

If Planning is Complex and Political, maybe Planning is the Solution: Improving Infrastructure Quality in Global South Cities

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1 ABSTRACT

The Global South is undergoing unparalleled urbanisation rates, alongside profound consequences for infrastructure demand and supply. This paper examines the relationship between the political economy and infrastructure planning in the global south cities. A particularly disturbing trend in Global South development is the explosion of large-scale, internationally-financed infrastructure developments that serve exclusive interests while abandoning the everyday necessities of majority populations. Drawing on literature from diverse geographic contexts, we explore the political economy of urban planning in understanding complexity as essential. The paper identifies key mechanisms linking the intersection of climate vulnerability with factors such as sociopolitical issues, poor governance, and limited technological capability, further declining infrastructure resilience. Infrastructure discrepancies in informal settlements echo deliberate poor policy choices and planning failures, isolating these areas. Additionally, we examine evidence on KwaZulu-Natal, South Africa, a particularly valuable empirical context for understanding planning's role in infrastructure improvement, disaster response, and resilience. Evidence shows that climate-induced disasters associated with risk and vulnerability are aggravated by socioeconomic issues, including housing deficiencies, compelling people to construct settlements in flood-prone zones. Finally, we propose several key pathways that emerge from this analysis for advancing more effective, equitable planning in Global South cities. The paper concludes that addressing institutionalized participatory planning as standard practice, integrating planning across sectors and governance levels, adopting explicit equity frameworks in planning, investing in municipal capacity building, decolonizing planning knowledge and practice and address the political economy of infrastructure would shape local institutional capability and encourage adaptive learning as opposed to continued dependence on external finance expertise.

Keywords: Global south, cities, urban planning, infrastructure, political economy

2 INTRODUCTION

The Global South encompasses previously marginalized countries across Latin America, Africa, Asia, Oceania and the Caribbean (Al hothaufi et al., 2025). Studies on global south cities indicate that planning's complexity and political nature can operate as both a hurdle and a passageway to infrastructure quality. Political instrumentalization (Sajjad and Javed, 2022), governance fragmentation (Schoulund et al., 2021), economic constraints (Sajjad and Javed, 2022) and social inequalities (Tiznado-Aitken, 2022) create multilayered problems to infrastructure development. However, effective interventions influence these complexities, for example, integrated planning developments transformed institutional fragmentation into viable interdisciplinary cooperation in Argentina, obtaining increased spatial quality at minimal extra costs (Schoulund et al., 2021). This literature review answers the following research question: How can planning and political nature influence quality infrastructure in the Global South cities ? To answer this question, we outline below the literature review, methodology, survey these phenomena, and discuss how these influences affect the quality of infrastructure in the Global South cities.

3 METHODOLOGY

The literature review was conducted using PRISMA protocols (Moher et al., 2016) Scopus is the main used database for research in bibliometric analysis. The search of the literature was specifically on publications between 2021 and 2026. The database search in Scopus was done and categorised using the following keywords.

- “Urban planning” AND “Global South”

- “Quality infrastructure” AND “Politics” AND “Complex”
- “Infrastructure quality” AND “Approach” AND “Developing countries”

The inclusion criteria were all articles published between 2021--2026 in the field of urban planning to improve quality infrastructure in Global South cities (Table 1).

Inclusion Criteria	Exclusion Criteria
Articles with topics relating to planning in Global South cities	Outside urban planning scope
Articles with topics relating to infrastructure development	Unpublished dissertations and thesis
Articles with topics related to the complexity of politics and planning	Non-English Language

Table 1: Inclusion and Exclusion criteria for the data extracted

The search in the literature was directed by screening titles and abstracts for each article to confirm eligibility. The in-depth information on the selection process is presented in Fig. 1 as guided by the PRISMA protocols. The review identified 527 studies in Scopus, of which 9 were duplicates and consequently removed. 30 were used for this paper.

A key outcome from KwaZulu-Natal study is that though policy outlines exist, severe governance gaps hinder effective implementation. Cities have disaster management policies and land-use plans, yet management failures and feeble institutional capacity weaken effectiveness (Alam and Bhat, 2025). Moreover, government has not been able to satisfactorily involve vulnerable societies in policy formulation and implementation. The fiasco to reinforce and promote public participation abandons vulnerable societies powerless against disasters (Oreta, 2025). Recommendations evolving from KwaZulu-Natal study emphasise to institutionalise noteworthy community engagements and participation in all spheres of planning and implementation, establish robust intergovernmental coordination, and increase resource allotment to address disaster risk mitigation (Oreta, 2025).

4 FINDINGS

4.1 The Global South Urban Crisis: Context and Challenges

In urban settings, the Global South is challenged with fragmented governance, institutional constraints and informal development requiring green infrastructure approaches aligned to the context to improve equitable city regeneration and climate resilience (Al hothaufi et al., 2025). In Menoni (2025) it was found out that the relationship between climate vulnerability and factors such as limited technological ability sociopolitical issues, and governance further deteriorates infrastructure resilience. Flooding in urban areas has become progressively severe in several Global South metropolises, with severe occurrences documented across Africa, China, Latin America, Southeast and South Asia. The impacts are disturbing, with numerous metropolises experiencing repetitive flooding incidences that reveal human vulnerability and infrastructure weaknesses.

A particularly disturbing characteristic in urbanization in Global South cities is the explosion of large-scale, internationally financed infrastructure developments that serve exclusive interests while abandoning the everyday necessities of majority populations. Countries in the Global South constantly invest in comprehensive, vanity infrastructure developments, which do not benefit the majority citizens (Shatkin, 2022). An example is Walter et al (2025) on the effect of spatial planning on the development of export-oriented green-hydrogen projects. The researchers analysed how spatial planning impacted the development of export-oriented green-hydrogen projects in South Africa, Namibia and Chile. The study revealed that, South Africa, Namibia and Chile have developed dissimilar planning approaches for export-oriented green-hydrogen projects. South Africa pursued a facilitative approach, Namibia a restrictive approach, whilst Chile is transitioning from a market-centred towards a restrictive approach. The different approaches indicate different stakeholder interests and political priorities and suggest diverse outcomes on the expansion of export-oriented green-hydrogen projects in terms of their size, number, shared infrastructure, acceptance and socio-environmental effect. The study underscored the need for properly designed high-quality spatial planning outlines.

Al hothaufi et al. (2025) emphasized the urgency to repurpose underutilized spaces into multifunctional green infrastructure. The study explored case studies in Latin America, Asia, and Africa, mainly focused on underutilized public spaces, brownfields and vacant lots. Analysis revealed four thematic groups: spatial analysis (site identification), (2) community-led and participatory planning, (3) policy and governance

mechanisms, and (4) multifunctionality in green infrastructure strategies. Key gaps incorporate limited integration of spatial, procedural, and social justice into green infrastructure planning. Reliance on outdated datasets that disregard altering vacancy patterns and informal land use. Cities in India exemplify this problem, for instance, a scrutiny in the transportation infrastructure development in Mumbai Municipal Region has failed to meet the demand for infrastructure, as a result, excessive delays, traffic jams, and an absence of inclusive and integrated transportation systems (Shaban and Sattar, 2023). The infrastructure shortage is not merely a financial or technical problem but depicts political choices on which needs are prioritised and resource allocation. Increased urbanisation throughout the Global South remains to be embedded by poorly managed and unplanned expansion, aggravating services deficiencies and ecological stress (Zhou et al., 2022). SV

In Adom et al. (2025) the South African context is surveyed and echoes the country has formulated an in-depth climate change adaptation framework reinforced by substantial legislative milestones, comprising the National Climate Adaptation Strategy, the landmark Climate Change Act, and the ground-breaking Coastal Adaptation Response Plan. Even so, evidence shows existing leadership gaps, including industry influence, lack of political will, complexity, short-term focus, international collaboration challenges, inadequate skills and understanding significantly delay the implementation of an in-depth climate change adaptation framework in the country.

4.2 The Political Economy of Urban Planning: Understanding Complexity as Essential

Urban planning is characteristically political and contains decisions about resource distribution, land allocation, and which voices have substance in shaping cities. It is imperative to understand planning as political and not perceive planning as a weakness to defeat. The structural ferocity of spatial conversion in Global South metropolises reflects socio-spatial reform in hybrid neoliberal governments, resulting in momentous harm to marginalised and poor groups (Burte and Kamath, 2023). Studies similar to Prasad et al., (2023) explored informality glitches to smart urban planning in Indian metropolises and proved how informality – an essential distinguishing factor of Global South metropolises – remains largely unseen in smart urban planning frameworks. These frameworks show significant disregard of informality at the cost of socio-spatial division, creating a fundamental challenge for smart city development claiming to serve all residents. The implication is clear planning that ignores the political dimensions of infrastructure -whose needs are served, what values guide planning, how power shapes decisions – inevitably reproduces existing inequalities. This is not an accidental outcome but rather a structural feature of planning systems that have not been fundamentally reformed to address equity concerns.

George-Williams et al (2026) further explored Sierra Leone's water sector, an investigation on stakeholder relationships and governance dynamics. The study identified key actors and their interests, roles, interdependencies and influence, while also investigating systemic barriers in political, economic, social, technical, and environmental dimensions. The findings revealed an extremely fragmented governance ecosystem, categorised by donor dependency, weak enforcement, overlapping mandates, and the side-lining of community voices. Though current reforms comprising donor-financed infrastructure projects, new regulatory institutes, and community-based projects illustrate improvement, they remain mostly insufficient, reactive, and piecemeal to address rooted structural deficiencies.

Das (2025) confirmed the difficulty of planning in cities in the Global South spreads beyond political contention to deep institutional disintegration. Amplified urbanization has moulded situations where particular agencies manage separate infrastructure systems energy, transport, water, waste without proper coordination, as a result, creates duplicated investments, inefficient resource allotment, and inconsistent interventions. Studies on infrastructure planning problems in developing cities illustrate how insufficient governance structures, poor shareholder coordination, and resource constraints destabilise integrated planning and execution. Critical limitations in city infrastructure development encompass resource constraints, poor shareholder coordination, inadequate urban drainage, insufficient governance, fractured solid waste management, insufficient sewerage, and improper transportation systems (Caldern-Ramrez et al., 2025). An essential intricacy in urban planning in the Global South is the occurrence of informal economies and informal settlements. Research has shown informal settlements are rapidly expanding but continue to be excluded from formal urban planning frameworks and official data platforms. In South Africa,

approximately one in four urban people reside in informal dwellings, however their realities are often ignored in urban development planning (Mangara and Dorasamy, 2025).

4.3 Evidence in KwaZulu Natal: Planning Contexts and Imperatives

Understanding socioeconomic vulnerability and risk to disasters induced by climate change requires the assimilation of geographic information systems, spatial techniques, socioeconomic vulnerability and risk mapping, and hazard exposure mapping (Menoni, 2025). Studies directly related to the South African setting reveals that disaster risk and vulnerability focuses on informal dwellings where environmental hazards, infrastructure deficits, and housing inadequacy converge, aggravated by socioeconomic influences such as housing shortages convincing individuals to build settlements in flood-prone zones (Alam and Bhat, 2025).

The KwaZulu Natal (KZN) province is renowned for occasionally suffering natural disasters (Aiseng and Gamede, 2023). In KZN, the city of eThekweni is one district that is well-known to have been gravely affected by devastating floods, with distressing effects on its extensive informal settlements (Dlamini et al, 2024). The city of eThekweni is an example of a colonial city in South Africa, designed to be unable to accommodate a population over the city limits. As a result, several township settlements were developed using the apartheid settlement approach contained by a fifty kilometre radius of the metropolis (Thinane et al. 2023). The legacy of the apartheid regime and its spatial planning, old and dilapidated infrastructure, governance challenges, rapid sprawling of informal settlements and lack of visible early warning communication to the destitute living on high-risk areas contribute to the distressing flood effects (Ngcamu,2023). A report by the Moses Kotane Institute documented that the harm inflicted by the disastrous floods in eThekweni were intensified by inadequate infrastructure, poor urban planning, and houses constructed on hilly areas (Ngcamu,2022). The absence of housing is a major challenge confronting government, and it forces the marginalized people to build informal houses on land unauthorized for human settlements, precisely floodplains and slopy land (Dlamini et al. 2024).

Nonetheless, findings illustrated that response interventions in flood disaster in KZN were rapid and efficient; however, several gaps existed in pre-disaster and post-disaster management (Olanrewaju and Reddy, 2025). Accordingly, the increase in knowledge in the connection of climate hazards and inadequate infrastructure exposes planning as a key factor in disaster risk mitigation, making it important to conduct a comprehensive literature review to identify approaches to reconceptualise planning for cities in the Global South. This paper aims to use Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) to document the knowledge of quality infrastructure in Global South cities, identify emergin themes and new approcahes in the literature. Following this introduction, we discuss the methodological PRISMA method concentrating on how the data was gathered and analysed for this paper. The subsequent section presents findings obtained from the systematic analysis. Following, a discussion on findings and and a conclusion.

5 CONCLUSION

The failures of planning visible across Global South cities are not inherent failures of planning itself but rather failures of planning systems that have not been fundamentally reformed to address equity, democracy, and sustainability concerns. These systems continue to reflect colonial legacies, top-down imposition, elite capture, and exclusion of marginalised communities. They persist in treating infrastructure as a technical problem amenable to engineering solutions while ignoring the social, political, and economic dimensions of infrastructure access and quality. They continue to prioritise vanity projects serving elite populations while infrastructure essential to the majority's survival deteriorates.

The idea of transformative planning would fundamentally look different. The concept begins with clear commitments to equity, democracy, and social justice. It would encourage participatory procedures, to ensure authentic public voice in decisions impacting the futures and lives of the public (Terdo, 2024). Transformative planning would connect multiple aims – disaster resilience, housing, environmental protection, service delivery, and employment – within clear frameworks instead of continuing sectoral, fragmented approaches (Hakiman and Sheely, 2023). It would acknowledge and work with infrastructure heterogeneity rather than imposing standardised, externally-designed solutions. It would build local institutional capacity and support adaptive learning rather than perpetuating dependence on external expertise and financing (Wieszczeczynska et al., 2024).

In conclusion, planning is not a failed endeavour or an impediment to development in Global South cities. Rather, planning, when fundamentally reconceptualised to prioritise equity, democracy, and social justice, represents an essential tool for addressing the interconnected crises of urbanisation, infrastructure inadequacy, climate vulnerability, and spatial inequality. The evidence presented throughout this paper, drawn from diverse contexts across the Global South, demonstrates that effective, inclusive, participatory planning can mitigate disasters, promote sustainable development, and advance social justice (Menoni, 2025; Terdoo, 2024). The task ahead is not to abandon planning but to transform it – to create planning systems that genuinely serve the needs of majority populations, that integrate multiple objectives through coherent frameworks, that build local capacity and knowledge systems, and that confront power inequalities perpetuating urban inequality and injustice.

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