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## A FRAMEWORK FOR SPATIAL AND SOCIO-ECONOMIC SUSTAINABILITY OF CITIES IN THE GLOBAL SOUTH: LEARNING FROM CITY OF EKURHULENI

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### ABSTRACT

This study proposes a comprehensive framework for achieving spatial and socioeconomic sustainability in cities of the Global South, drawing on significant insights from the South African City of Ekurhuleni. As urbanization accelerates and socioeconomic issues persist in the Global South, there is an urgent need to establish sustainable solutions that address the complex interplay between spatial planning and socioeconomic development. The proposed framework in this study integrates effective spatial planning tactics, inclusive governance, and targeted socioeconomic interventions to promote sustainable urban expansion and improve inhabitants' quality of life. By studying the experiences of Ekurhuleni, a city with diversified socioeconomic dynamics, ongoing urbanization, and a dedication to sustainable development, useful lessons can be gained and applied to other cities in similar situations. The spatial planning concepts include compact and mixed-use development, green infrastructure, and integrated transportation systems. These initiatives aim to optimize land use, reduce sprawl, improve accessibility, and promote environmental sustainability. Inclusive governance stresses participatory decision-making processes, stakeholder involvement, and collaboration between government and communities, ensuring that varied viewpoints and interests are included in urban planning and development processes. Furthermore, focused socioeconomic interventions focus on equitable housing access, job creation, economic diversification, and the provision of social infrastructure and services. These initiatives seek to reduce socioeconomic inequities, foster inclusive economic growth, and improve the well-being of all inhabitants. However, adopting the suggested framework will require addressing various issues, including the need for political will, institutional capacity building, suitable financial sources, and effective stakeholder coordination. Policymakers and urban planners may navigate these challenges and adapt the framework to their contexts by learning from the experiences of Ekurhuleni. Overall, this framework provides a road map for achieving spatial and socioeconomic sustainability in cities of the Global South. It provides tangible methods and interventions to develop inclusive, resilient, and liveable cities that can effectively respond to the region's rapid urbanization and socioeconomic difficulties.

**KEY WORDS** Spatial Planning; Socio-economic sustainability; Global South; Urban Development; Inclusive governance

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## 1. INTRODUCTION

### 1.1. Background

Cities in the Global South are urbanizing at unprecedented rates, owing to reasons such as population growth, rural-to-urban migration, and economic opportunities in cities (Makhubu, 2022). Rapid urbanization poses various issues for communities, including increased strain on infrastructure, housing, service delivery, and natural resources. The rate and scale of urbanization in the Global South frequently surpass cities' ability to adequately plan and manage sustainable development (Mkhwebane, 2022; Dlamini et al., 2022). These cities are confronted with serious socioeconomic issues (Patience and Nel-Sanders, 2021). Poverty, wealth inequality, and unemployment are all common, and access to decent education, healthcare, and basic amenities can be limited for vast portions of the population. Informal economy and informal settlements are common, adding to the issues of land tenure, infrastructure provision, and social exclusion (Dlamini et al., 2022). Furthermore, urban spatial challenges increase socioeconomic inequities in the Global South. Access to economic prospects, social services, and amenities is hampered by urban sprawl, poor transit networks, and geographical fragmentation. Cities' spatial patterns reflect historical legacies of segregation and unequal development, exacerbating disparities within cities.

Globally, the debate on rapid urbanization denotes that it can lead to increased economic opportunities but can also worsen social inequalities, particularly in the Global South where informal settlements and slums are prevalent (Henderson and Turner, 2020; Larsen et al., 2019). Advocates for inclusive urban policies often prioritize affordable housing, accessible education, and healthcare, while critics argue that rapid urbanization can lead to gentrification and push low-income residents to the peripheries (Larsen et al., 2019). Supporters of compact development argue that it minimizes resource use,

promotes public transportation, and preserves natural habitats, while critics argue that sprawl can provide more green spaces and lower housing costs (Bibri, Krigstie and Karrholm, 2020). Balancing growth with social and environmental responsibility is also a critical debate, with support for growth-oriented models funding social and environmental initiatives and critics advocating for alternative models that prioritize well-being, circular economies, and social equity. The governance structure for sustainable urban development posits in two ends, on one hand the local governance advocating for tailored policies and on the other hand global governance advocating for coordinated efforts to address global challenges (De Guimaraes et al., 2020).

Addressing these difficulties necessitates a holistic approach that takes into account the interdependence of spatial planning and socioeconomic development. Previous approaches concentrated primarily on spatial planning or socioeconomic strategies, resulting in fragmented and unproductive outcomes. Recognizing the interdependence of these two dimensions, on the other hand, is critical for fostering sustainable urban development that improves inhabitants' well-being and guarantees equitable access to opportunities.

### 1.2. Rationale

The spatial and socio-economic sustainability of cities in the Global South is crucial for achieving the Sustainable Development Goals, particularly Goal 11, which seeks to create sustainable cities and human settlements, and to better the overall quality of life for those living in urban areas. However, existing frameworks are often focused on either the spatial planning or socio-economic development in isolation. Therefore, a comprehensive framework that recognizes the interdependencies between the spatial and socio-economic factors is needed to address the complex challenges faces by cities of the Global South.

### 1.3. Objectives

The main objective of this paper is to propose a framework that integrates spatial and socio-economic considerations to promote sustainable development in Cities of the Global South. By examining the City of Ekurhuleni as a case study, valuable insight and lessons are drawn to inform the development of the framework. The framework aims to guide policymakers, urban planners and stakeholders in formulating strategies and interventions that foster spatial efficiency, inclusivity, and socio-economic well-being in rapidly urbanizing contexts. Ultimately, the goal is to contribute to the creation of more sustainable, resilient, and liveable cities in the Global South.

### 1.4. Methods

The paper used a case study research approach and qualitative data to understand the research problem from the perspective of the people involved, as well as to collect non-numerical data through interviews with key informants from the City of Ekurhuleni, external stakeholders, and academic scholars. The study drew conclusions using both primary and secondary data. Semi-structured interviews with key informants from the City of Ekurhuleni, scholars, and external stakeholders were used to obtain primary data. A thorough review of books, journals, conference proceedings, and government publications was conducted to gather secondary data. The data was evaluated using thematic analysis, and the themes that emerged influenced the study's findings.

## 2. URBANIZATION AND CHALLENGES IN THE GLOBAL SOUTH

### 2.1. Urbanization trends

Cities in the Global South are experiencing rapid urbanization because of factors such as population growth, rural-urban migration, and the presence of economic opportunities in urban areas. The urbanization is characterized by the

proliferation of informal settlements, inadequate infrastructure, and spatial fragmentation (Dlamini et al., 2022). The concentration of people in cities puts immense pressure on transportation, housing, water and sanitation systems, and other essential services (Makhubu, 2021; Mkhwebani, 2022). Managing urban growth becomes crucial to avoid the emergence of slums, environmental degradation, and social inequalities.

## 2.2. Socio-economic challenges

For cities of the Global South to achieve sustainable development, there are varying aspects of socio-economic challenges that need to be addressed. These challenges include poverty, inequality, limited access to quality education and healthcare, unemployment, and informal economies. Informal employment and inadequate social protection systems contribute to vulnerable living conditions for a significant portion of the urban population (Dlamini et al., 2022). Additionally, social exclusion, discrimination, and lack of participation in decision-making processes further exacerbate socio-economic disparities (Patience and Nel-Sanders, 2021).

## 2.3. Spatial challenges

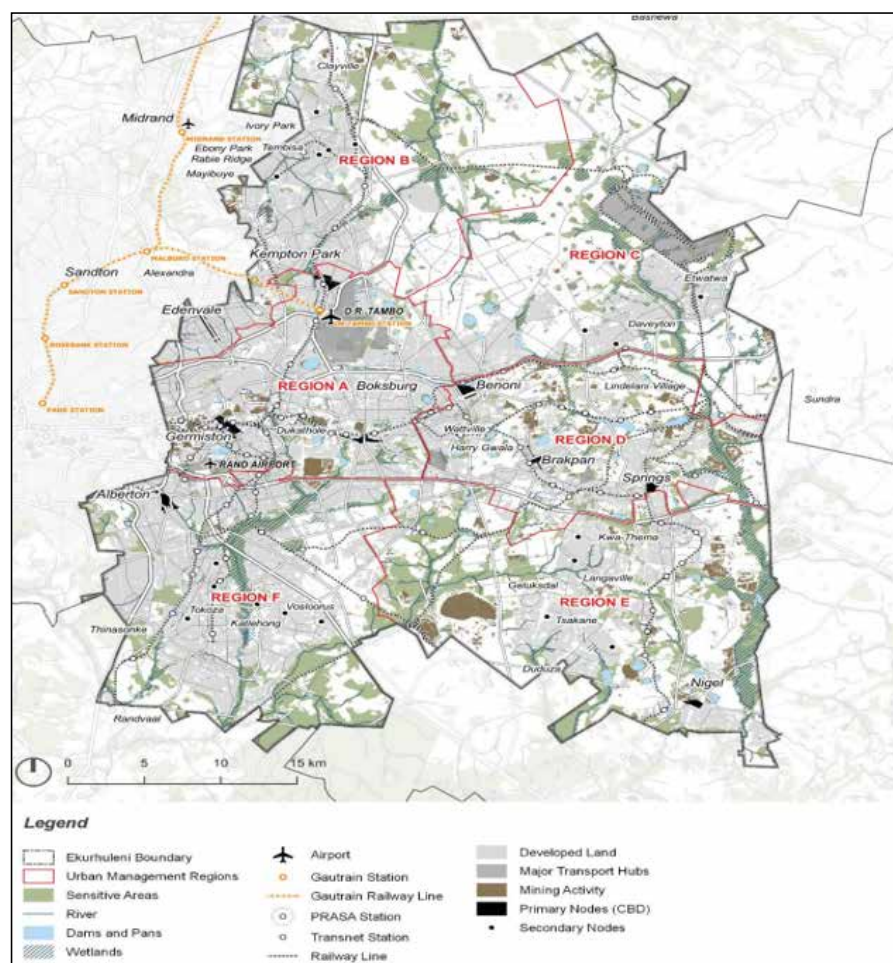
Spatial challenges in Cities of the Global South are closely intertwined with socio-economic issues. Rapid urbanization often leads to haphazard and unplanned growth, resulting in sprawl, inefficient land use, and inadequate infrastructure provision. Spatial fragmentation can lead to social segregation, limited access to services and economic opportunities for marginalized communities. Furthermore, the lack of affordable housing options and inadequate urban mobility infrastructure contribute to spatial inequalities and hinder inclusive urban development.

## 3. THE CITY OF EKURHULENI: A CASE STUDY

### 3.1. Overview of Ekurhuleni

The City of Ekurhuleni, located in the Gauteng province of South Africa serves as a valuable case study for understanding spatial and socio-economic sustainability in the Global South. With a population of over 3,3 million people, Ekurhuleni is one of the fastest growing cities in South Africa and experiences significant urbanization pressures (Growth and Development Strategy, 2013). The City is characterized by a diverse socio-economic landscape, comprising formal and informal settlements, industrial and commercial zones (Makhubu and Vyas-Doorgapersad, 2022). This diversity provides a rich context for understanding the challenges and opportunities related to sustainable urban development.

Figure 1: Extract from City of Ekurhuleni Growth Management Strategy, 2020



The City of Ekurhuleni (CoE) is located in Gauteng and is one of the three municipalities in the province. It is known to represent the industrial heartland of South Africa and it is home to the biggest Airport in Africa which is the OR Tambo international airport. It is located within the larger city region and has a good inter and intra-regional linkages of different transportation modes, with the OR Tambo international airport and three core sub-continental export harbours being Maputo, Richards Bay and Durban. The spatial structure of the CoE comprises of nine towns and settlements which were established the mining belt which are Alberton, Benoni, Boksburg, Brakpan, Edenvale, Germiston, Kempton Park, Nigel, and Springs. The city also consists of four historically disadvantaged communities which are located in the outskirts of the urban areas which are Tembisa, Daveyton, the Katorus complex and the Kwatsaduzza

complex (MSDF, 2015). It also consists of the Actonville-Wattville area located in the south of the Benoni CBD. The CoE is recognized in the Gauteng City-Region as part of the economic and employment core, which also faces rapid urbanization resulting in various urban challenges (GDS, 2013).

### **3.2. Urbanization and spatial patterns**

The City of Ekurhuleni's urbanization and geographical patterns are shaped by a combination of historical, economic, and social forces. Ekurhuleni, as a fast-rising metropolitan area, has extensive urbanization and distinct spatial patterns. Historical causes such as apartheid-era laws that enforced racial segregation and spatial inequality have shaped the spatial patterns in Ekurhuleni. The city still bears the scars of forced removals and spatial fragmentation, with sections designated for different racial groups and severe inequities in access to resources and services.

As a result of population growth and economic development, Ekurhuleni has seen significant urban expansion. Residential, commercial, and industrial districts have grown in the city, notably along key transit routes and near economic hubs (Makhubu, 2021). This growth has resulted in the formation of new townships, informal settlements, and urban sprawl, all of which have an impact on the city's spatial organization.

The spatial distribution of economic activities in a city affects employment prospects, land use patterns, and transportation networks. In Ekurhuleni, informal settlements and low-income regions are important spatial features. Substandard housing, insufficient infrastructure, and restricted access to basic services characterize these communities (Kornienko, 2021). Informal settlements typically appear in peri-urban areas as a result of rapid urbanization, housing shortages, and migration. The presence of informal communities in the metropolis contributes to spatial fragmentation and socioeconomic

inequality.

Ekurhuleni has spatial differences, with prosperous parts coexisting with impoverished people. Well-planned residential developments, contemporary infrastructure, and easy access to quality services characterize affluent neighborhoods. In contrast, marginalized populations frequently confront issues such as insufficient housing, limited access to essential services, and socioeconomic disparity. These spatial differences contribute to social fragmentation as well as an unequal distribution of resources and opportunities inside the metropolis.

### **3.3. Socio-economic dynamics**

The city of Ekurhuleni demonstrates a variety of socioeconomic factors that form its urban landscape. Ekurhuleni is one of South Africa's major metropolitan municipalities, encompassing a diverse mix of urban, peri-urban, and rural communities, each with its own socioeconomic characteristics and issues (MSDF, 2015). Like many cities in the Global South, has major socioeconomic gaps. The city is marked by high levels of inequality, with sharp differences between prosperous and underprivileged sections. The main obstacles that vulnerable communities in informal settlements and low-income areas face include persistent poverty, limited access to essential services, and poor infrastructure (Mkhwebane, 2022). Addressing these socioeconomic inequities is critical for Ekurhuleni to achieve inclusive and sustainable development.

Ekurhuleni is a significant economic centre, containing a wide range of industrial and commercial activity. The city is home to strong manufacturing, logistics, and service sectors, all of which contribute considerably to regional and national economies. However, unemployment remains high, especially among young people and vulnerable populations. Improving job creation, skill development, and entrepreneurship are critical to achieving inclusive economic

growth and eliminating poverty in Ekurhuleni (Dlamini et al., 2022). The informal economy is important in the socioeconomic dynamics of Ekurhuleni. Informal businesses and street vendors help to create jobs, generate revenue, and provide goods and services, especially in underserved areas. However, the informal sector frequently faces obstacles connected to its informality, a lack of resources and assistance, and insufficient working conditions (Mkhwebane, 2022). Integrating the informal economy into formal urban processes and supporting informal workers can improve their lives and overall socioeconomic resilience.

Ekurhuleni is dealing with housing issues, such as a considerable backlog in formal housing provision and the spread of informal settlements. Inadequate housing conditions, restricted access to basic amenities, and tenure insecurity characterize informal communities (Makhubu, 2021; *ibid*). Addressing the housing shortage and improving housing conditions are crucial for supporting socioeconomic stability, decreasing inequality, and assuring people's well-being. Access to high-quality social infrastructure, such as education, healthcare, and community centers, is critical for socioeconomic development and increasing citizens' quality of life. Disparities in access to social infrastructure exist across Ekurhuleni, with marginalized populations frequently facing restricted access to critical services. Investing in social infrastructure and increasing service delivery in underserved areas are critical for achieving socioeconomic justice and boosting inhabitants' well-being.

### **3.4. Sustainability initiatives**

Various initiatives have been undertaken in CoE to promote sustainable development and address the spatial and socio-economic challenges it faces. The city has embraced sustainable urban planning principles, emphasizing compact mixed-use development, green infrastructure, and integrated transport systems. Efforts have been

made to revitalize and regenerate older industries, promoting economic diversification and job creation. Inclusive governance practices have been promoted through mechanisms such as community forums and stakeholder consultations, aiming to engage residents in decision making processes. Additionally, social interventions targeting housing, healthcare, education, and social support programs have been implemented to improve living conditions and reduce inequalities.

The City of Ekurhuleni houses various strategies which are being implemented to aid with the attainment of urban sustainability. These strategies include the Strategic Urban Developments, which are city wide projects that are critical projects towards the building of the city and ensure strategic development throughout the city, creating jobs, providing housing, promoting spatial transformation and inclusion in the city (IDP, 2022). The city also realizes housing provision as a strategic element, although there still exists a backlog in housing provision in the city, there has been various interventions being done and houses being provided. Transit Oriented Development is also denoted as a strategy towards urban sustainability. It speaks to building communities which are connected, with transit nodes being in proximity with commercial and residential units and encouraging the use of public transportation and walking rather than being dependent of private vehicles.

The provision of sustainable energy is also one of the strategies of the City of Ekurhuleni to achieve a sustainable city and communities. Notably, the provision of PV solar light units and portable solar lighting units to informal settlements in Ekurhuleni has been an important aspect of the city in ensuring that its residents have access to efficient energy. The city has also established a solar farm in the O. R. Tambo Precinct in Wattville, solar panels are also used in some of the customer care centres such as in Boksburg and in Kempton Park. This is an important aspect for the city in the

move towards the use of more efficient and clean energy. The city also denotes Disaster Risk Reduction as an important strategy for attaining urban sustainability. The inception of the Covid-19 pandemic has demonstrated that most cities do not have capacity to deal with disasters, thus finding themselves vulnerable if a disaster occurs (Mkhwebane, 2022). The Disaster Management Plan alludes to strengthening institutional capacity, risk reduction actions and disaster response actions while also providing training and awareness in communities to mitigate and deal with disasters.

### 3.5. Policy and legislative frameworks

The City of Ekurhuleni has over the years implemented a number of policies and legislative frameworks, which are constantly reviewed and updated. This shows that the city has capacity to implement SDG-11 towards the achievement of urban sustainability from their policies and legislative frameworks. The policy and legislative frameworks of the city delineate that the city strides to achieve sustainability by putting focus on all four pillars of sustainability through their formulation which are social, economic, environmental, and institutional sustainability. Achieving a balance in the pillars of sustainability is important because these policies guide development, thus achieving this balance ensures that there is balanced development and growth in the city. Development in the city is guided by the Spatial Planning and Land Use Management Act (SPLUMA), which provides overarching principles on how to undertake development and land uses, which is incorporated into the policies and frameworks of the city (IDP, 2022).

The Growth and Development Strategy plays an important role in the city achieving urban sustainability, with a goal to position the City of Ekurhuleni as a sustainable city by 2055. The IDP clearly outlines the implementation plan and way forward towards the achievement of the sustainable city by

2055 (ibid). The policies and legislative frameworks of the city are interrelated and speak from common ground, this is important to ensure that the city is moving towards a similar goal and its policies are addressing its urban problems. Although the City of Ekurhuleni is still faced with many challenges such as urbanisation, development on the urban edge, spatial segregation and a backlog in housing provision, the policy environment provides promising ground that if they are well implemented, the city can address its challenges and achieve its policy goals, thus building a city and communities which are resilient, safe, sustainable, and inclusive (Patience and Nel-Sanders, 2021).

## 4. THEORETICAL UNDERPINNINGS

This study explores sustainable development principles, spatial planning theories, and socio-economic paradigms to create a comprehensive framework for cities, especially those in the Global South, to navigate rapid urbanization. The theoretical frameworks provide a foundation for the analysis of the City of Ekurhuleni and the proposed spatial and socio-economic sustainability framework, offering a roadmap for effective and equitable urban development.

### 4.1. Urban sustainability framework

The concept of urban sustainability has been defined in a variety of ways. It symbolizes a city's demand-oriented approach to activities that provide long-term benefits and address long-term urban concerns, according to Evans and Fordham (2000). According to this theoretical framework, urban sustainability is dependent on a city's ability to meet defined standards across formal, functional, social, economic, and cultural domains, allowing its inhabitants to thrive while not negatively impacting the environment, social fabric, or economic conditions.



Facilitation and coordination of formal and functional strategies are critical, depending on the provision of sustainable infrastructure and policy development by urban institutions, as well as the sustainable behaviour of urban residents.

Urban sustainability is a multi-faceted approach that focuses on preserving the environment, promoting sustainable development, and ensuring the well-being of all living beings. It is based on four core pillars: environmental sustainability, social sustainability, economic sustainability, and institutional sustainability. Environmental sustainability focuses on maintaining a stable resource base, preventing over-exploitation of renewable resources, and preserving biodiversity (Hernandez-Mereno and de Hoyoz-Martinez, 2010). Social sustainability aims to provide equitable social services, including education, health, political accountability, and participation (Lake and Hanson, 2000). Economic sustainability focuses on developing a productive economic system that balances present consumption needs without compromising future consumption, ensuring a sustainable balance (Scoones, 2007). Institutional sustainability involves institutions shaping decision-making and implementing policies that foster sustainability, responding to changes such as economic growth, urbanization, evolving social values, and international linkages (World Bank, 2003). These institutions serve as intermediaries, balancing the interests of diverse entities while working towards common sustainability goals.

The four pillars of urban sustainability—environmental, social, economic, and institutional—are interrelated and mutually reinforcing. To achieve urban sustainability, a comprehensive approach that addresses the interdependence of these factors is required. Urban sustainability does not mean self-sufficiency, but rather argues for the establishment of global-local partnerships that promote sustainability (Hanson and Lake, 2000).

This theoretical framework provides a comprehensive lens through which cities can envision, develop, and implement long-term urban sustainability plans.

## 4.2. SymbioCity Framework

The SymbioCity approach is a holistic and integrated approach to sustainable urban development, focusing on spatial, socio-cultural, institutional, environmental, and economic dimensions. It is aimed at promoting sustainable urban development in low and middle-income countries and provides guidance and tools to support the process (Ranhsgen and Growth, 2012). The approach can be adjusted to fit specific regions, towns, cities, and urban areas and complements but does not replace existing regulatory policies and frameworks.

The SymbioCity approach emphasizes urban development through the local context and can be applied through various processes of city, urban area, or town development. It can follow two entry points: a multidisciplinary approach, which analyzes the area from different perspectives, and a sectorial approach, which analyzes a specific urban system to identify potential synergies.

The main objectives of the SymbioCity approach are to encourage and support multi and transdisciplinary cooperation among stakeholders, contribute to capacity building through mutual sharing of knowledge and experience, serve as a basis for dialogue and cooperation between stakeholders, guide urban sustainability reviews, contribute to the development of city-wide strategies for short, medium, and long-term improvement of urban areas, and support cities and towns in identifying practical and integrated systems solutions for sustainable urban development.

The approach can be applied in six steps: organizing the process, diagnosing the current situation, setting key issues and objectives, developing proposals, assessing the impacts of proposals, and developing a strategy

for implementation. By applying this integrated systems approach, important synergies, perspectives, and potentials are not ignored in the process of urban development. By applying the SymbioCity approach systematically, urban development processes can benefit from an integrated systems perspective, ensuring that stakeholders collaborate effectively, critical issues are addressed, and long-term solutions are implemented strategically (Ranhsgen and Growth, 2012).

## 5. FRAMEWORK FOR SPATIAL AND SOCIO-ECONOMIC SUSTAINABILITY

### 5.1. Spatial planning strategies

Spatial planning strategies play a crucial role in achieving spatial and socio-economic sustainability in cities of the Global South. The proposed framework emphasizes the following strategies.

#### 5.1.1. COMPACT AND MIXED-USE DEVELOPMENT

The promotion of compact and mixed-use development helps optimize land use, reduce urban sprawl, and enhance spatial efficiency. By integrating residential, commercial, and recreational functions within proximity, residents can access amenities and services more conveniently. This approach reduces travel distances, lowers transportation costs, and mitigates congestion and carbon emissions. Implementing zoning regulations and urban design guidelines that encourage mixed-use development can foster vibrant and liveable neighbourhoods.

Promoting compact and mixed-use development is an important spatial strategy for achieving spatial and socioeconomic sustainability. Compact development entails concentrating population and activities in concentrated metropolitan areas, eliminating the need for expansive growth on the periphery of cities. Compact development increases land use efficiency and lowers

infrastructure costs by confining growth inside current urban footprints. It also promotes a vibrant mix of residential, commercial, and recreational places, promoting walkability, social interaction, and economic vibrancy. Mixed-use development complements compact development by combining multiple land uses within the same region. This method provides for a variety of roles and activities, minimizing the need for long-distance commuting and fostering a more sustainable and balanced urban fabric. Implementing compact and mixed-use development necessitates strategic land-use planning, density-promoting zoning restrictions, and incentives for developers to participate in urban infill and redevelopment. It also needs the development of suitable infrastructure, such as transportation networks, utilities, and social amenities, to sustain greater land use and higher population densities.

#### **5.1.2. GREEN INFRASTRUCTURE AND OPEN SPACES**

Integrating green infrastructure and open spaces within urban areas improves environmental sustainability, enhances biodiversity, and provides recreational opportunities. Incorporating parks, green corridors and urban forests not only enhances the aesthetic appeal of cities but also contributes to other various factors such as air purification, temperature regulation, and stormwater management. These green spaces also provide residents with opportunities for physical activity, social interactions and contribute to the overall well-being of the communities. Strategic urban design should prioritize the incorporation of green infrastructure into the urban fabric, ensuring that all inhabitants have equitable access to green spaces. It also necessitates taking into account the interconnectedness of green spaces in order to create green networks and corridors, so facilitating biodiversity conservation and enabling pedestrian and cycling connectivity.

Investing in green infrastructure creation and upkeep necessitates coordination among government agencies,

community organizations, and business partners. To assist the establishment and continued management of green areas, funding strategies such as impact fees, public-private partnerships, and green bonds can be investigated. Engaging local communities in green infrastructure planning, design, and maintenance develops a sense of ownership and stewardship, assuring the long-term sustainability of these vital urban assets.

#### **5.1.3. INTEGRATED TRANSPORT SYSTEMS**

The development and promotion of integrated transport systems is essential for sustainable urban mobility. Prioritizing public transportation such as buses, Harambe BRT, and trains encourages the use of sustainable modes of transportation and may lead to the reduction of reliance on private vehicles. Designing safe and accessible cycling and pedestrian infrastructure improves active transportation options and promotes healthier lifestyles. An integrated transport planning system ensures that there is seamless connectivity between different modes of transport, making it easier for residents to access employment opportunities, education, and other essential services.

### **5.2. Inclusive governance**

Inclusive governance practices are crucial for fostering sustainable and equitable urban development. The proposed framework emphasizes the following elements.

#### **5.2.1. PARTICIPATORY DECISION-MAKING PROCESSES**

Engaging residents, community organizations and relevant stakeholders in decision making processes promotes inclusivity, transparency, and accountability. Establishing participatory forums, enables communities to actively contribute to urban planning and policy formulation.

The involvement of marginalized groups is important to ensure their representation in decision-making processes, making

sure that their needs and aspirations are also addressed.

Cities may tap into local expertise, insights, and inventive solutions that would otherwise go unnoticed by involving locals in decision-making. It enables communities to actively shape policies, programs, and initiatives that have a direct impact on their neighborhoods and quality of life. Participatory decision-making also improves transparency, accountability, and trust between citizens and authorities, instilling in residents a sense of ownership and responsibility. Cities may enhance participatory decision-making by creating forums for public dialogue, making information and data more accessible, and ensuring that decision-making processes are inclusive and culturally sensitive. It is critical to actively engage marginalized groups in order to ensure their representation and meaningful participation in decision-making processes. It is also critical to build residents' capacity to participate successfully in these processes through education and awareness campaigns.

#### **5.2.2. STAKEHOLDER ENGAGEMENT**

Effective stakeholder engagement facilitates collaboration and cooperation among government agencies, civil society organizations, private sector, and communities. It ensures that diverse perspectives are considered and that the interests of various stakeholders are considered. Regular consultations, workshops, and public meetings provide platforms for sharing information, gathering feedback, and building consensus. Strengthening partnerships and fostering dialogues among stakeholders can lead to more sustainable and context-specific urban solutions. Involving stakeholders in urban project planning, implementation, and evaluation fosters teamwork, shared responsibility, and a more holistic knowledge of the difficulties at hand. Partnerships, joint efforts, and co-production strategies are all possible forms of collaboration. Stakeholders can confront difficult urban challenges

and discover new solutions by bringing together diverse experience, resources, and viewpoints.

Effective stakeholder engagement necessitates the establishment of clear communication channels, ensuring that information flows both ways. It entails building communication and collaboration platforms, as well as boosting mutual learning and understanding. Collaborative procedures should be inclusive, ensuring the inclusion of marginalized and vulnerable groups that are frequently left out of decision-making processes. Empowering stakeholders through capacity-building activities and technical assistance improves their ability to participate meaningfully in urban development processes.

### **5.2.3. COLLABORATION BETWEEN GOVERNMENT AND COMMUNITIES**

Collaboration between government entities and communities is vital for implementing sustainable urban interventions. Governments can support community-led initiatives, providing technical assistance, capacity building, and financial resources. Engaging communities in the co-creation and co-management of urban projects ensures a sense of ownership and long-term sustainability. Community driven development approaches empower residents to actively participate in shaping their urban environments and enhances social cohesion. Collaborative projects can take several forms, including co-planning, co-design, and co-management. This involves collaborative efforts in urban regeneration projects, community-led development initiatives, and participatory budgeting systems. Collaboration necessitates government entities taking on a facilitative role, providing the necessary support, resources, and enabling environment for communities to actively participate and contribute.

Governments can promote collaboration by establishing mechanisms for joint decision-making, such as multi-

stakeholder committees or advisory boards, where representatives from government, community organizations, and other relevant stakeholders can meet to discuss and make collective decisions. Building trustworthy connections and encouraging regular discussion between government officials and community representatives is critical to ensuring long-term and fruitful partnership.

### **5.3. Targeted socio-economic interventions**

To achieve socio-economic sustainability, the proposed framework underscores the importance of targeted interventions that address specific challenges faces by Cities of the Global South.

#### **5.3.1. EQUITABLE ACCESS TO HOUSING**

Promoting affordable housing options, secure land tenure, and inclusive housing policies is critical for addressing housing challenges and reducing homelessness in cities. Implementing strategies such as social housing programs, mixed-income developments, and upgrading of informal settlements can improve living conditions and provide access to decent housing for all residents. Governments can enact policies and initiatives that prioritize the provision of affordable housing units, subsidize rents or mortgages for low-income households, and assist in the rehabilitation of informal settlements. Collaborations with private developers, community organizations, and non-governmental organizations can aid in the mobilization of resources and knowledge for effective housing interventions. It is critical to provide secure land tenure and access to basic amenities in informal settlements in order to improve living circumstances and ensure people's well-being.

#### **5.3.2. JOB CREATION AND ECONOMIC DIVERSIFICATION**

Fostering economic growth and diversification is vital for reducing unemployment and poverty. This involves creating enabling environments for entrepreneurship, attracting

investments, and supporting small and medium sized enterprises. Providing vocational training programs, promoting skills development, and facilitating access to finance for microenterprises can enhance employment opportunities and stimulate local economies.

Cities may encourage entrepreneurship and promote small and medium-sized businesses by providing training, credit, and business development services. These projects help people start enterprises, create jobs, and contribute to local economic progress. Encouragement of innovation and technology centres can also help to diversify the economy and attract investment in developing sectors. Furthermore, governments can work with local industry, educational institutions, and training providers to create skill development programs that are in line with labor market demands. These programs can provide citizens with the skills and competences required for available career possibilities, so increasing their employability and income-generating potential.

#### **5.3.3. SOCIAL INFRASTRUCTURE AND SERVICES**

Investing in infrastructure and services such as education, healthcare, and community facilities is essential for improving living standards and reducing socio-economic disparities. Ensuring equitable access to quality education for all residents, enhancing healthcare facilities and services, and providing community spaces that promote social interaction and cultural expression contribute to inclusive and cohesive communities.

Improving educational opportunities entails the construction and renovation of schools, the provision of resources and materials, and the provision of fair access to education for all children, particularly those from underprivileged homes. Promoting vocational and technical training programs can provide individuals with specific skills, increasing their employability and



boosting economic growth. Providing inexpensive and high-quality healthcare necessitates investments in healthcare infrastructure, medical facilities, and healthcare workers. Governments can prioritize underdeveloped areas and vulnerable people to ensure that everyone has access to necessary healthcare services. Parks, community centers, libraries, and sports facilities all play an important role in building social cohesion, cultural expression, and leisure activities. To establish inclusive and thriving communities, targeted interventions focus on developing and maintaining such facilities, particularly in underprivileged regions.

These targeted socioeconomic interventions necessitate extensive planning, policy frameworks, and collaboration among government agencies, community organizations, and stakeholders. Adequate financial channels, such as public-private partnerships, grants, and social impact investments, are required to properly implement these interventions. Cities can reduce inequality, increase social inclusion, and improve citizens' well-being through implementing targeted socioeconomic measures. These actions promote inclusive and sustainable urban development, resulting in cities that provide equitable opportunities and a good quality of life for all residents.

## **6. IMPLEMENTATION CHALLENGES AND STRATEGIES**

Implementing the proposed framework for spatial and socio-economic sustainability in cities of the Global South comes with several challenges that need to be addressed.

### **6.1. Political will and institutional capacity**

One of the significant hurdles is the need for strong political will and institutional capacity at the local level (Mokoena and Sebola, 2020). Without political commitment, sustainable development initiatives may lack the necessary

support and resources for effective implementation. Additionally, limited institutional capacity in terms of skilled personnel, technical expertise and administrative capabilities can hinder the execution of complex and integrated projects.

### **6.2. Financing and resource constraints**

Sustainable urban development requires substantial financial resources, which may pose challenges for cities of the Global South that often face resource constraints. Limited budgets, inadequate revenue streams, and difficulties in accessing external funding can impede the implementation of sustainable initiatives (Mannya, 2012). Finding innovative financing mechanisms, attracting private sector investment, and seeking international partnerships and grants can help overcome these financial barriers.

### **6.3. Stakeholder coordination and engagement**

Coordinating diverse stakeholders can be challenging. Balancing the interests and priorities of different actors, including government agencies, community organizations, private sector entities, and civil society groups requires effective communication, negotiation, and consensus-building. Ensuring inclusive and participatory processes may also demand additional time and resources, but it is crucial for promoting ownership and accountability (Botha, 2015).

### **6.4. Data availability and management**

Obtaining accurate and up-to-date data on various spatial and socio-economic aspects can be a challenge in many cities due to limited data collection capabilities, fragmented data sources and lack of coordination among different agencies. This may hinder evidence-based decision-making. There is a need to strengthen data collection mechanisms, investing in data management systems, and promoting

data sharing and collaboration among relevant stakeholders to alleviate these challenges.

## **6.5. Implementation strategies**

To overcome the challenges and facilitate the implementation of the proposed framework for spatial and socio-economic sustainability, the following strategies can be employed.

### **6.5.1. STAKEHOLDER ENGAGEMENT AND CAPACITY BUILDING**

Actively involving stakeholders and building their capacity can create a sense of ownership, foster collaboration and enhance the implementation process (Ibid). Engaging communities, civil society and private sector through participatory platforms, workshops, and capacity building programs can ensure their active participation and empower them to contribute effectively (Mannya, 2012).

Participatory decision-making processes involve engaging stakeholders in decision-making to consider multiple perspectives and interests. This involves public consultations, workshops, and focus group discussions, ensuring transparency, inclusivity, and responsiveness to diverse needs. Ensuring representation of marginalized groups and vulnerable communities is crucial for equitable urban development. Targeted outreach, capacity-building initiatives, and engaging with underrepresented groups can create an enabling environment for meaningful participation. Collaborative partnerships between government agencies, civil society organizations, private sector actors, and community representatives are essential for sustainable urban development initiatives. Regular communication platforms, such as urban councils or multi-stakeholder committees, facilitate ongoing engagement, coordination, and monitoring of progress.

### **6.5.2. POLICY INTEGRATION AND COHERENCE**

Coordinating policies across different sectors and levels of government is crucial for ensuring policy coherence. Integrating spatial planning, housing, transportation, environmental management, and social policies helps align objectives and creates synergies. Establishing mechanisms for interdepartmental and interagency coordination, such as task forces can facilitate policy integration and ensure that the various policies support each other in achieving sustainable outcomes. Policy integration and coherence are crucial for achieving spatial and socio-economic sustainability in cities. This involves aligning various policy frameworks, strategies, and plans to achieve common goals. Spatial planning and development policies should be integrated with other sectoral policies, promoting compact and mixed-use development, efficient land use, and natural resource preservation. Aligning socio-economic development strategies with spatial planning ensures equitable distribution of economic opportunities, social services, and infrastructure investments.

Environmental sustainability and resilience policies should be integrated into spatial planning to address climate change, natural resource management, and environmental protection. This includes incorporating green infrastructure, urban greening, and climate adaptation measures. Establishing governance structures and policy coordination mechanisms is essential for policy integration and coherence, facilitating cross-sectoral collaboration and joint decision-making. Maintaining a long-term vision and policy continuity is essential for achieving coherence. This requires political commitment, institutional stability, and the establishment of mechanisms to ensure policy continuity across political cycles. By promoting policy integration and coherence, cities can achieve holistic and balanced urban development outcomes, ensuring that spatial

planning, socio-economic development, environmental sustainability, and governance efforts work in tandem towards sustainable urban development.

### **6.5.3. PILOT PROJECTS AND DEMONSTRATION SITES**

Implementing pilot projects and creating demonstration sites can serve as powerful tools for showcasing the benefits and feasibility of sustainable urban development initiatives. These projects can act as models that demonstrate how the framework can be applied and adapted to local contexts. Successful pilot projects can generate momentum, attract investment, and serve as learning platforms for scaling up sustainable interventions.

Pilot projects enable cities to test and refine strategies before scaling them up. By implementing targeted interventions in specific neighborhoods, cities can evaluate their effectiveness, identify challenges, and fine-tune approaches. Demonstration sites showcase best practices in sustainable urban development, inspiring others to adopt similar approaches. These projects build stakeholder support, facilitate knowledge sharing and learning, and foster a culture of learning and continuous improvement. Collaborations and partnerships among stakeholders enhance the effectiveness of interventions, leverage resources, and create shared ownership. Successful pilot projects and demonstration sites can be scaled up and replicated in other cities, enabling the expansion of sustainable practices and widespread impact.

### **6.5.4. PARTNERSHIPS AND KNOWLEDGE SHARING**

Building partnerships with international organizations, research institutions, and other cities can provide access to technical expertise, best practices, and funding opportunities. Collaborating with global networks and participating in knowledge-sharing platforms enables cities to learn from the experience of others and leverage international support

for implementing these sustainable urban development initiatives. These partnerships can facilitate the exchange of ideas, lessons learned and innovative approaches.

Effective partnerships between government agencies, community organizations, private sector entities, academic institutions, and civil society groups are crucial for sustainable urban development. These partnerships can take the form of formal agreements, joint projects, or collaborative platforms. Public-private partnerships (PPPs) mobilize resources, expertise, and innovation for sustainable urban development, while community engagement fosters ownership, active participation, and responsive interventions. Knowledge sharing platforms facilitate the exchange of experiences, lessons learned, and best practices among cities, institutions, and stakeholders. Peer-to-peer learning and twinning programs promote collaboration and knowledge transfer, while capacity building and technical assistance provide training, resources, and technology. International collaboration and funding also facilitate knowledge sharing and access to financial resources, promoting cross-cultural understanding, innovation, and visibility of local efforts.

### **6.5.5. MONITORING AND EVALUATION**

Establishing robust monitoring and evaluation systems is essential for tracking progress, identifying gaps, and ensuring accountability. Regular monitoring of key indicators allows cities to assess the effectiveness of implemented interventions, make informed adjustments, and communicate achievements to stakeholders and the public. Evaluation processes help generate evidence on the impact of sustainable development initiatives, enabling cities to learn from both successes and failures and continuously improve their approaches.

Cities should establish specific, measurable, achievable, relevant, and

time-bound (SMART) indicators and targets to monitor the implementation of sustainable urban development initiatives. These indicators can be quantitative or qualitative, and setting targets helps track progress and ensure accountability. Cities should establish robust data collection and analysis mechanisms, such as surveys, tools, and information management systems, to ensure accurate and up-to-date information. Performance tracking helps identify gaps, bottlenecks, and areas for corrective action. Evaluating the impacts and outcomes of sustainable urban development initiatives is crucial for understanding their effectiveness.

Stakeholder engagement in monitoring and evaluation enhances transparency, accountability, and legitimacy. Adaptive management approaches should be informed by reviewing and analyzing monitoring and evaluation findings, guiding future decision-making and improving the effectiveness of sustainable urban development initiatives. Regular reporting and communication of monitoring and evaluation findings is essential for transparency and accountability, fostering knowledge sharing and learning across cities.

By employing these strategies, cities in the Global South can navigate the implementation challenges and make significant progress in achieving spatial and socio-economic sustainability.

## **7. LESSONS LEARNED FROM THE CITY OF EKURHULENI**

The experiences of the City of Ekurhuleni in pursuing special and socio-economic sustainability offer valuable lessons that can inform the framework's development and implementation in other cities of the Global South. The following lessons highlight key insights from the City of Ekurhuleni.

### **7.1. Contextual understanding**

Understanding the local context is crucial for designing effective interventions.

The City of Ekurhuleni's experiences emphasize the importance of conducting thorough assessments of the city's unique spatial and socio-economic dynamics. This includes recognizing the specific challenges faced by different neighbourhoods, informal settlements, and marginalized communities. By tailoring strategies and interventions to the local context, cities can address the root causes of spatial and socio-economic disparities and promote sustainable development that aligns with the needs and aspirations of the local population.

### **7.2. Multi-sectoral collaboration**

Collaboration among various sectors and stakeholders is essential for the successful implementation of sustainable urban development initiatives. Emphasized in the City of Ekurhuleni's experiences is the importance of fostering partnerships between government entities, civil society organizations, private sector actors, and community representatives. Collaborative efforts enable the pooling of resources, expertise, and knowledge sharing, leading to more comprehensive and effective interventions. The engagement of stakeholders from diverse backgrounds promotes shared ownership and accountability, creating a sense of collective responsibility for sustainable urban transformation.

### **7.3. Data Driven decision-making**

Data plays a critical role in informing evidence-based decision-making processes. The City of Ekurhuleni's experiences highlight the significant of collecting and analysing spatial and socio-economic data to identify priority areas for intervention and monitor the impact of implemented strategies. Robust data on population dynamics, land use patterns, infrastructure provision, socio-economic indicators and environmental factors provide a solid foundation for understanding urban challenges and evaluating the effectiveness of interventions. Regular data collection and analysis can help

ensure that decision makers have accurate and up-to-date information to guide policy formulation and resource allocation.

### **7.4. Capacity building and empowerment**

Building the capacity of local institutions and communities is essential for sustainable urban development. The City of Ekurhuleni's experiences underscore the importance of providing training, technical assistance, and knowledge-sharing platforms to enhance the skills and capabilities of urban planners, government officials, and community leaders. Capacity building initiatives enable local actors to actively participate in the planning and implementation processes, strengthening their ability to make meaningful contributions. Empowering communities to take ownership of their neighbourhoods and participate in decision making fosters a sense of agency and ensures that interventions are contextually relevant and sustainable in the long run.

### **7.5. Policy coherence and long-term vision**

Coherence between spatial planning policies, socio-economic development strategies, and sustainability goals is crucial for achieving lasting impacts. As evident in the City of Ekurhuleni, there is a need for aligning various policy frameworks such as urban planning, housing, transportation, and social development. This helps to ensure a holistic and integrated approach to sustainable urban development. Establishing long-term vision that transcends political cycles and provides continuity in policy implementation is essential. This requires political commitment and cross-sectoral coordination to ensure that policies and interventions are mutually reinforcing and contributing to the overall goals of spatial planning and socio-economic sustainability.

## 8. CONCLUSION

The framework for spatial and socio-economic sustainability in Cities of the Global South, drawing lessons from the City of Ekurhuleni provides a comprehensive approach to address the complex challenges faced by cities. By integrating spatial planning strategies, inclusive governance, and targeted socio-economic interventions, the framework offers a roadmap for creating sustainable, inclusive, and resilient urban environments.

The framework emphasizes the importance of compact and mixed-use development, green infrastructure and open spaces, integrated transport systems, inclusive governance, and targeted socio-economic interventions such as equitable access to housing, job creation, and social infrastructure. These elements work together to promote sustainable development, enhance quality of life, and address the unique socio-economic and spatial challenges faced by cities in the Global South.

Implementing the framework, however, comes with a share of its challenges. Political will, institutional capacity, financing, stakeholder coordination and data availability are key challenges that need to be overcome. By employing strategies such as stakeholder engagement, policy integration, pilot projects, partnerships, and monitoring and evaluation, cities can navigate these challenges and facilitate the implementation of sustainable urban development initiatives.

The experiences of the City of Ekurhuleni provide valuable lessons for other cities in the Global South. The importance of contextual understanding, multi-sectoral collaboration, data driven decision-making, capacity building, and long-term vision are key takeaways from the City of Ekurhuleni's journey towards spatial and socio-economic sustainability.

By embracing the framework and learning from the experiences of the City of Ekurhuleni, cities in the Global South

could transform their urban landscapes. Sustainable urban development not only contributes to environmental protection, economic growth, and social inclusion. It requires a collective effort from governments, communities, private sector entities, and civil society organizations to work together towards a shared vision of sustainable and equitable cities.

In conclusion, the framework for spatial and socio-economic sustainability provides a practical comparative approach for cities in the Global South to navigate the complexities of urban development. By adopting the framework, cities can create a more inclusive, resilient, and sustainable future for their residents, drawing on the lessons learnt from the City of Ekurhuleni and fostering collaboration, innovation, and positive transformation in urban environments.

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## Notes

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