of community centers, Naji, Almaimani and Rahaman (2020) highlight that community centers are synonymous with multifunctional space, civic centers, community halls, civic centers, recreational centers which offer educational and recreational platforms for access and promoting active participation from citizens of different age groups. Furthermore, they categorize community centers as small, medium and large and /or extra – large community centers. In this category, small community centers cater for 100 – 1,100 people and this is within the catchment on informal settlements that have a lower population. Before building community centers in a neighborhood, social and physical environments should be considered and this goes to show the importance of localizing solutions in any settlement and catering to different age groups.

On another note, community centers are areas of social interaction and can also be referred to as public spaces. The Charter on Public Space by UN-Habitat (2020:8) defines public spaces as "places that are publicly owned or of public use, accessible and enjoyable by all for free and without a profit motive." Site-Specific Assessment Guidelines for public spaces, suggests that community centers should be within walkable distance and close to homes to ensure easy access (ibid…). Judin (2023) argues that more than being buildings or architectural structures, community centers are about social processes involved in their construction and the meaning they hold to the end user. This means that community centers are not only physical structures but also the social processes that create and sustain them, whether formal or informal. For example, a community hall represents a formal space, while water points function as informal gathering places – yet both can be understood as community centres. In a study, Madzaramba (2024) found out that facilities such as a public standpipe serve many families and women and young children, usually gather and hold conversation whilst waiting in long queues for water emphasizing that community centers are not necessarily buildings.

In my assessment, successful community centers require consultations and integrating existing livelihoods of residents. They need to provide opportunities for learning, economic activity, and leisure. Community centers are areas of social interaction and cohesion that promote neighborhood relations and indirectly contribute to reducing crime rates. On the other hand, other terms closely related to community centers are places of amusement which the Johannesburg Land Use Scheme (2018) describes as "buildings for the purpose of exhibitions of trade or industry or other recreational purposes" and places of amusement which "have civic function to serve community needs of an area, which may attract people in relatively large numbers." In this case such places play a role in leisure, recreation, education and public integration.

Furthermore, the Johannesburg Land Use Scheme (2018) refers to public open space as buildings or land under the governance of the state for providing the public with space for recreation, parks and communal gatherings. Some of these public spaces have access control therefore limiting access for the public. In one hand, having access control to community centers may defeat the purpose of integration and free access to anyone in the community. It may imply that the facilities are for a certain group of people. The lack of access control on the other hand may be a risk for vandalism from juvenile delinquents or thieves. Therefore, it is critical to assess the issue of security and access without limiting who can access the community centers.

One of the SDGs listed by the United Nations (2015:21) is Goal 11.7 which aims to 'provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities.' Achieving this goal requires the collective engagement of diverse community stakeholders. According to Haywood et al. (2019), the global goals for sustainable development has five actors; civil society, UN Cluster, government, Business and science and academia, municipal, provincial and national level. To make progress in providing public spaces, it is necessary to have accountability structures and a sense of shared responsibility from each stakeholder involved.

2.5. A CASE FOR COMMUNITY CENTERS

In settings where informal dwellers lack access to basic amenities such as electricity, water, and sanitation, community centers have the potential to meet these needs (Sonono, 2021). Richards, O' Lery, and Mutsanziwa (2007) highlight that public amenities play a critical role in improving the standard of living. Secondly, UN-Habitat (2020) also adds that public spaces offer residents with means to improve their economic status through opportunities to earn a living. Further discussion argues that most economic and social activities in Johannesburg are closer to the main highways and Ballard et al. (2021) argue that transportation nodes and infrastructure attract people and contribute to densification.

Stjwetla is strategically located near the Marlboro Gautrain station and the highway and in my assessment, this may provide better access to neighboring communities therefore making integration with privileged communities feasible. Nyashamu et al. (2020), cited by Sonono (2021) assert that informal settlements are often excluded from the urban land. Community centers can be implemented as places of integration for informal settlements and developed communities in their proximity. Anwana and Owojori (2023) argue that further research for upgrading of housing and infrastructure in informal settlements should address multi-stakeholder partnerships and prioritize on meeting the needs of the community.

The United Nations Habitat (2020) describes low levels of ICT skills as a barrier to connectivity and community centers can act as places of education and skills training. These can involve the provision of information and communications technology (ICT) infrastructure to educate and train the public with skills that can be commercialized and improve the level of education. A

community center can serve as a place of recreation and education for both the young and old and in other cases offer employment opportunities for the unemployed youth. Richards et al. (2007) allude that the popular recreation for Alexandra was church attendance as opposed to physical activities. A church building is an example of a community center but in my assessment, it needs complementary spaces that cater for other needs of the community such as leisure.

Different interventions can be implemented to facilitate community engagement and sustainability. According to Parker and Rubin (2023), governments need to upgrade the economy of informal settlements to alleviate unemployment, encourage community engagement, and promote densification and multiple land use. There is a focus on promoting social integration and multiple land use and Judin (2023) argues that this can be achieved through developments such as mixed-use infrastructures to cater to different age groups in informal communities. In addition Visagie and Turok (2020) emphasize that providing community centers and mixed use zoning caters for a variety of facilities to live, work and play. The Land Use Scheme of Johannesburg (2018) lists community centers under the social/ recreational or institutional at best it regards community facilities as institutional, in the same group as social clubs and youth clubs. The Land Use Scheme of 2018, made provision for social open spaces and ecological open spaces which are for parks, horticulture, active and passive recreational activities and for the conservation of natural areas.

2.6 GOVERNANCE AND MANAGEMENT OF COMMUNITY CENTERS

The existing self-governance system in Stjwetla can be adopted to manage community centers. According to Pheni (2020:25), “Stjwetla informal settlement has leadership structures in place” and these are responsible for engaging with the City of Johannesburg and the community of the Stjwetla informal settlement, coordinating activities with other Non-government organizations. Woodcraft et al (2020:298), allude that “poor-quality city and settlement infrastructures undermine efforts to prosper and live well, regardless of the material resources households can deploy.” With these challenging realities, communities have taken initiative to self-govern through ward committees. Furthermore, Pheni (2020) adds that the ward committee acts as a mediator between the COJ and community members, ensuring they provide proper channels for discussion and expressing grievances.

The community has partnered with the service providers such as Gift of the Givers, City Power and Joburg Water demonstrating multi – stakeholder partnerships in the running management of community centers. Members of the public can be employed by committees for the municipality to work in these centers as healthcare workers, resource managers, accountants, and facility managers. As argued by Sinwell (2011), communities formed yard committees and ward committees to enable themselves to solve issues within their residences and promote community involvement with government representatives. According to Van Rensburg (2004:35), the Department Of Arts, Culture and heritage Services has a responsibility to

> "Promote sustainable arts, culture and heritage programmes to support the vision of a world-class African city. This requires the development and implementation policies for ensuring equitable provision of cultural services to promote access and redress imbalances of the past and providing a point of contact for national and cultural exchange."

Speaking on inclusive economies, the GCR website cites that "All stakeholders recognize that an "inclusive economic development" paradigm is required to address low and imbalanced economic growth In the GCR." This inclusive economy includes including marginalized economic actors and linking communities to economic opportunities and mitigating unbalanced growth. Modiba, Katumab and Cheruiyot (2018) have cited the challenge for addressing development imbalance in the Gauteng region especially concerning the access to services, poverty and environmental risks.

Funding is essential to sustaining community centers, covering development capital, daily operations, and long-term maintenance. Common sources include provincial and national grants, city revenue collection, loans, donor contributions, public contributions and public-private partnerships. The City of Johannesburg's Integrated Development Plan (IDP) 2020/2021 highlights the need for alternative funding mechanisms such as PPPs, loans, cash reserves and grants to ensure sustainable delivery. Funding can be grouped into three categories: capital funding (for infrastructure development), operational funding (to sustain programs and services), and maintenance funding (to preserve and renew assets).

Learning from the Gando Primary School case in Burkina Faso, Kere (2012) shows how funding was secured through a co-founded organization, enabling construction tailored to community needs. This example demonstrates that external financial support, combined with active community participation, enhances the sustainability of projects. Kere also stresses (2012) the importance of training and empowering communities to take on management roles, ensuring long-term stewardship and the effective maintenance of shared facilities.

2.7 PARTICIPATORY PLANNING AS A TOOL FOR SUSTAINABILITY

Participatory planning and integration are integral parts of sustainable development. At the center of sustainable development is community engagement and public participation. According to UNESCO (2002:431), "a multi stakeholder approach is necessary to create a more integrated framework for understanding the implications of our actions." Public participation in decision making and a multi stakeholder approach is key in the implementation of sustainable development (ibid). According to Woodcraft et al (2020:290)

> "Co-production is understood in this article as a deep engagement with different perspectives to create knowledge that can support the development and implementation of progressive policies and planning; resting on an epistemology of knowledge that challenges

unitary visions and instead embraces knowledge production borne of the confrontation and juxtaposition of multiple ways of living, working and seeing the city."

Ntwana and Naidoo (2024:573) add that "informal settlements invent their own structures that would represent them at local government" and further adds that community leadership structures are the common solution for public participation. Woodcraft et al (2020) advocate for the appreciation of citizens' views, knowledge, experiences, preferences and needs. Interventions towards informal settlements need holistic approaches and multi-stakeholder participation to be inclusive of the informal dwellers. Aina and Bipath (2022) highlight the need for the government, sponsors and private institutions in providing public infrastructure in townships to afford underprivileged parents to send their children to school. Informal dwellers in the Stjwetla community practice recycling as a mode of economic activity which in turn has environmental benefits. According to Omran et al. (2012), cited in Oyakale (2018:2356), "Participation in recycling could be enhanced if policymakers possess a proper understanding of the reasons why households are reluctant to recycle waste."

Dakyaga et al. (2020) argues that informal communities possess ingenuities that should be formalized instead of adopting planning principles that perpetuate segregation. Developments should be localized to suit the unique needs of the context. According to Woodcraft et al (2020), persistent development of informal settlements are a result of exclusion and lack of service delivery in many cities in Africa and the same applies to Johannesburg. This is to say that informal settlements emerge as makeshift solutions by people who feel excluded from formal urban developments as a way to meet their needs outside of the support of government. However, Parker and Rubin (2023) argue that local governments attempted to address the mismatch through spatial planning but have not been effective. This highlights that developments need to cater to sustainable development for the environment and social needs of the community as well as integration of informal communities into broader urban systems.

Community centers present the opportunity to serve as learning centers for children in society in the form of after-school education According to Aina and Bipath (2022), Infrastructure development has an impact on promoting teaching and learning and the learning institutions should provide learners with good hygiene and sanitation. In addition, playgrounds are essential for learning. Aina and Bipath (2022) also argue that children need enough space and equipment to allow them to learn through play, exploring and use their energy in development activities.

The Department of Housing (2005c:16) cited in Huchzermeyer (2006: 54) cites that "early-childhood development facilities, primary health clinics, recreational and community facilities [and] public open space improvements" are necessary for social developments. These developments include parks, playgrounds, gardens and community halls. According to Aina and Bipath (2022), furnished playgrounds improve the development of children's social skills and physical development. Woodcraft et al (2020) argue that community knowledge should be valued

and actively considered in mitigating challenges faced by urban dwellers. This knowledge is through day-to-day activities, management of resources, and development of shelter. The community has inherent knowledge that is shared with policy-makers and implementers to ensure proposed developments meet their needs whilst serving the interest of the stakeholders. Woodcraft et al (2020) argue that inclusion and integration of visions amongst stakeholders bridge the gap for informal dwellers.

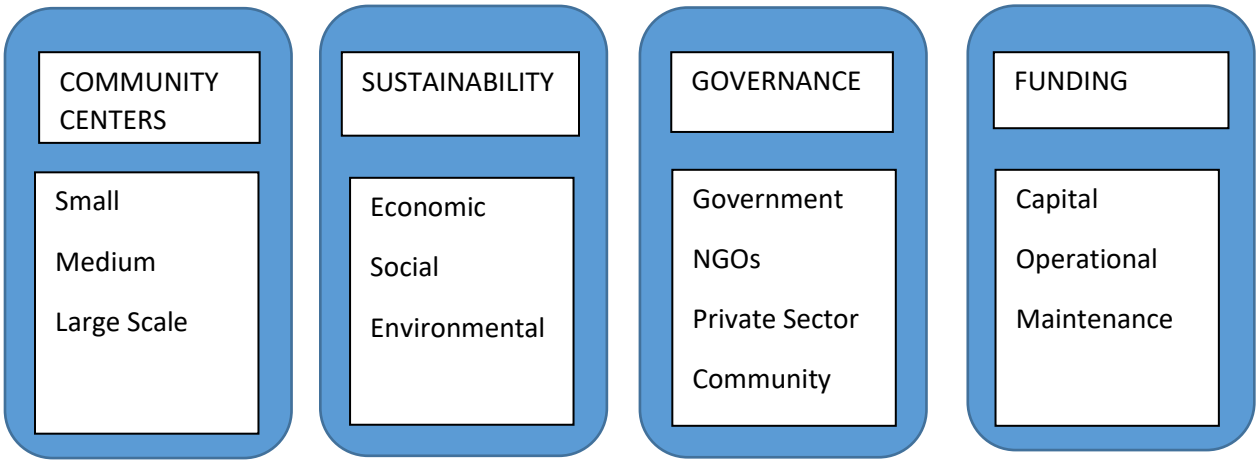


Figure 2: Conceptual Framework from literature review. Source: Author's own construction.

The framework highlights necessary components for the integration and sustainability in Stjwetla. These actors are individually structured however, they should relate to one another to integrate the informal settlement with the high and middle income neighboring settlements. Community centers are categorized into small, medium and large scale based on unique site imperatives such as population and spatial planning. There is interrelation between institutions and funding provision for community centers and the design interventions for environmental sustainable community centers and funding. To achieve sustainability, financial investment is needed for building new facilities or improving the operations of the existing community centers.

2.8. CONCLUSION

Community centers have the potential to facilitate integration of informal dwellers in the decision-making processes including the public sector, the private sector, the community, and academia. They are spaces for social and economic engagement, providing access to opportunities and neighboring communities. Participatory processes in informal settlements help facilitate the involvement of the community by bridging the gap between the formal or developed urban dwellers and the informal dwellers and including different perspectives from all stakeholders. The discussion in this chapter emphasizes that community centers are important for improving sustainability in informal settlements. It has been established that the three main pillars of sustainability ensure the needs of communities are met without damaging the environment. Furthermore, integrating the community with the private and public sector decision-making and implementation policies will facilitate public participation. The literature discussed highlights the importance of considering the views and inherent skills and knowledge of the informal dwellers in proposing communal facilities or improving the existing ones. Policymakers can develop inclusive approaches for sustainable development when they adopt participatory approaches.

CHAPTER 3: CONTEXUALISING STJWETLA

3.1. INTRODUCTION

This chapter provides a detailed study of the Stjwetla informal settlement, focusing on the existing settlement in relation to neighboring communities, the economic and building construction practices and the challenges faced by the community members. The Gauteng City-Region Observatory website (2024) lists that the province has a diversity of cultures and languages but is often challenged by inequality. This section highlights the contrasts and connections for reciprocities between the Stjwetla residents and the neighboring communities. Further exploration is drawn to building construction trends, environmentally sustainable practices in Stjwetla to understand the livelihoods and strengths of the community.

3.2. GAUTENG CITY REGION AND CITY OF JOHANNESBURG

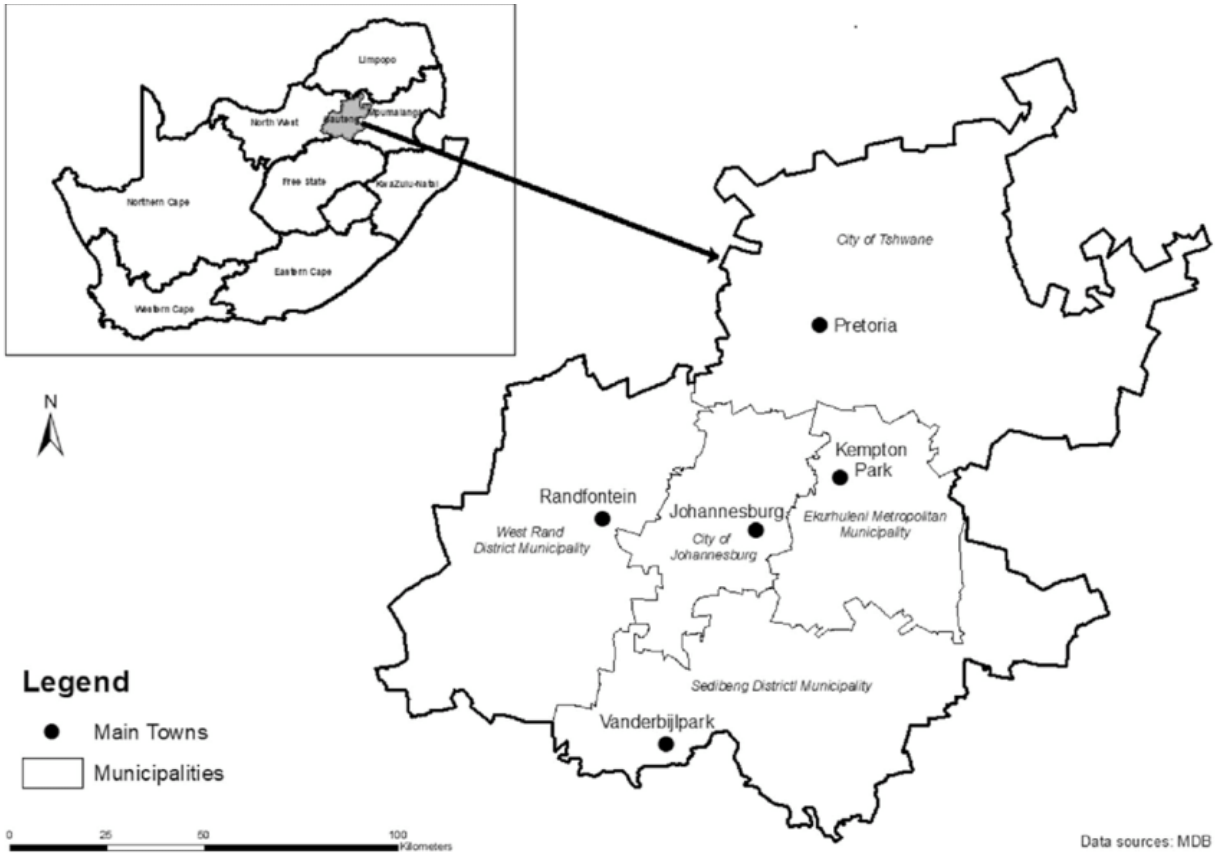


Figure 3: Location of City of Johannesburg in relation to the Gauteng Province (Source: MDB)

Johannesburg is considered as the City of Gold, a top city in the Gauteng Province. The CoJ IDP (2020/21) cites that Gauteng contributes as the most populated of all provinces in South Africa. Furthermore, the CoJ SDF (2016:19) alludes that there are 'high density residential areas (the

"townships") are separated from urban economic centers and movement structures of the city" The goal for the COJ as elaborated in the COJ SDF 2040 (2016:20) is to build a compact, inclusive, connected, resilient and generative city in order to facilitate spatial transformation. The goal for resilient city involves preserving green infrastructure, density and promoting public space and sustainability. The focus for the Master plan includes spatial development, social integration, environmental soundness and sustainability. Provision is required for public spaces and the CoJ SDF (2040:26) states that "public space should make up at least 50% of total area at neighborhood level, including 15-20% public open space, and 30 – 45% for streets including sidewalks."

The City of Johannesburg is a top-ranking city to live in and do business however, it is characterized by spatial inequality, with townships and informal settlements being the most deprived. Although it is considered as "a major economy in the global south, and the top performer in Africa" as stated by the CoJ SDF 2040 (2016:37), caution is needed to ensure it is inclusive. Motloung (2024) and the IDP (2020/21) explain that informal settlements, especially those in Gauteng are home to migrants and residents from rural areas and neighboring countries in search for jobs and political asylum. According to Huchzermeyer (2021:50), "the creation of informal settlements may be deemed 'informal' but is not entirely outside of the law, as certain legislative provisions secure rights to occupation and to improvement within this mode of existence."

3.3. CONTEXTUALIZING STJWETLA INFORMAL SETTLEMENT IN JOHANNESBURG

Stjwetla is an informal settlement located near key nodal points in Johannesburg, including Sandton, Linbro Park, Kelvin, Marlboro Gautrain Station, Alexandra, and the Juskei River. Pheni (2020) estimated its population at 5,000 in 2014, but this has since grown due to rapid urbanization and migration in search of economic opportunities. At the city level, the Johannesburg Spatial Development Framework 2040 (2016) identifies in-situ upgrading of informal settlements as a priority, to be implemented in the best interests of residents and aligned with both municipal and national policies. Stjwetla's proximity to major transport routes and economic zones makes it highly accessible to employment opportunities, offering a significant case study for exploring how informal communities can be better integrated into the wider city.

There is evidence of public recreational centers and health clinics and community halls in Johannesburg however, these facilities are spread across formalized and well-developed communities compared to informal settlements. This implies that there is little to no adequate communal facilities infrastructure in informal settlements compared to the middle-income formal settlements. Borofsky and Günther(2022) highlight that informal settlements face a major challenge of access to infrastructure, low income earning jobs, poor access to water and sanitation, little indoor or private outdoor space and Stjwetla is no exception.

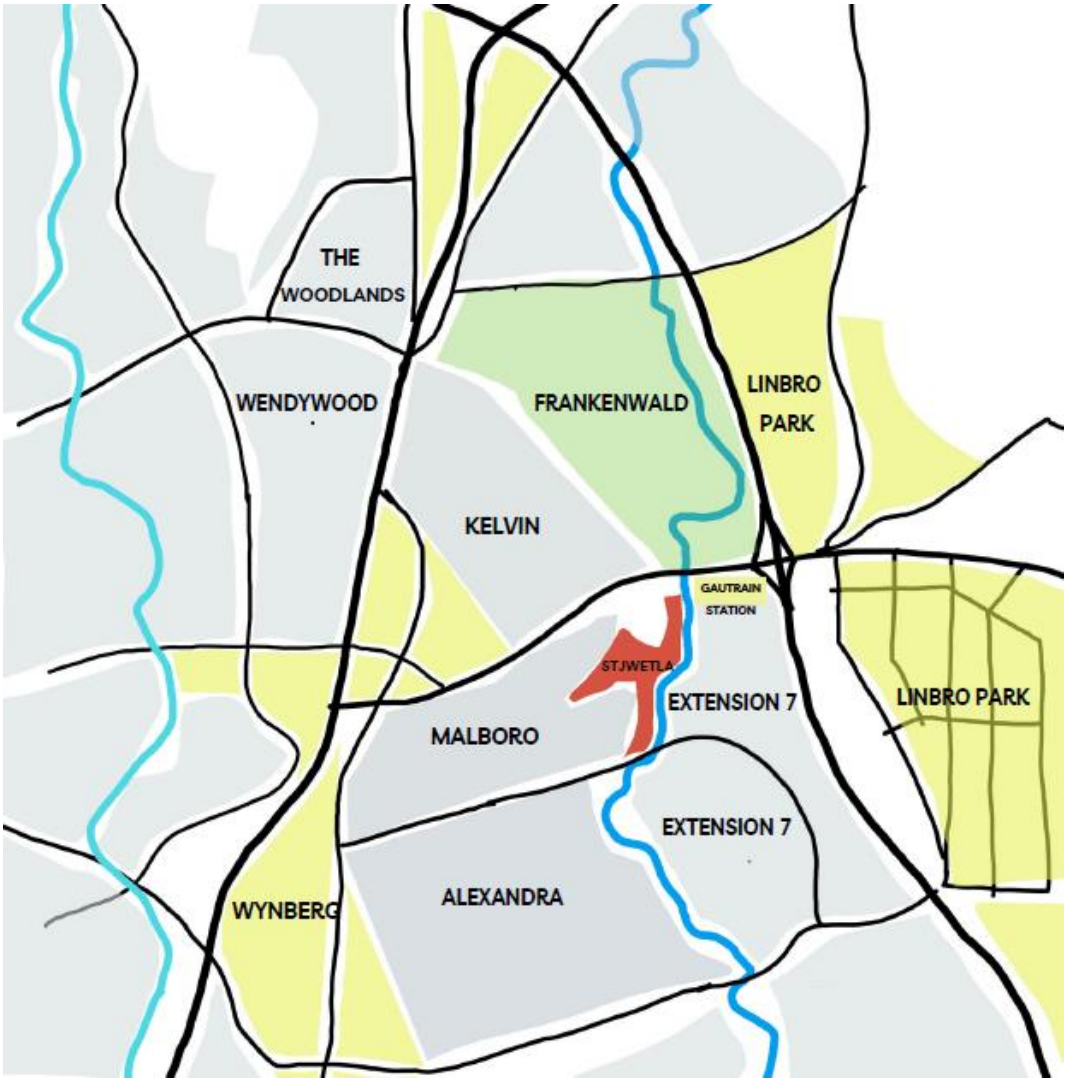


Figure 4: Location of Stjwetla (Highlighted in red) relative to land zones. (Source: Author) The yellow represents the industrial zones, grey as the residential areas and Green as the Frankenwald

Various authors have reflected on the relationship between informal settlements like Stjwetla and the city of Johannesburg. According to Ballard (2021), most of the working urban population can only afford to live in townships therefore highlighting the challenge for actualizing economic sustainability. Mushongera (2017) mentions that rapid urbanization poses challenges for local governments to effectively deliver services and accommodate the needs of communities living in poverty. Sonono (2021:6) cites that "Stjwetla informal settlement exemplifies a community manifesting deep-rooted spatial and structural vulnerability that characterize South African human settlements." Furthermore, Sibanda (2018) adds that the problems faced by members of Stjwetla as an informal settlement are lack of adequate sanitation, formalized infrastructure poor access to social services and amenities and poor skill transfer between the privileged and underprivileged members of the community.

Stjwetla is faced with complex issues related to informality and land occupation. Amongst these challenges are unemployment and adverse living conditions are at the top among its residents. According to Sinwell (2011), the South African government implemented the Reconstruction and Development Programme (RDP) to empower the residents living in poverty. In addition, the UN-Habitat (2023) argues that a large population in Sub-Saharan Africa lacked access to drinking water, sanitation services, and water in their homes. These conditions are relevant in Stjwetla as the majority of residents live in shacks that have no access to water. Residents end up sourcing water for bathing, cooking, and drinking from water points.

3.3.1 Economic practices

The United Nations (2023) argues that the challenges of poverty in informal settlements are complicated and exist in many forms. It continues to mention that unemployment among the youth in Southern cities is much higher compared to adults. Ballard et al. (2021) highlight that townships and informal settlements have the highest numbers of unemployed people. The challenge for this study therefore, is to identify how community centers can offer solutions for economic sustainability and integration of the urban population in Stjwetla. The location offers better opportunities to job seekers and workers residing in Stjwetla however the settlement is characterized by challenges of informality, socio-economic exclusion, poverty, poor sanitation, flooding, high levels of unemployment, and overcrowding (Sibanda, 2018; Sonono, 2021).

Stjwetla is located close to transport and job opportunities however, informal economic activity is prevalent. As Sonono (2021) highlights, informal trading is the main source of income for residents in the community as most of them sell fruits, vegetables and snacks from their informal stalls. There is a local market along the main road in Stjwetla which has a mixture of *spaza* shops and temporary and permanent stalls housing taverns, food stalls, and hair salons. Some of the residents own car washes while others collect waste materials for recycling. According to United Nations (2021:3), “sustainable transport enables connectivity at all levels, allows for community interaction, helps integrate markets and economies, enhances rural-urban linkages and facilitates international trade.” The Proximity of the Gautrain to Stjwetla offers residents with opportunity for connecting with neighboring communities along the Gautrain route and the major economic and transportation nodes in the city. Although the Gautrain may not be affordable compared to other forms of transport, it creates access to health and educational facilities to promote inclusivity.



Figure 5: Location map of Stjwetla relative to the Marlboro Gautrain Station and neighboring communities. Source: Author (2024)

3.3.2 Building Construction Practices

The use of renewable energy contributes towards sustainable development. While residents of Stjwetla built their shacks with corrugated iron sheets, some are using repurposed materials such as bricks and timber contributing to environmental sustainable development. According to Addy et al. (2022:4), construction works and materials have an impact on the environment however using locally sourced materials has an impact on the economy. This practice of repurposing materials and using local materials helps reduce greenhouse emissions, clean the environment, and economic benefits to the builders.

The world is faced with the reality of climate change and the CoJ SDF 2040 (2016) highlights that the informal settlement made a positive response towards reducing, reusing and recycling resources. This made a positive impact on the environment and the income of informal dwellers.

Residents of Stjwetla practice recycling and reusing for both economic and personal benefits. These practices are evidence of the inherent consideration of residents to their environment despite the challenges they face.

It is possible that improving the existing recycling points to serve as community facilities with required amenities can significantly improve the contribution of the residents toward sustainability. Formal and upgraded structures with incentives and organized activities cultivate more interest from the community to recycle and participate in day to day activities. Some of the residents conduct clean-up campaigns as a way of cleaning their environment, especially the highly polluted Juskei River. A study by Anwana and Owojori (2023) highlights that informal settlements across South Africa face spatial inequality and exclusion caused by political, legal, and social forces as many live in shacks and houses that do not meet building regulation codes. The building typology has transformed from single storey shacks made from corrugated iron sheets to single storey and double storey houses made of brick and mortar. Spatial inequality is evident even in the informal settlement the type of structure reflects affordability and the financial status of residents. Some of these buildings are not compliant with building codes therefore some of the buildings collapse or crack, causing damage and exposes residents to environmental factors.



Figure 6: Image showing density and building materials e.g. corrugated iron sheets, fabric, bricks (Source: Author, 2024)

3.3.3 Community Centers in Stjwetla

Stjwetla has existing communal facilities such as Greenhouse community hall and the community garden shared by households, a working space for local artists in the garden premises, the children's playground, and the Nthethelelo Foundation afterschool programme that function as community centers. These facilities (mapped in section 4.3 of the findings chapter) provide services that are not readily available in the households considering the lack of space for individual backyards for working space, gardening, and playing for the children. The community in Stjwetla lacks infrastructure that facilitates access to education, recreation, and social cohesion.

The residents of Stjwetla manage themselves through the community representatives and patrollers and this model can be adopted in the running of community centers. Residents may elect trusted members to oversee their communal areas and determine how often their positions should be revised. The community has a garden shared by households next to the Green Houses, the Green House hall, a non-government foundation, and the children's playground, and this has the typology of a multi-purpose community precinct. Within the community garden is the residence for the facility manager and working space for three local sculptors. The Nthethelelo Foundation, which is made from shipping containers, serves as a center for afterschool education center for the youth and young women in the community. The hall is used to host meetings and other community activities.

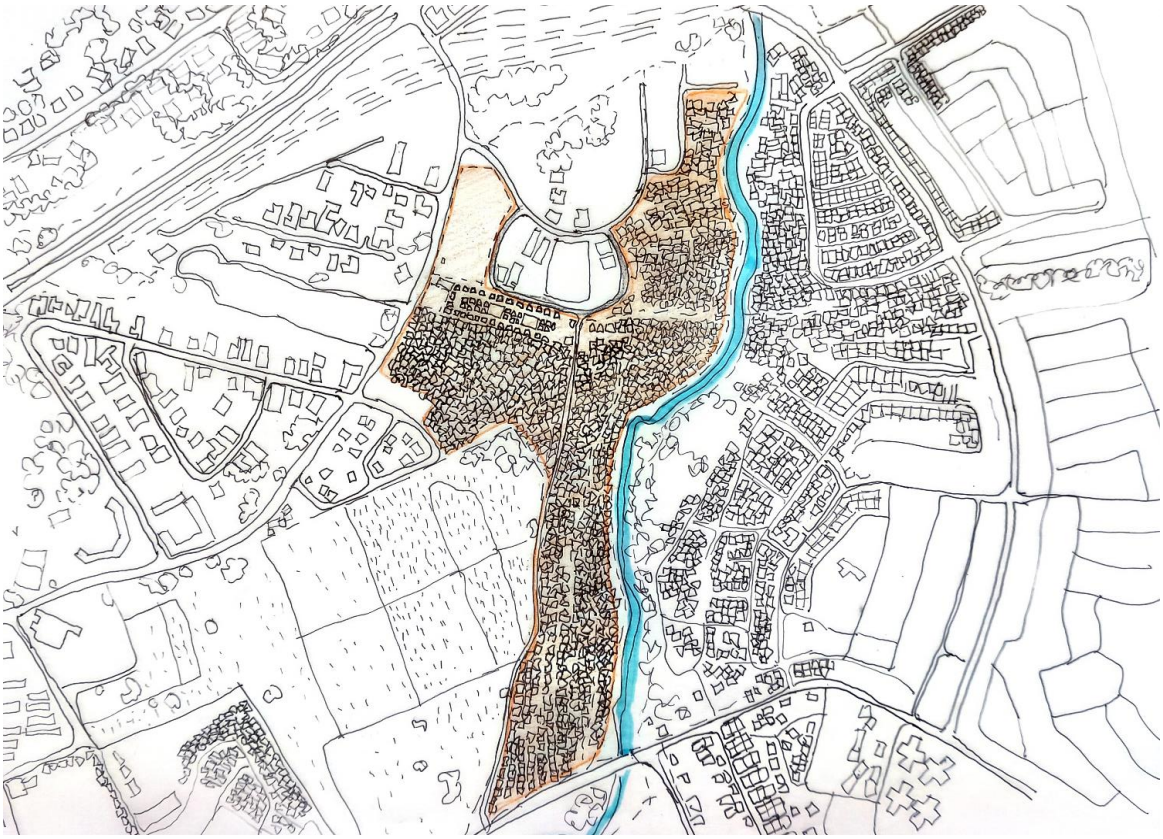


Figure 7: Spatial form of Stjwetla reltative to neighbouring communities (Source, Author, 2024)

The map above shows the difference in spatial planning between Stjwetla informal settlement and Marlboro Gardens, a more formalized settlement. Stjwetla is densely populated with little to no evidence of open spaces and developed road infrastructure.

The informal settlement is close to the Marlboro Gautrain station which links Stjwetla to Sandton, Rosebank, and Pretoria through the Gautrain route. Community integration is important for fostering sustainable development and the focus of this research offers context for exploring effective models for integration and sustainability through community centers. There are existing social and economic disparities faced by Stjwetla residents compared to the neighboring communities therefore community centers are a medium for bridging the gap between informal and formal urban settlements.

3.4. CASE STUDIES ON TYPOLOGIES OF COMMUNITY CENTERS

Case studies explored in this research will provide evidence of projects and theories for community participatory practices, integration, and sustainability in Africa. These include the Gando Primary School, Langbos Children's Center, and the Steinkopf Community Center which were selected based on with community participation, integration and sustainability in the African context. The first case study is the Gando primary school in Burkina Faso which was built to address problems of illiteracy and unskilled labor. In this community project, the architect emphasized sustainability and the use of local materials (Kéré, 2012). Building the school was a

community effort that employed local building construction methods and consideration for climate therefore exhibiting efforts for sustainability. According to Kéré (2012), the project included training the community members with skills they could trade on a day-to-day basis, capacitating residents with self-empowerment and confidence. Kéré (2012) further highlights that involving the community in the project motivated local authorities to buy into such models of economic development. Therefore, these case studies were examined for their role in bridging formal and informal systems and facilitating participation. They exemplify how the built environment can respond to integration and the social, economic and environmental components of sustainability.



Figure 8: Gando Primary School, designed by Architect Francis Kere.
Source: Simeon Duchoud, https://www.kerearchitecture.com/work/building/gando-primary-school-3

Another example that offers a case for a working model for community centers is the Langbos Children's Center in Addo, Eastern Cape, South Africa. According to Isandla Institute (2022), Langbos is an informal settlement that lacks access to basic amenities and this facility was designed by Jason Erlank Architects and built in partnership with Intsikelelo non-profit organization, to serve the local community with various services. The construction of the project employed thirty locals and adopted the eco-friendly methods of construction (*ibid...).* The Isandla Institute (2022) further highlights that the locals were of different walks of life and economic stature and working on this project equipped them with professional skills that enabled them to make a living after completion of the project.



Figure 9: Langbos Children's Center designed by Jason Erlank Architects. Source: Chris Grava, Archdaily, https://www.archdaily.com/942147/langbos-childrens-centre-jason-erlank-architects/5ef0b621b3576529f5000143-langbos-childrens-centre-jason-erlank-architects-photo?next_project=no

The third and last case study is the Steinkopf Community Centre designed by Roelof Uytenbogaardt, located in the Northern Cape and it offers key points in understanding the typology of community centers. According to Judin (2023), the facility was built to have multi-functional use and serve as a place of gathering, and hosting community social events and sports games. This highlights the importance of multiple functions and adaptability. As cited by Judin (2023), labor was sourced from the community therefore implementing participatory processes and giving the residents a sense of ownership regarding the center.



Figure 10*:* Steinkopf Community Centre designed by Roelof Uytenbogaardt in context. Source: Gerhard Bosman https://www.researchgate.net/figure/The-context-with-the-Steinkopf-Community-Centre-in-the-foreground-and-another-community_fig6_323848069

3.5. CONCLUSION

Community centers serve as possible solutions to promoting sustainable development and catering to the needs of the communities in urban areas, especially informal settlements. This chapter highlighted the dynamics of the different demographics of the Sandton, Kelvin, Alexandra and Stjwetla communities and how they are interconnected and the possibility for integrating Stjwetla with the other middle-class residents. The case study on Stjwetla unpacks the economic and sustainable practices that build a case for the improving communal facilities to meet the needs of the community and addressing the issue of sustainability. There are challenges for integrating informal settlements to the more formalized and developed communities however the discussion in this chapter presents a case for a detailed approach to mapping the existing community centers and engaging more with the community representatives and general public on the preferred and best interventions. The case studies discussed in this chapter provided a case for implementing solutions that are multi - functional, uses local materials and employ the local communities.

CHAPTER 4: FINDINGS

4.1. INTRODUCTION

This chapter outlines the findings from the fieldwork that was set out to investigate the existing community centers in Stjwetla and their roles in promoting sustainability, towards achieving sustainable development goals for just and inclusive cities and integrating the residents to the larger urban context. The aim was to explore existing centers in the location and the current roles the community members and the committee members play in facilitating the use of such facilities. The chapter begins with findings on the existing community centers in Stjwetla and the challenges they face. The emerging themes of these findings were pressing concerns and challenges faced by residents, community resilience and lastly the recommendations by the respondents.

The findings of this research were a result of the interviews in line with objectives to investigate the community centers that exist in Stjwetla and to establish the potential role they play within low income informal settlement. Furthermore the findings present solutions for bridging the gap between Stjwetla and its neighboring, more privileged communities. These build up to recommendations from the respondents for potential interventions to improve existing communal facilities and integrate of Stjwetla to wider society.

4.2 FIELDWORK STRATEGY

The structure of an informal settlement is quite complex and admittedly existing complexities require investigation and input from the residents, therefore the need to interview several community members to understand how Stjwetla functions. This study adopted a qualitative approach to investigate the use of communal spaces in Stjwetla and the challenges faced by the community. In this chapter, I discuss the data collection, sampling procedures and observations made during the field work in addition to the challenges and ethical considerations for the study. The main research question was to find out the challenges faced by community centers in Stjwetla with sub-questions to find out the challenges for the development of community centers in informal settlements, how community centers facilitate sustainable development, social integration, cultural continuity, and knowledge transfer. Lastly to find out the potential benefits, limitations, and implications of incorporating community centers based on existing practices in the area. There are case studies discussed in the previous chapter were a reference for making a case for community centers for Stjwetla.

Prior to conducting the fieldwork, the expected findings were to discover ways in which community centers provide access to resources that are not readily available in informal communities. The hope was to find solutions for intervention beyond the existing barriers to community integration and sustainable development. A further expectation was identifying existing community centers in Stjwetla and the proposing interventions for the improvement of

the existing structures. The primary data collection instruments were semi-structured interviews with 10 community members residing or working near the identified community centers, and 2 committee members. The interview format allowed for additional opinions from the respondents that provided more insight to the research topic beyond the structured interview questions. Secondary instruments to complement the interviews were desktop research, observation and photography.

Ten community members with varying occupations and ages were interviewed, this included patrollers, unemployed adults, informal traders and elder representatives. Some of the community patrollers and committee members introduced me to the participants on different occasions at the participants' homes and workplaces. Efforts were made to ensure there was a gender balance of the participants in light of the fact that people use public spaces differently. Two committee leaders were interviewed to find out the governance structures of the informal settlement and the pressing needs of the community. The leaders gave insight into the existing community initiatives and the challenges they face compared to the neighboring formal settlements.

The fieldwork began first with site walkabouts and attending meetings in the community to get familiar with the existing structures and general spatial layouts in Stjwetla. To document the existing community, photography was used as the primary medium. In light of the observations from the site walkabouts, I learnt that there is no room or available space to build a new facility for the community except to improve the existing hall, playground and the community garden. I attended a mapping workshop facilitated by supervisor and Stjwetla residents and this helped me with identifying the community centers that otherwise were not easily recognizable in my site visits. The development of this chapter will focus on mapping the activities in the community that already function as community centers.

4.3. EXISTING COMMUNITY CENTERS IN STJWETLA

Community centers, defined as multipurpose buildings for community activities, exist in Stjwetla and findings from the interviews and transect walks highlighted that the existing community centers in Stjwetla include the Greenhouse community hall, Greenhouse community garden, Nthethelelo Foundation, Thuthuzela Aid Community Center, Rays of Hope, the community playground as well as the mobile clinic. Although Stjwetla is not as developed and formalized as the neighboring communities such as Kelvin and Marlboro Gardens, it was evident that there are community centers existing in the informal settlement and they are concentrated in one area of the informal settlement. The subsequent discussions highlights findings from the transect walk and field observations.



Figure 11: Community Centers in Stjwetla. Source (Author's own)

In the map above, the community gardens and open spaces are highlighted in green, the red highlights the buildings for communal facilities and the orange are the community playgrounds. The community centers are shown relative to the Marlboro Gautrain Station, highlighted in dark orange, at the top right. The location of these facilities is a central point that offers the opportunity to serve the residents of Stjwetla, Kelvin, Alexandra, and Marlboro Gardens. It is conveniently located in proximity to transport nodes and can be easily accessible to residents from the communities around therefore the possibility of integrating communities.

One of the major community centers in Stjwetla is the community hall is located in the Greenhouse TRA. It was built as part of the relocation facilities donated to the community by Gift of the givers. This hall is used for community meetings, workshops, private events such as celebrations, polling station during general elections and for church gatherings. Prior to the 2024 elections, the hall was a storage facility for families who did not have enough storage however, it was cleared after the residents collected their belongings. The hall is easily accessible from three main sides of the compound and links to the patrollers' office, the children's playground, Nthethelelo foundation, Thuthuzela community center, the community garden and the playground.



Figure 12: Interior and exterior representation of the hall when it was still used for storage. Source (Author, 2024)



Figure 13: Spatial layout of the hall in relation to its surrounding TRAs. Source (Author's drawing)

The second community center identified is the Rays of Hope, located in Marlboro Gardens, just south of the Stjwetla community playground. This double-storey facility that serves both Marlboro and Stjwetla residents. The design of this facility contrasts with those in Stjwetla. Security is visibly enforced, with high walls, fencing, and security guards at the entrance of the facility. In this case, the study extended beyond Stjwetla, as Rays of Hope is located in Marlboro Gardens but functions as a key community centre in the area.



Figure 14: Rays of Hope, A double storey with a front yard for parking located in Marlboro Gardens. (Source: Google Street View, 2024)

Nthethelelo Foundation is one of the existing community centers in Stjwetla, located above across the road from Marlboro Gardens, next to the Stjwetla community garden and the Greenhouses. According to Resident 4, the foundation offers after school education to learners in Stjwetla. This after school center offers their learners to go on field trips and excursions in neighboring communities to learn more about their surroundings. The United Nations Department of Economic and Social Affairs (2023) highlights the importance of schooling in improving the learning of children and the Nthethelelo Foundation in Stjwetla functions in line with this mandate.



Figure 15: Nthethelelo Foundation, made from shipping containers and fenced for security and limiting access. Source (Author, 2024)

The Thuthuzela Aid Community Center, shown in figure 16 below, is one of the key community centers in Stjwetla. Established in 2005 as a non-profit organization, Thuthuzela began as an orphanage and shelter for vulnerable and neglected children in Alexandra (Munyela, undated). Over time, it expanded from providing meals, basic pre-school education, and counselling into a fully-fledged daycare centre. According to the Thuthuzela website, the centre offers assisted living, residential care, medical support and 24/7 specialized services, as well as transport for

students to and from schools. In addition, it supports community-based projects and skills development initiatives. The center is managed by a six-member committee responsible for daily operations.



Figure 16: Thuthuzela Aid Community Center, a single storey with a garage and front yard for reception and parking, located in Marlboro Gardens. (Source: Author, 2024)

In addition to the community centers in Stjwetla, there is a gravel soccer ground and the only sports facility in the neighborhood. The sports ground is located next to the Greenhouse and Thuthuzela community center and Marlboro gardens. Due to high rates of congestion, waste collectors store the resources in the open spaces like the playground and the community garden. The playground is not fenced and most of the resident pass through it to Marlboro Gardens all the way to Kelvin and the Marlboro Gautrain Station.



Figure 17: Stjwetla Football playground. Source: Author (2024)

Respondents have alluded that there is no park in Stjwetla therefore their children play in the streets or go to the parks in neighboring Alexandra. These parks are too far for children to walk to and puts them at risk because it is not safe for them to walk across the busy road and the river by themselves. The figure below example of the park that residents of Stjwetla use in Alexandra.



Figure 18: Alexandra Water Warriors Park, A well maintained public space with walkway, temporary and permanent street benches and refuse bins. Source: Author (2024)

The Alexandra Water Warriors offices and recycling station have a park along the river that accommodates children from Alexandra and residents from Stjwetla. This space is well furnished with urban furniture, a walkway, trees and streetlights. These facilities exemplify community efforts towards environmental suitability and integration by way of recycling and repurposing materials and working with neighboring communities as Alexandra and Stjwetla.



Figure 19: A park in Alexandra. Source: Author (2024)

Despite the evidence of community centers by other interview respondents, there was an opposing statement from Participant 2 who alluded that there are no community centers existing in Stjwetla and they do not see their importance. In support of this, the participant regarded Stjwetla as a mess and there is nothing that is seems to be working in the community. This highlights the level of frustration that the residents have regarding service and infrastructure delivery. According to Participant 3, there is a mobile clinic that sometimes comes to Stjwetla at the Greenhouse entrance. The concern however is that this initiative is not consistent as there are days that the community need health care services but they need to travel to Marlboro or Alexandra for those services.

The Stjwetla patroller office located at the greenhouse acts as a community center. On several occasions, I have observed that this is where the committee and the patrollers meet, a place for receiving guests and officials such as the police and different private organizations. It also serves a judicial purpose for conflict resolutions. The community does not have a post office but the patroller's office is used as a delivery and mail collection point. According to one of the patrollers, the mail is mainly bills that the post office delivers to the office and the residents are informed of their mail and they come to collect.

On the issue on integration, it is evident that the Stjwetla community uses some of the community facilities in their neighboring formalized settlements. There is an existing community hall in Marlboro which is often used by various public sector organizations to host meetings with Stjwetla leadership. According to one of the committee members, the community hall is far for Stjwetla as it is a 20 minutes' walk from the Stjwetla playground.

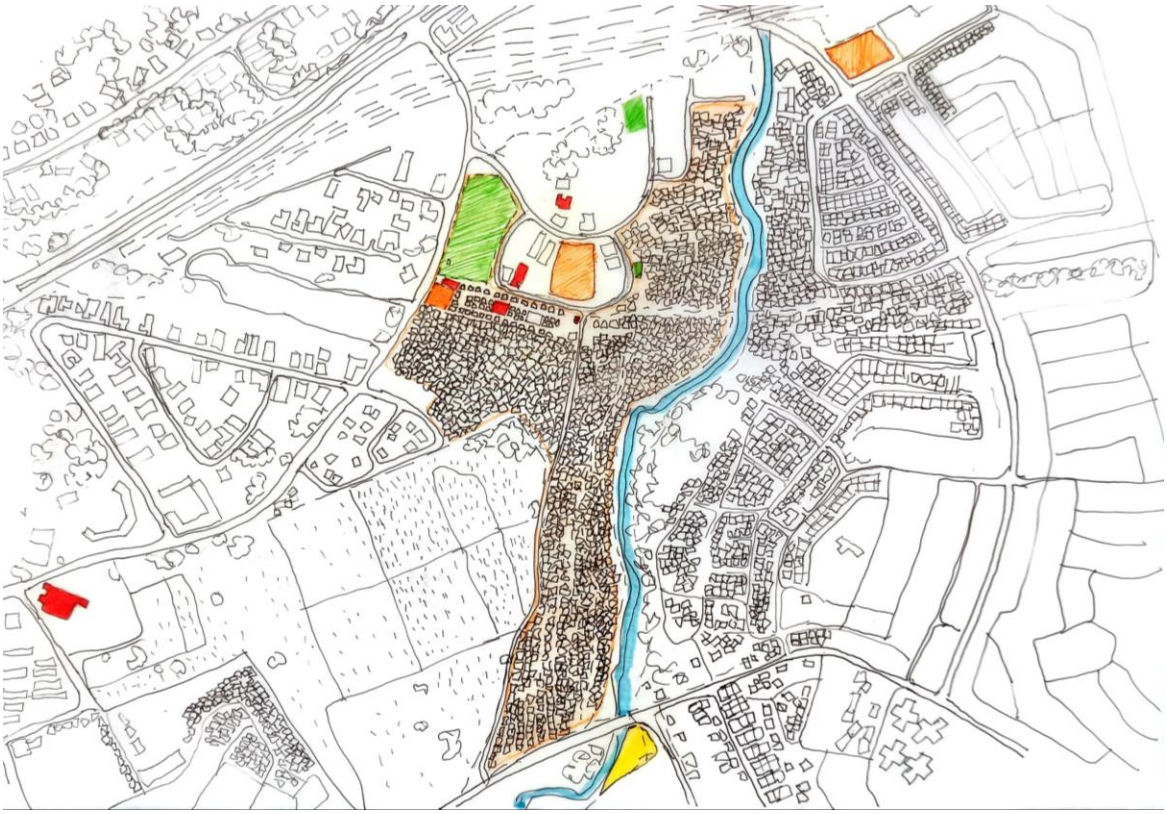


Figure 20: Marlboro community hall is located at the bottom left of the map. Source: Author (2024)

The map highlights the community gardens in green, playgrounds in orange and the Alexandra Park in yellow. The existing community centers can be categorized as educational, recreational, communal and agricultural. The Nthethelelo Foundation, Rays of Hope and Thuthuzela Community center can be classified as educational, the community gardens as agricultural and the playgrounds are recreational.

4.4. CHALLENGES FACED BY THE COMMUNITY

The various community members interviewed have expressed general concerns over crime, lack of space, unemployment and infrastructure deficits. There are numerous challenges pointed out but the underlying factor being that Stjwetla is an informal settlement. One participant referred to Stjwetla as a squatter camp although the building typologies have since transformed to imply a sense of permanence to the settlement. There was a major axis or paved road that, most of the tuck-shops and taverns are located along. Along that road is also a line of portable toilets that are used by the household. During the walkabout I made observations that the community members usually gather around taverns and in front of their houses. The activities observed were playing cards and conversations.

Infrastructure deficit is among the main challenges in Stjwetla. According to Committee Member 12, “there is no hall facility and there is no library near this place”. Residents 8, 2 and 6 have all expressed frustration over the lack of educational, recreational and health infrastructure in the Stjwetla. They have all alluded that there are no schools, no clinic or libraries in their community or neat their community. Reflecting on their lived experiences, Resident 6 stated that *“Re Lela ka*

everything. Ga gona ntho e functioning right" Which means "we cry about everything. There is nothing that is functioning right" Resident 9 has also added that there are no proper roads in Stjwetla and all gravel roads are damaged. Committee Member 2, Residents 10 and 9 have all alluded that there are no proper facilities that accommodate children and adults in the community. "We do not have proper facilities for our children where they can play tennis, rugby, netball or something like that". Some of the residents have built crèches but their schools lack proper equipment and space that caters for the development of the children.

The existing football ground does not fully cater to the needs of the community because of its current state. The ground is bare and only a gravel surface. According to Resident 3, "the ground is like an old gravel road". The recommendation is to plant green grass to make it better however this would require a lot of maintenance and water. In most of the site walkabouts, it was observed that children mostly play on the streets, the road and the empty vendor's stalls. These children appeared to be within the age range of 5 years to 12 years old. Some were playing football, catch, and *mmehele* (traditional chess) and some were grouped together sitting on the ground playing on the phone.

The second and most concerning challenge that the respondents have highlighted is delayed implementation of development strategies. Committee leader 1 has expressed that government officials have "promised to relocate Stjwetla in a formal area for such a long time now, so they kept on delaying, on delaying so that is a problem". According to Resident 10, "several times the department of housing comes and promise to relocate us and develop Stjwetla but nothing happened yet since from 2016 until to date". The committee leader has alluded that the delay of service provision and implementation is a result of political manipulation because they benefit from the current state of the settlement. He further adds that "maybe government officials are delaying to develop a formal residence for this area simply because some of them are benefitting from Stjwetla". In my assessment, this most likely means that some leaders use the community developments funds for their own interests instead of using it for the community projects.

In addition to this, Committee member 1 and resident 8 have alluded that the current ward councilor is distant, not active and that the leaders are failing them. According to the committee member, the ward councilor does not respond to the concerns of the community and this makes things difficult for them. According to Resident 10, the government has rejected Stjwetla. Service delivery is one major challenge faced by Stjwetla community. As alluded by Manga, Bartram and Evans (2020), local authorities are unable to sustain services over time. Despite the municipality efforts to provide basic services, they are faced with backlogs to addressing challenges in the congested informal settlement. A major contributor to this is the rate of urbanization therefore affecting the sustainable services.

In addition to the above challenges, residents have expressed that space is a challenge for developing their community of introducing new infrastructure. Participant 8 alluded that there is no space, even if there were proposals to build a community center, there is no space to build

because Stjwetla is too packed and congested. According to Resident 2, there is no space to hold church meetings therefore they meet on the street. According to Resident 8 "Stjwetla *o tlhakatlhakane*" meaning that Stjwetla is a mess. The problem of space affects entrepreneurs as and residents alike as there is no space to store their products and stock. According to Resident 5, the residents do not have space for backyard gardening and they have since divided the space in the garden amongst different families to resolve this issue.

Unemployment is a concern that affects a lot of the residents in the Stjwetla despite their efforts to look for employment opportunities for sustainable livelihoods. Several interview participants have emphasized that this is challenge affecting most of the residents in Stjwetla. According to Committee member 1, Committee member 2 and 7 other community members, there is a lot of people in Stjwetla who are not working and some of them have resorted to volunteering in the community to keep themselves occupied. Resident 10 and committee member 1 expressed that the high unemployment rates not only affects Stjwetla but most of South Africa. This also affects children because their parents are not able to afford enrolling them with schools and transportation. Participants have alluded that most of the people earn a living through street vending, owing salons, selling electricity and food to afford the basic necessities.

The unemployment and poverty rates increase the level of crime and illegal activities because people are looking for means to make a living. Participant 10, who is a committee leader alluded that there is a challenge of crime in the Stjwetla community. The committee has made efforts to put measures in place through patrolling, however the police sometimes fail to aid them. The patrolling was an initiative by the community to tackle crime in the area. The committee has partnered with public sector organizations such as the South African Police service to curb the challenges of crime in the area. Crime and social ills are amongst the top challenges faced by Stjwetla community. There is a high unemployment rate, and the crime is too high. There is an existing children's playground or park next to the Nthethelelo Foundation and Greenhouse however, there are no swings and equipment for children. According to one of the respondents, the playground used to be furnished with equipment but most of it was stolen. It is reported that some people steal metal to resell for income.

In addition to these challenges highlighted by the respondents is the lack of sanitation facilities. According to Participant 3 the toilets are shared by at least five households and each of the toilets are locked and not open to the general public. In the case that someone may need to use these facilities, or they lack sanitation facilities at their homes, they would not have access because there are no communal sanitation facilities. The provision of community centers with adequate toilets can help cater for residents who do not have the means to afford sanitation facilities. Figure 21 below shows the portable toilets used by most of the residents in the area. Some of the portable toilets are located along the road from the end of the market to the crèche.



Figure 21: Portable toilets shared by multiple households in Stjwetla. Source: Author (2024)

Lastly the community faces a challenge of high rates of teenage pregnancy. Participant 3 has expressed frustration that older people impregnate teenage girls and put their health at risk for communicable diseases. It is however challenging to resolve because teenagers do this looking to get money to go to school where their parents are not able to afford. The Thuthuzela aid community center plays an important role in offering counseling services for victims of rape, defilement, and gender-based violence.

4.5. COMMUNITY RESILIENCE AND SUSTAINABLE LIVELIHOODS

Despite the countless challenges faced by residents of Stjwetla, they have demonstrated resilience and initiative through community gardening, patrolling, opening private crèches and street vending. Residents of Stjwetla have expressed the need to keep themselves busy and take initiatives to sustain themselves. Some have expressed the need to take the initiative instead of waiting for the government to bring solutions to them. Some of the unemployed residents have volunteered in order to keep themselves occupied instead of staying home without doing any work. These volunteering activities include patrolling and cleaning. According participant 4, they volunteer with a group of women to clean the streets. The hope is that one day the government will recognize their efforts and offer them a stipend and the same applies to the Alexandra Water Warriors. These practices are evidence of environmental sustainability.

In a conversation with one of the caretakers of the garden, they highlighted that the garden was built to help the community and create a livelihood for themselves and teach people to be self-sustainable without waiting for the government to donate to them. They have taken initiative to partner with people from the private sector to help grow their initiative of the shared garden they grow different kinds of vegetables, keep livestock such as rabbits, chickens and pigs which they sell for income. This garden is located near the Marlboro Gautrain Station and Alexandra

opposite Kelvin. It was also pointed out that sometimes they sell these vegetables and where they see that there are people who are not able to afford to pay. The pricing model is primarily to cater for everyone, including those who do not have any form of income generating activities. Sometimes they donate the produce to residents in need of food. These are efforts towards economic sustainability.

Unemployment is amongst the main concerns of Stjwetla residents and some have taken initiative to start small businesses such as mechanic, carpentry, crèches and street vending. The challenges however is that not all of these businesses are regulated, there has been mention of electricians that connect electricity illegally, putting residents at the risks of electric shock and fires. For some of the small businesses, the challenge is the lack of space for storage and trading as alluded by Resident 1.

These initiatives exemplify how sustainable livelihoods can emerge from community driven – projects, therefore the need for community centers that facilitate and accelerate the efforts of the residents of Stjwetla. Community centers can offer spaces to support residents, facilitate community engagement and empower them through trainings. Additionally, these findings emphasize the potential for these centers to serve as hubs for such initiatives and offering space for co-production, trainings, integration with neighboring communities in light of the present challenges of lack of space for individuals. The patrollers have partnered with the Alexandra Water warriors for patrolling along the Juskei River where they monitor the activities along the river banks to guard against illegal dumping. According to one of the respondents, the Water Warriors are positioned at different locations and work according to a shift schedule. They are also stationed at the empty land across the garage, across the Gautrain Bridge to ensure people do not dump rubble there and recently planted trees there to build a community park.

4.6. RECOMMENDATIONS BY RESIDENTS FOR COMMUNITY CENTERS

The community have highlighted various challenges they face and have voiced out several recommendations for these challenges. The health service providers must be located in the settlement fulltime and not temporarily in a way that the mobile clinic changes to a permanent clinic in the community in case of emergencies. Secondly, for the sports ground, the recommendation is to plant green grass in the playground but this may not be possible because of the challenge of water supply in the area. Thirdly, to tackle the issues of unemployment, Resident 3 recommended that agents from various organizations can come to the community and recruit people from Stjwetla for job opportunities at their organizations.

> If there can be a school, or like a hall and a drainage system and things like RDP houses. A hall that can accommodate maybe a thousand people for whatever thing is needed by the community like meetings or functions. (Resident 2, Personal Communication, 14 August 2024)

Residents expressed that they need a hall that can also be used for church gatherings on Sundays, as well as primary and high schools. The existing schools are in Tsotsomane, Eastbank and Alexandra which are far from the Stjwetla. In the case that this is not possible, the alternative recommendation is to procure government buses or the government can fund buses to transport children to schools in the neighboring settlements.

The community garden, the Greenhouse community hall, and the playground have the potential to be developed as the community center in Stjwetla. However, the existing children's playground in Stjwetla lacks adequate facilities for children to learn and explore therefore there is a need to improve the existing infrastructure to cater for the needs of the community. Resident 4 recommends that a hall can be used to accommodate children for after school programs to help them with their homework. The residents expressed the need to also have activities for various age groups such as the elderly women and grandmothers where they can come together for sewing to keep them busy, activities for youth as well. The hall can be a facility that hosts career guidance clinics and study guidance for learners.

One of the community leaders recommends a variety of sporting facilities especially for the children, and sports such as tennis, rugby or ladies netball. On the contrary, there is a shortage of land therefore community leader 2 recommends that relevant authorities

> Find us a land where they can allocate people or build them RDP houses where people can live with privacy. The community needs library and a foundation school for children. (Community Leader 2, Personal Communication, 16 September 2024)

This can also create job opportunities for people to run those facilities and jobs for teaching. Participant 10 added by saying "We need the government to build their government things where someone who doesn't have money can be accommodated and go study." The community needs facilities like a rehabilitation center for drug addicts. If children are using drugs, they can find rehabilitation. The only rehabilitation center is at the Alexandra clinic. Most people in Stjwetla have nothing to do because of the unemployment rates despite the efforts to reside there in search of better economic opportunities. According to participant 4, one initiative that can be implemented to curb these challenges is to have programs for elderly women such as sewing classes.

There was an interesting debate amongst some of the elderly residents and the patrollers about the hygiene of the place. The patrollers expressed concern over people resorting to throwing garbage into the river instead of the designated waste collection points. Some people pointed out the collections points were far from their houses and that the river was the closest and people are already throwing garbage there. The discussion was mainly recommendations for the community leadership and the Water Warriors to mobilize and garbage skip in one of the open spaces for people to use for garbage disposal instead of the river. The agreement was that the residents will take initiative and ensure the upkeep of the area and the water warriors will

provide them with refuse bags whilst waiting for the skip. From one of the representatives input, he said he would ensure that he gets in contact with Pick it Up to come collect the garbage on a weekly basis as long as the residents commit to proper refuse disposal.

4.7 CONCLUSION

The fieldwork conducted in Stjwetla highlights the significance of community centers in fostering sustainable development and integration of informal communities with the formalized. It is worth noting that the responses in this report are the opinions of a few residents for addressing the pressing needs for provision of communal facilities. Perhaps community centers could be the grounding factor for formalization in informal settlements therefore addressing the challenges of crime, unemployment, limited access to health and educational facilities as well as recreation. The Stjwetla community has demonstrated resilience through self-sustaining initiatives. Formalizing such initiatives and improving these spaces could be a launching pad for accelerating sustainable development and bridging the gap between informal and formal settlements. This can be done by promoting participatory planning, training the local residents to work in these centers and designing the community centers to offer a variety of services that cater to the different age groups and activities within the Stjwetla community.

CHAPTER 5. ANALYSIS AND DISCUSSION

5.1 INTRODUCTION

The analysis of the findings from the fieldwork highlights the crucial role that community centers play in bridging the gap between low -income informal settlements and affluent high- income formal settlements. This chapter is an analysis of the findings of the research study in exploring the existing community centers and how they build and bridges between informal settlements and formal settlements. The data analysis is presented using tables, charts and texts to convey how these community spaces serve as critical nodes for social, educational and environment sustainability. Graphs and charts presented in this research are not a statistical representation of the population but they are an indication of my sample.

5.2. EXISTING CENTERS IN STJWETLA

A study and assessment was made on existing community centers in Stjwetla to investigate their use and make a case for improvement in line with objectives. Out of the twelve respondents that were interviewed, two were of the view that there are no community centers existing in Stjwetla and one expressed that they do not know of any. In all of the interviews, the respondents did not recognize the patroller's office and the children's playground next to Nthethelelo foundation as a community facility although they are spaces that they use on a daily basis. This highlights that there may be community centers in Stjwetla but the community do not regard them as such but there is a category that they consider to qualify as community center. There are three different types of community centers which are small, medium and large centers based on the population of an area and the use of such communal facilities depend on the perceptions of the residents to the space. The issue lies in how the residents perceive space therefore, it is important to do thorough consultation from the community before building any structure that the residents do not identify with or one that may be of little or no value to them.

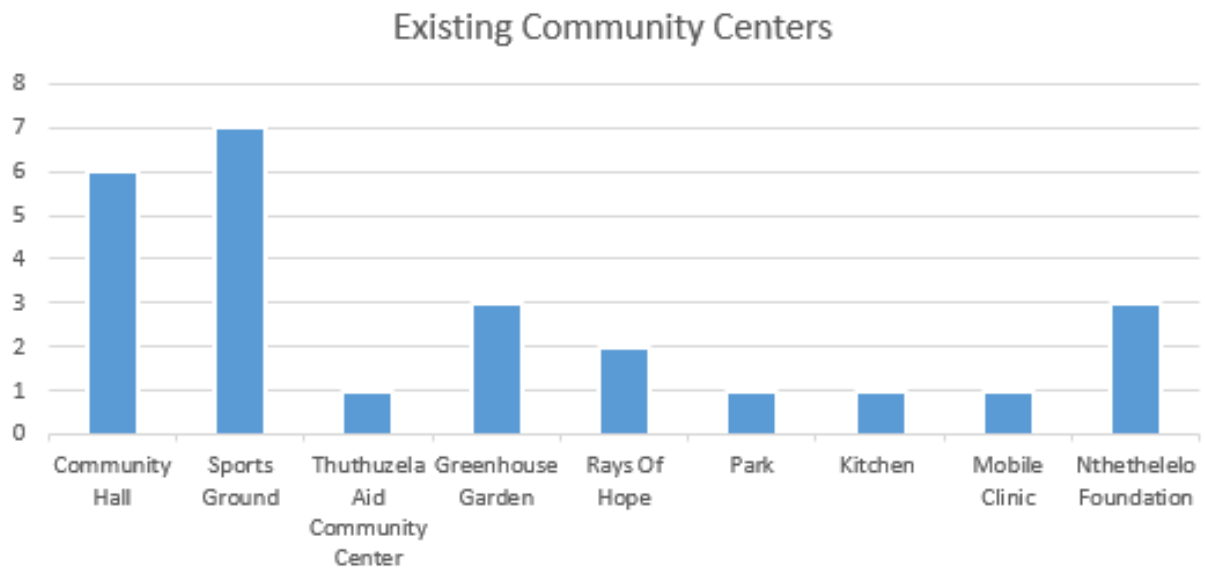


Figure 22: Existing community centers. Source: Author (2024)

The graph above demonstrates the existing community centers identified by the research respondents. Most of the respondents consider the Greenhouse Community Hall and the ports ground as the two main community centers followed by Nthethelo foundation, Greenhouse community garden and Rays of Hope.

On a different note, most of the community centers in Stjwetla are unfurnished and lack proper resources for effective use. Such facilities include the Greenhouse community hall, the playground and the Community garden. The bare ground poses challenges of environmental sustainability as there are no trees of landscaping in the grounds to prevent strong winds from blowing dust in the houses below. Much dust can cause respiratory problems to the residents.

According to Dakyaga, Ahmed and Sillim (2020), Informal communities demonstrate ingenuities that need to be formalized or adopted in order to improve the livelihoods of the residents. In some cases, residents have adopted the open spaces for trading and one particular instance is the space in front of the Greenhouse community garden. To earn a living, they have used the space outside for a car wash, mechanical repairs and some use it for making furniture, wood and metal artworks and storing bricks and recycled materials.



Figure 23: Car wash and mechanic at the entrance to the Greenhouse Garden Source (Google Street View, 2024)

5.3. INVESTIGATING CHALLENGES FACED BY THE COMMUNITY

This section discusses the findings in relation to sub-question four, which aims to identify the challenges faced by the Stjwetla community that justify the need for improving or recommending new community centers. These challenges include infrastructure deficits, economic and social challenges, and lack of integration with neighboring communities.

5.3.1. Infrastructure Deficits

Infrastructure deficits such as a permanent health facility, schools, recreational spaces for adults and children as well as proper sanitation are exacerbated by political manipulation and neglect from local authorities. There are some partnerships between Stjwetla community leaders and public institutions such as the South African Police Service and the Department of Human Settlements but these are not sufficient for improving the general livelihood of the community. According to Ntwana and Naidoo (2024: 572) “councilors and staff are further obligated to use municipal resources and annually allocate funds from its budget to implement the provision of municipal services.” Such services include access to water, electricity and communal facilities that play and integral role in the social wellbeing of the community.

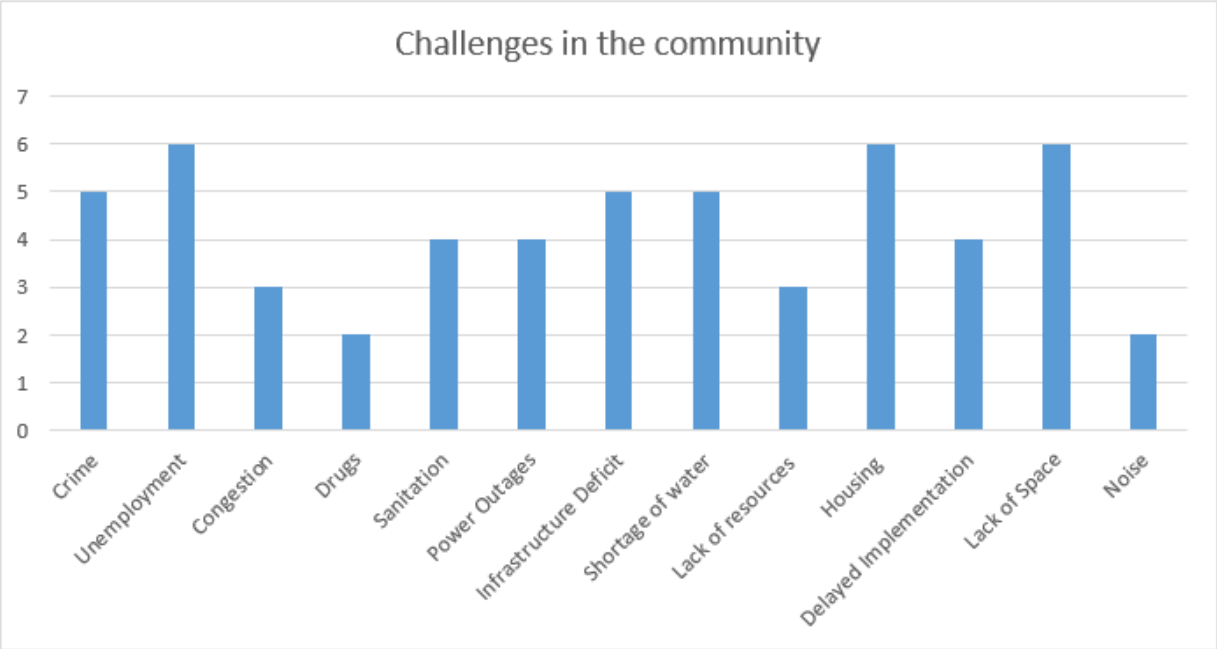


Figure 24: Challenges faced by Stjwetla residents

The above graph shows that unemployment, access to affordable formal housing and lack of space are the highest recorded challenges faced by the community, as voiced by the respondents.

Provision of community centers can accommodate different spaces for businesses for the residents. This model is evident at the greenhouse community garden. The garden accommodates artisans and farmers. The recommendation by the respondents highlight the need for sporting facilities by the community. As participant 10 suggested, the community need a recreational facility that accommodates various sporting codes such as tennis, rugby and netball, not just football. Huchzermeyer (2006: 54) cites that "early-childhood development facilities, primary health clinics, recreational and community facilities [and] public open space improvements" are necessary for social developments.

5.3.2 Economic and Social Challenges

The challenge of unemployment has proven to be a burden on residents despite their efforts to volunteer and start businesses. This affects their buying power and affordability for their children to attend school instead of staying home. Parents are not able to afford transport fees and school fees because of unemployment and unstainable jobs. Ntwana and Naidoo (2024) argue that the voices of informal settlement residents in South Africa, are often ignored and silenced therefore municipalities should consider the needs of such marginalized and disadvantaged communities.

Many of the participants expressed a desire to have recreational facilities that offer a variety of sports such as tennis, rugby and netball. Such a center could accommodate the different demographics in Stjwetla such as children, youth and adults therefore promoting social cohesion

and the general health of the residents. The recommendations from the residents of Stjwetla align with the objectives of sustainable development yet the challenge remains for funding and implementation from the municipality and private sector to partner with the community to promote their existing initiatives and further develop formalized and permanent community centers. According to Aina and Bipath (2022), furnished playgrounds improve the development of children's social skills and physical development.

5.3.3. Integration with neighboring communities

Integration between Stjwetla and the neighboring communities such as Marlboro, Kelvin, Sandton and Alexandra is uneven and it is made apparent by the level of access to facilities and services. Based on the responses from the Stjwetla community members, there is integration with residents from Alexandra compared to Marlboro, Kelvin and Sandton. One of the respondents works in Linbro Park and commutes to the workplace by foot. This was observed on site that there is a community hall in Marlboro that the respondents highlights that the community uses for official meetings however the challenge is the distance of from Stjwetla. It appears that the closest facilities are in Alexandra compares to the neighboring Marlboro and Kelvin settlements which are more formalized and advanced compared to Alexandra. These communities are mostly middle to high income compared to Alexandra therefore there is a bigger gap for integration compared to that between Stjwetla and Alexandra.

According to Judin (2023), apartheid has a role in community segregation and cultural boundaries therefore, community centers became useful in providing residents with spaces they can identify with, have a sense of belonging, and foster social change. The SDF for Johannesburg 2040 (2016:25) states that “many of the city’s marginalized areas, including informal settlements, fall outside of the Transformation Zone” and this calls for creating strategies for the sustainable informal settlements and regulating the densification such communities. A transformation Zone referring to allocated land uses. Densification can be regulated through implementing zones, building standards and including the community in managing their shared spaces.



Figure 25: Proposed areas of small scale community centers highlighted in yellow. (Source: Author.)

The lack of formal infrastructure with adequate resources is a barrier to the integration and development of Stjwetla. As some participants have alluded, the closest community centers are mostly in Alexandra, which is relatively a low income settlement compared to Marlboro and Kelvin, which are middle income formal settlements. From the findings, it is evident that the integration of the communities is more inclined between Stjwetla and Alexandra. For the residents, Alexandra is closer to home and is easily accessible. The reliance on Alexandra and formalized neighboring communities for health services, rehabilitation and education marginalizes Stjwetla residents as accessibility to these facilities is limited. Although these community centers are nearby, many residents still have to navigate poor roads and unsafe streets to access them. This gap highlights the need from local governance structures that address needs of informal settlements and prioritize service delivery in general.

Residents of Stjwetla use community centers and facilities in neighboring settlements, however these places are far therefore and require financial investment which is a challenge for most. One respondent highlighted that their children go to school in Eastbank and Bekilanga but they have to walk long distances therefore the community needs facilities closer to them or alternatively, the government could offer relief measures by procuring transportation for the children.

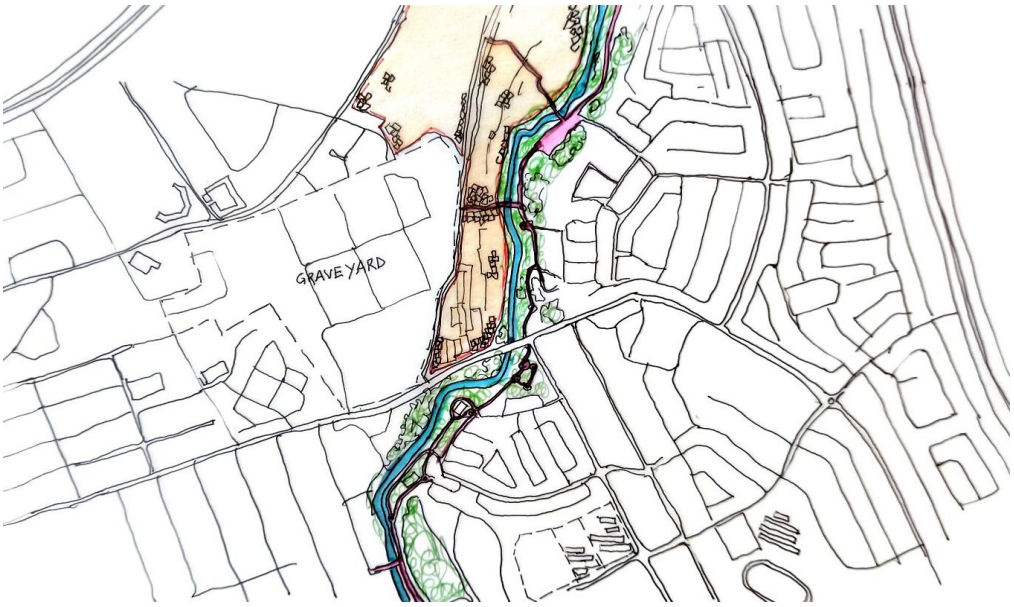


Figure 26: Proposed extension of the Alexandra Park Walkway. Source: Author (2024)

5.4. CHALLENGES FOR IMPLEMENTATION OF COMMUNITY CENTERS IN STJWETLA

The challenges represented in the pie chart below reflect the concerns from the residents. Respondents have identified a shortage of space as the main challenge for building community centers in Stjwetla, followed by delayed implementation as well as lack of implementation in some of the policies. A few respondents highlighted lack of funding and political manipulation as some of the challenges for implementing community centers.

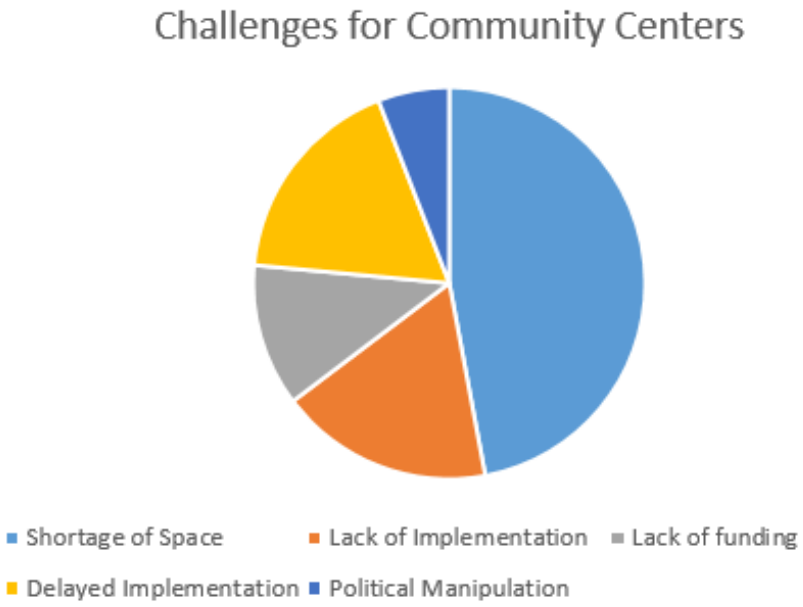


Figure 27: Challenges for community centers in Stjwetla. Source: Author (2024). This chart is a representation of the sample.

5.4.1 Shortage of Space

One of the most significant challenges is the shortage of space in Stjwetla and some respondents highlighted the reason to be migration from neighboring regions and countries in search of better employment opportunities in Johannesburg. This migration adds to the challenge of urbanization and overcrowding of the informal settlement and the more people build shacks, the more it becomes congested and limits the availability of space for building community centers. Despite the challenge of shortage of land, community gardens in Stjwetla such as the Greenhouse Garden provide a model for how community centers can be multi- functional to accommodate various entrepreneurs and community services despite the shortage of land to promote social and economic development.

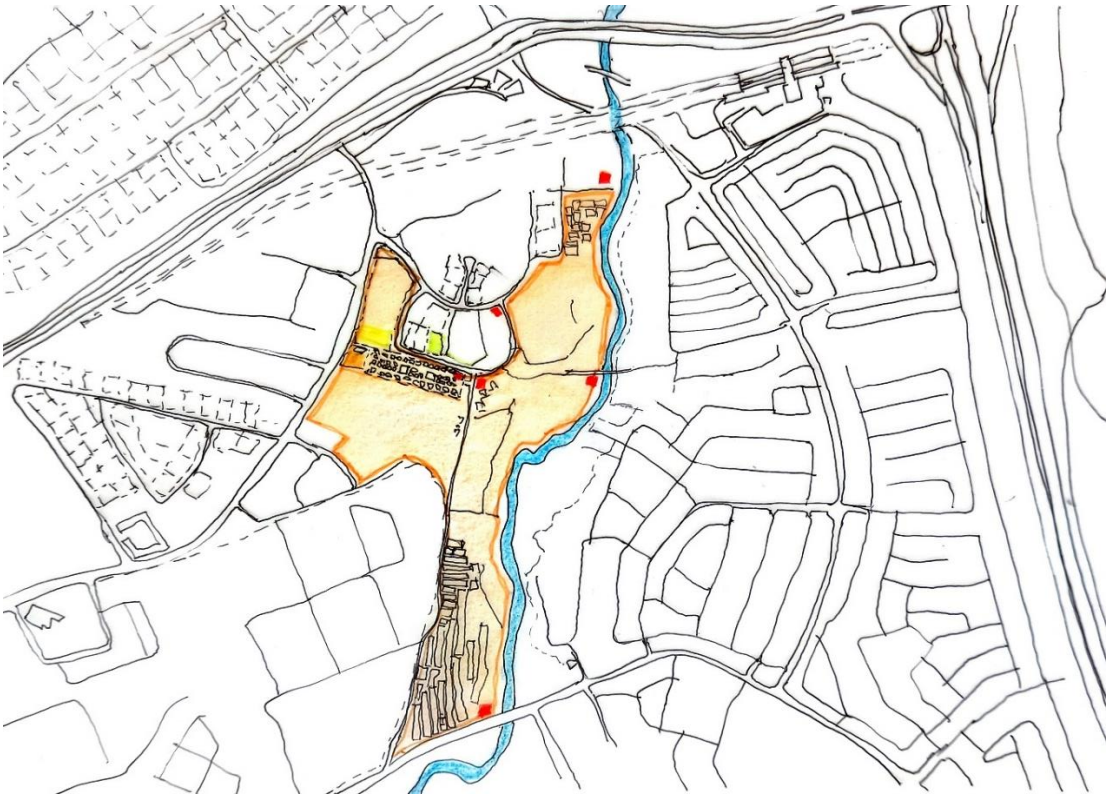


Figure 28: Proposed location of small scale interventions for community centers. These areas are high traffic areas located in the small open spaces in Stjwetla. Source Author (2024)

The existing centers in Stjwetla such as the Greenhouse garden, Maponya Community Garden, Nthethelelo Foundation as well as Thuthuzela offer a model for how community-driven initiatives can contribute to social cohesion and environmental sustainability which are in line with the Sustainable Development Goals. These community centers act as social, educational and environmental hubs that enable residents to make a living and build resilience despite the various challenges they face. The resilience of Stjwetla residents through community gardening, patrolling and informal businesses are proof that the community is able to adapt to the ever

changing economic and spatial landscapes. These initiatives by the community are essential for mitigating the issues of crime, unemployment and poverty although without the support from government, their efforts remain limited. They can be improved through consolidating community patrolling, building multipurpose pavilions for shared working spaces, training and community dialogue.

According to Pheni (2020:25) the Stjwetla committee has "a unit that focuses on infrastructure and development in this settlement and issues that has to do with maintenance of roads, provision of services such as electricity and water." Additionally one of the patrollers or the committee members contact the police in the case of emergencies. Pheni (2020) also stated that the councilor contacted relevant people in the municipality whenever there was an emergency. Such units serve an integral purpose of improving participation in community development, informing priority of developments, monitoring safety and facilitating programmes with Stjwetla residents and their neighboring communities. Beyond dealing with development, the committee also upholds moral standards and emergency response in community. Vandalism is a setback to service delivery in most informal settlements and Madzaramba (2024) opines that once facilities are vandalized, repairing often takes long therefore other residents suffer. This case justifies the need for formalization and co - management of community centers by state and non-governmental organization.

The recommendations from the community emphasize the importance of building permanent, multi-functional facilities that can accommodate diverse needs of the community. A central community hall for example could provide space for educational programs, health services and recreational activities whilst also addressing social and economic challenges faced emphasize the community. The introduction of job creation programs and vocational training within these centers would empower residents to become self-sufficient and reduce the reliance on informal work. The development of community centers that cater to the needs of all residents are essential for achieving sustainability and bridge the gap between livelihoods and infrastructure development of Stjwetla and neighboring communities. Considering that a blanket approach is never ideal, the needs can be identified through engaging the community in forums allow them to express their concerns, listen and engage residents for innovative solutions. These can serve as a model for the formalization and development of informal settlements across Johannesburg.

5.4.2. Government and allegations of Political Manipulation

The implementation of community centers in Stjwetla face obstacles that affect the potential of the existing centers. Pheni (2020) highlights that the Stjwetla committee leadership plays a vital role of implementation rules and regulations. Furthermore, some of the respondents have alluded to this by highlighting that they liaise with municipal officers from the Department of Housing and Human Settlements and the South African Police Service to combat criminal activity and illegal occupation. However the unit faces challenges in achieving their mandate because of limited participation and lack of execution of from the government officials. There is a unit

responsible for service delivery however, there are challenges due to lack of implementation from the responsible government officials. Collaborative efforts between the community, the municipality and private stakeholders is essential for sustainable development.

Local government should implement solutions that address the inputs by residents on service delivery. The IDP (2020/21) cities that developing countries face tremendous population growth and Johannesburg is no exception therefore a need to adapt interventions and positively respond to the ever changing dynamics. Ntwana and Naidoo (2024) highlight that public participation is the core of democracy for service delivery therefore citizens should be allowed to have input in matters concerning local government.

Public participation therefore requires structures and facilities that will accommodate residents and government representative meetings. According to Huchzermeyer (2023), informal settlements across cities of the Global South face significant complexities of governance weaknesses that require partnership from the local government, private – sector and non-governmental organizations for solutions. These partnership will facilitate accountability between the private sector, NGOs and the government. Van Wyk (2020) cited in Huchzermeyer (2019) opines that planning should be flexible in responding to spatial plans and land use systems. To implement this, there should be a bottom –up approach that integrates the informal dwellers that recognizes that they communities are involved in the making of the city and should not be neglected.

5.4.3. Funding and Resource Gaps

The lack of funding for community centers limit the improvement and furnishing of existing facilities in Stjwetla therefore they do not serve to the optimum capacity. The greenhouse community hall is almost a storage room rather than a functional hall. The hall lacks furniture and other equipment as alluded by one the interview respondents. Participants expressed that the lack of funding and support from the government institutions is a challenge to the development of their community centers. However the funding such facilities is a form of investment from the government and can promote the actualization of the sustainable development goals for infrastructure and reduced poverty.

Institutional support is a critical aspect of community development therefore local government should ensure adoption of realistic target that are cognizant of the context of informal settlement. Whereas solutions for planned communities may be at a grander scale, interventions for informal settlements like Stjwetla should match the scale. These interventions need not be conventional building standards for community hall, sports facilities and art galleries. They can be multipurpose pavilions that can serve as shelters, meeting points, pop up stalls or libraries, mobile clinics, amphitheaters, a sizeable playground and green spaces with gardens



Figure 29: Drawings of the newly built safety shelter in Stjwetla (see figure 16) is part of ongoing research at CUBES, University of the Witwatersrand, which investigates and implements community-based safety interventions. These open structures, designed primarily for patrollers, are accessible to all residents and provide a shared, context-sensitive space.

5.5. CONCLUSION

Community centers play a vital role in promoting sustainable development and integration between the Stjwetla informal settlement and the neighboring middle and high income formal settlements. However, challenges related to infrastructure, funding, availability of space and government support continue to hinder improvement of existing community centers and proposing new ones. There is potential for Stjwetla to develop the existing community centers that will serve both the residents and the neighboring communities in order to promote social cohesions, economic and environmental sustainability. Interview respondents expressed various recommendations for new facilities such as schools, RDP houses, sporting activities and job opportunities in order to improve their livelihoods. Providing these facilities offers opportunities for long- term resilience and sustainable practices. The success of this development may serve as a model for similar developments across informal settlements in Johannesburg.

CHAPTER 6: CONCLUSIONS AND RECOMMENDATIONS

6.1 INTRODUCTION

The recommendations in this chapter are based on the findings and analysis from field observations, interviews with Stjwetla community members and their leaders. They highlight strategies for leveraging on the community's resilience to improve the existing community centers in order to facilitate sustainability and integration, as well as build bridges between the informal settlement and its neighboring high income settlements. Addressing the pertinent issues for integration and social sustainability aligns with achieving the UN Sustainable Goal 11 for sustainable cities and communities by reducing the level of inequality and fostering collaborations and inclusivity.

6.2 SUMMARY OF THE STUDY

In this research, I investigated the existence of community centers in Stjwetla and built to build a case for them to be models for facilitating sustainability and integration of low income, informal communities with affluent and middle income neighborhood. Community centers are multifunctional, accessible to the general public and a place of recreation, social interaction, education and empowerment. They are learning centers that facilitate social cohesion as in the case of the Greenhouse community garden and the Rays of Hope community centers in Stjwetla. Managed by both the local government and community leadership thorough participatory planning. Case studies like the Gando Primary School, Langbos Children's center and the Steinkopf community center provide reference for how sustainability can be implemented in community projects. A place of gathering, hosting social events, employing locals as labor, using eco – friendly materials and partnering with non-governmental organizations.

Despite existing literature on housing and in-situ upgrading in informal settlements, there is a gap in research for community centers. It was important to conduct this research to add on to existing research and bring a perspective that promotes actionable recommendations for community centers. Community centers are categorized into small, medium and large scale and are built depending on the setting. Sustainability discussed in three main pillars of economic, social and environmental. The main research question was to find out how community centers facilitate integration and sustainability in Stjwetla and neighbouring areas and in this report, several points were discussed. To find out this, I adopted qualitative methods to find out first hand from the residents. In addition, the sub questions were structured to find out the challenges for the development of community centers in informal settlements. The qualitative methods adopted in this research highlighted that the main challenges were shortage of space, alleged government and political manipulation, funding and resource gaps.

Furthermore, I found out that there are existing centers in Stjwetla which are the Community hall, Nthethelelo Foundation, Greenhouse community garden, Maponya garden, Rays Of Hope, Thuthuzela Aid Community center and the sports ground. In the report, these centers were identified in three main categories of educational, recreational, agricultural and communal community centers, varying in different spatial layout and architectural design. There are challenges for improving the existing facilities and proposing new ones primarily because of funding challenges, lack of space and alleged political manipulation from government.

In line with the sub-question two to find out the pressing needs and concerns of the Stjwetla community this research, I found out that the challenges Stjwetla faces are common for most informal settlements. The motivation for migration and informal dwellers is proximity to job opportunities in developed and formalized urban areas despite the dire living conditions. Despite the Stjwetla community showing resilience and cohesion in the management of the residents and sustainable economic and building constructions practices, there are pressing needs in the community that have been left unaddressed. The respondents have alluded that there is general concern on the high crime rate, lack of space, lack of sanitation facilities, unemployment, lack of government participation and infrastructure deficits in the informal settlement.

6.3 RECOMMENDATIONS

In the case of Stjwetla, providing public spaces has the potential to offer the community platforms for job creation to sustain themselves and promote social cohesion. The following recommendations are given in line with the aim to find out how community centers can be improved to address the needs of residents of Stjwetla.

6.3.1 Addressing challenges for infrastructure

The level of congestion, high population and spatial density in Stjwetla obstructs free mobility of people, vehicles and the possibility of building new facilities. Interview respondents highlighted the lack of proper infrastructure, there are no tarred roads except the narrow pavement that runs from the Greenhouse TRA through Stjwetla to the main road connecting to Alexandra and Extension 7. It is true that there are challenges in developing Stjwetla by introducing roads and walkways to improve walkability and circulation in such a congested settlement unless the some of the houses are relocated to make room for infrastructure development in Stjwetla. Another solution for the challenge is collaboration with private sector and non-government organizations to provide basic services beyond water and sanitation facilities provided by the municipality. Meeting basic health standards is important therefore an alternative solution to the temporary toilets could be zoning out some of the spaces to build better toilets and conservancy tanks for the community.

The lack of organization and regulation for how people build creates room for unregulated development that leads to congestion. Where residents of informal settlements wish to extend their homes, they should first register with the community leadership for inspection. Standardized building typologies for informal settlements should include communal facilities and acceptable building materials. Building materials do not always have to be concrete, brick and mortar but alternative durable materials such as wood or shipping containers would be sufficient. Rezoning and improving the building standards may increase the value of some key community nodes in Stjwetla and reduce the spatial indifference in the communities, a place that residents are proud to live in. Aligning and implementing these strategies with the Spatial Development Framework and the Integrated Development Plan will ensure the City of Johannesburg achieves its vision for sustainability and integrated human settlements for its citizens.

6.3.2 Promoting sustainability through community centers

In this research, I found out that community centers contribute to social and economic sustainability and this include the wellbeing of the residents. The municipality should consider building a small clinic for Stjwetla residents. This facility can be an outpatient clinic for accidents and emergencies, regular health screenings and first aid center for the community. Running this clinic may offer employment opportunities for some of the residents and take the load of the patrollers. Stjwetla residents have alluded to the challenge of power supply and illegal electricity connections that put them at risk of electric shock and fire breakouts. Firstly, it would be ideal to have a committee responsible for monitoring electrical connections in the community and local electricians can lead the roles therefore creating jobs for them. Secondly, it would be ideal to have solar powered generators at community centers and solar street lights so that incase of load shedding and power cuts, residents have access to internet, backup for charging their electronic devices and rechargeable lights for their home. Furthermore, this can help provide sufficient light for students to study at night.

Shipping containers have proven to be a viable solution for densification especially in areas faced with challenges of space. Hassan et al (2022) argue that shipping containers are durable and allow for modularity, they are economical and fast to install compared to conventional building materials therefore suitable for various human activities such as fast-food restaurants, shops, exhibition halls waiting areas, housing and office space. There are debates on thermal comfort for shipping containers but there is potential to explore vertical arrangements for effective thermal performance and densification in light of the shortage of space in Stjwetla. The Alexander Water Warriors used shipping containers for their satellite recycling center in Alexander and this is a testament of temporary architectural solutions that can be adopted in Stjwetla.

6.3.3 Improving participation and formalizing community initiatives

It is critical to engage residents for initiatives to be successful, impactful and for communities to take accountability and ownership of community facilities. In this research findings, it was established that the Stjwetla community demonstrate resilience and participation through patrolling. Patrolling and clean up campaigns can be formalized through partnerships with the local government and the non- governmental organizations therefore improving the sustainability of such community initiatives. Providing the patrollers with a monthly stipend may be further motivation for other residents to sign up and this would create sustainable livelihood. In addition, the COJ may consider holding regular consultation meetings with the community and collaborate with planners and other service engineers to present alternative solutions for community initiatives. Such facilities and spatial interventions need to address access, and hygiene standards.

Another recommendation is to formalize the community garden in a way that allows for education and skill transfer between the affluent and the low income informal neighborhoods. The community garden has potential to be an agricultural education center for the Stjwetla residents and neighboring communities. The recommendation is for residents to form a gardening club where they hold regular workshops in collaboration with local farmers and landscapers from neighboring communities such as Kelvin, Marlboro, and Alexandra to bridge the gap between the informal and affluent neighborhoods. More than just serving adults, children should be accommodated to learn gardening to achieve skills transfer.

6.3.4 Solutions for existing community centers

The Stjwetla community has artisans that are thriving in their businesses and even training others despite their limited resources. The artisans are currently working under the trees, another in the open space and others under a shelter made from plastics. I recommend building dedicated communal workshops in the garden for the artisans and further motivate them to hold training sessions and attract more visitors. In my opinion, formal working spaces can attract other artisans from neighboring Marlboro and Kelvin settlements for collaboration. Artisans can have opportunities of renting out their workshops for artist residencies therefore expanding their income generation and grow their businesses towards sustainable economic practices.

Developing existing community centers requires funding and it is an integral aspect of running community centers. Stakeholders from the local government, non-government organizations, and community based organizations and residents need to contribute towards capital, operational and maintenance costs for these facilities. Financial commitment ensures sustainability is attainable. The current patroller's office is dilapidated, poorly furnished and poorly ventilated. Building some office spaces for the patrollers and the committee leadership can accommodate management offices that can be a co- working space. These offices can be

made from shipping containers which also adopts the tone building with corrugated iron sheets but is more cost effective, easy to set up and can be moved to any location in the area. Structurally, shipping containers are durable and can be modified as the settlement transforms.

Further to improving the facilities, the patroller's office can be remodeled to serve as a multi-purpose facility. The space would better serve the community if it is converted into shared offices with well-ventilated cubicles for the Stjwetla leadership and therefore improve coordination of the committee with the leadership. These formalized offices can be used for holding meetings with COJ officials, the ward counsellor or other stakeholders without lowering the standard for a conducive and sustainable working space. These offices can also accommodate officers who will be responsible for monitoring applications for building inspections in the community.

Improving accessibility of the Greenhouse community hall would improve the function of the hall as a communal space for social, education and recreational activities. The hall needs to be furnished with more chairs, tables, notice boards and chalkboards, moveable partition panels that can transform the space into classrooms for children who are not enrolled in schools. To facilitate this, a designated manager for the hall can be appointed with the aim to organize activities towards improving social interaction. Implementing this offers the community with a functional multi – purpose hall that serves the different age groups in Stjwetla.

Lastly, recycling materials is common in Stjwetla but there is no recycling center available in the area. Setting up small scale recycling centers would serve as a storage and plant for repurposing waste from the Juskei River therefore enhancing the efforts of collaboration of the patrollers with the Alexandra Water Warriors. Those collecting waste materials keep them at the collection point near the Greenhouse complex and the Alexandra Water Warriors recycling station. This initiative would promote environmental sustainability by providing informal traders with cost effective, environmentally friendly materials for building their market stalls.

6.4. CONCLUSION

The study investigated the potential of community centers as models for sustainability and integration within informal settlements, using Stjwetla in Johannesburg as a case study. The study area, which is an informal settlement located near affluent high income neighborhoods, low income communities and industrial zones, presented an opportunity to investigate how community centers can act as bridges between the developed high to middle income communities and the low income, underprivileged informal communities. The findings highlighted the significant challenges faced by the community such as infrastructure deficits, inadequate governance and social exclusion. In light of these challenges, the community demonstrated resilience and sustainable practices through patrolling, recycling and repurposing waste materials and community gardening.

In informal settlements like Stjwetla, community centers like the Greenhouse Community hall, the patroller's office, the community garden and the football ground depict the potential to promote economic sustainability, social cohesion, safety and environmental protection. These spaces are however underdeveloped therefore integrating the community with its surrounding neighborhoods is limited. There is a need to improve the existing facilities and ensure that the municipality and council representatives improve service delivery and participation from the local government ensuring implementation of development frameworks.

It was apparent in the research interviews that residents consider the existing communal facilities as spaces for training, interaction, participation in social issues, character development for the youth and stewarding the environment. Although some residents do not regard these communal facilities, most of the responded highlighted the need for improvement in the management structures and involvement from local government. Community centers are not just physical structures but as places for bridging gaps in the community, promoting integration, safety, skills transfer, economic and environmental sustainability and the sustainable development goals. Stjwetla as a case study, offers lessons for addressing inequalities in informal settlements and promoting integration, sustainability and resilience in cities across the global south. Urban development must inclusive, catering to various community needs.

6.5 AREAS FOR FURTHER RESEARCH

Due to limitation on time and availability of City of Johannesburg officials, I was not able to get thorough information on the policy frameworks for informal settlements. The study would have benefited from more interviews with the public sector representatives to understand policy framework on implementing community centers in informal settlements closely linking them with the SDGs, the SDF and IDPs. In future, the research could have a larger sample group to include more residents from Stjwetla, Marlboro and Alexandra to get their perception on community centers.

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Personal communication

Resident 1 (Personal Communication, 14 August 2024) Stjwetla.

Resident 2. (Personal Communication, 14 August 2024) Stjwetla.

Resident 3 (Personal Communication, 14 August 2024) Stjwetla.

Resident 4 (Personal Communication, 14 August 2024) Stjwetla.

Resident 5 (Personal Communication, 14 August 2024) Stjwetla.

Resident 6 (Personal Communication, 14 August 2024) Stjwetla.

Resident 7 (Personal Communication, 14 August 2024) Stjwetla.

Resident 8, Patroller (Personal Communication, 14 August 2024) Stjwetla.

Resident 9, Patroller (Personal Communication, 16 September 2024) Stjwetla.

Resident 10, (Personal Communication, 16 September 2024) Stjwetla.

Community Leader 1 (Personal Communication, 16 September 2024) Stjwetla.

Community Leader 2 (Personal Communication, 16 September 2024) Stjwetla.

8. APENDICIES

Appendix 1

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG | SCHOOL OF ARCHITECTURE PLANNING

Community Leader No: ____

Title: Community centers as models for sustainable development and integration: Making a case for Stjwetla

I. INTRODUCTORY PART: Establish a rapport, State the purpose of the Research

II. INTERVIEW: Semi-Structured Interview Questions

The questions following are concerned with the role community centers play in informal communities. The aim is to explore existing structures and potential interventions for Stjwetla.

1. What management roles are existing in Stjwetla?
2. How does the community partner with the public sector to address the community needs?
3. Are there community centers existing in the community?
4. Please elaborate on how these facilities are managed and funded.
5. What are the common social/recreational activities in Stjwetla?
6. What is the most common economic activity in Stjwetla?
7. Are there facilities catering for these recreational activities?
8. What are the most prominent concerns and needs of the community?
9. What community facilities do you want provided for or improved in Stjwetla?
10. What is your understanding of the role community members play in the management and operation of these centers?
11. Are there any additional thoughts on the topic that you would like to share?

III. Closing: Thank the participant and offer the reassurance of confidentially

Appendix 2

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG | SCHOOL OF ARCHITECTURE PLANNING

Community Member No: ____

Title: Community centers as models for sustainable development and integration: Making a case for Stjwetla

I. INTRODUCTORY PART: Establish a rapport, State the purpose of the Research

II. INTERVIEW: Semi-Structured Interview Questions

The questions following are concerned with the role community centers play in informal communities. The aim is to explore existing structures and potential interventions for Stjwetla.

1. Are there community centers existing in your neighborhood?
2. What is your main source of economic activity and where is the business located?
3. Do you have any professional training, if so please state what kind of training?
4. What is the most common economic activity in Stjwetla?
5. Which recreational activities that you are interested in which are not provided for in your community?
6. Which activities are most common in your community?
7. What are the most prominent concerns of the community?
8. What community facilities do you want provided for or improved in Stjwetla?
9. Are there any other thoughts on community activities that you would like to share?

III. Closing: Thank the participant and offer the reassurance of confidentially

Appendix 3

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG | SCHOOL OF ARCHITECTURE PLANNING

Public Sector Representative No: ____

Title: Community centers as models for sustainable development and integration: Making a case for Stjwetla

I. INTRODUCTORY PART: Establish a rapport, State the purpose of the Research

II. INTERVIEW: Semi-Structured Interview Questions

The questions following are concerned with the role community centers play in informal communities. The aim is to explore existing structures and potential interventions for Stjwetla.

1. What are the existing planning processes and regulations for community centers in Johannesburg?
2. How do those structures facilitate sustainable development?
3. What are the primary services and activities offered at community centers?
4. How do you address the funding and resource limitations of these centers?
5. What partnerships have been most effective in supporting community engagement?
6. Can you discuss any economic development programs run by the community centers?
7. Are there any notable impacts on the community from the activities of these centers?
8. What challenges for integration do informal communities face in Johannesburg?
9. What are the plans for expanding community engagement in Stjwetla?
10. What is your view on community centers and their role in integrating communities?
11. Is there anything related to integration and sustainable development that you would like?

III. Closing: Thank the participant and offer the reassurance of confidentially

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG | SCHOOL OF ARCHITECTURE PLANNING

Participant Information Sheet (PIS): Community Members

Dear Sir / Madam

My name is Kolobetso I. Selemena. I am a Masters student in Urban Management at the University of the Witwatersrand, Johannesburg. My supervisor is Dr Paulo Moreira. I am conducting a research study about community centres in Stjwetla. The study title is Community Centres as models for sustainable development and integration: Making a case for Stjwetla, Johannesburg.

I am inviting you to take part in an interview. If you decide to take part, your participation in this research study will last about twenty minutes. The interview will take place in person in Stjwetla during working hours.

With your permission, I would like to audio record the interview. This data will be stored in a password-protected computer for 10 years, after which it will be destroyed. Only the researcher will have access to the data.

The interview will be confidential and anonymous. When I share the results of the research study, I will not include your name or anything else that could identify you.

If you decide to take part in the research study, it should be because you want to volunteer. You do not have to take part. You can stop being in the study at any time. You do not have to answer any questions if you do not want to. You will not get any direct benefits if you choose to join the research study. You will not lose any services, benefits or rights you would normally have if you decide not to join. Taking part in the research study will not cost you anything. You will not be paid for being in this research study.

The risks for this research study are no more than what happens in everyday life OR some of the questions asked may make you feel sad or upset.

This research study will be written up as a research report. The report will be available on the university library website. If you would like to receive a summary of this report, I will be happy to send it to you.

If you have any questions during or afterwards about this research study, feel free to contact me or my supervisor on the details listed below. If you have any concerns or complaints about the ethical procedures of this research study, you are welcome to contact the University Human Research Ethics Committee (Non-Medical), telephone +27(0) 11 717 1408, email hrecnon-medical@wits.ac.za.

Yours sincerely,
Kolobetso Iponeng Selemena

Researcher:
Kolobetso I. Selemena, 2889039@students.wits.ac.za

Supervisor:
Dr Paulo Moreira

6 August 2024

Selemena,Kolobetso Iponeng

2889039

TO WHOM IT MAY CONCERN

RESEARCH ETHICS APPROVAL

Community centers as models for sustainable development and intergration: Making a case for Stjwetla, Johannesburg

This letter serves to confirm that the Ethics application for the above titled study has been approved. The researcher has been granted clearance to proceed with the research study or project.

Protocol/clearance number is: **SOAP053/05/2024**

Yours sincerely

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07 August 2024

Enquires:
Tiyani Ngobeni
Tel: 011 375 6114
Ref no: 08/01

Kolobetso Iponeng Selemena
50 Stiemens Street
Braamfontein
Johannesburg, 2001

cc: paulo.moreira@wits.ac.za

RE:PERMISSION AND SUPPORT TO CONDUCT RESEARCH FOR ACADEMIC PURPOSES TOWARDS A MASTER'S DEGREE IN URBAN STUDIES (URBAN MANAGEMENT) FOR KOLOBETSO IPONENG SELEMENA, ID: BN2049070

Official permission is hereby granted for the student to conduct research for academic purposes.

The permission is granted based on the proposal submitted by the student to study the **community centers as models for sustainable development and integration: making a case for Stjwetla in Alexandra**. A study area will be within the City of Johannesburg Metropolitan Municipality, Gauteng province.

The researcher will be requested to indicate to the Directorate of Human Settlements Planning, Policy, and Research on the identified participants for the Directorate to facilitate introductions for you. No respondent should be identified by name and all contributions should be kept confidential and for purposes of this research only. Respondents may withdraw from the study if they are unable or not willing to assist further, this permission does not nullify an individual's right to refuse to participate in the study.

A copy of the final research report will be shared with the Department upon completion of the study.

You are also expected to sign an agreement with the Department within 10 days after receiving this letter, failing this will mean this letter is null and void. All research techniques will be shared and explained in detail with the respondents and Department prior to undertaking the study.

PP

We trust that all necessary research ethics will be adhered to in the conduct of the study. We will endeavour to provide whatever support is required.

Hope this will be of assistance in producing the required study report.

Kind Regards,



Patrick Phophi
Executive Director
City of Johannesburg Human Settlements

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