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MAPPING INFRASTRUCTURE FINANCE RESEARCH IN AFRICA'S BUILT ENVIRONMENT: A BIBLIOMETRIC REVIEW

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ABSTRACT

Infrastructure development plays a critical role in economic growth, urbanisation, and sustainable development across Africa. However, the persistent infrastructure deficit in many African countries has intensified the need for innovative financing mechanisms to support the delivery of built environment projects. Despite increasing scholarly attention to infrastructure financing, the structure, evolution, and knowledge domains of this research area remain fragmented. This study therefore presents a bibliometric review that maps the intellectual landscape of infrastructure finance research in Africa with specific relevance to the built environment and construction sector. Bibliographic data were retrieved from the Elsevier Scopus database, covering peer-reviewed publications on infrastructure financing in Africa. Bibliometric techniques including publication trend analysis, co-authorship networks, country collaboration patterns, keyword co-occurrence mapping, and citation analysis were conducted using VOSviewer and Bibliometrix. The analysis identifies the most influential authors, journals, and institutions contributing to the field, as well as emerging thematic clusters. The findings reveal significant growth in infrastructure finance research over the past decade, with dominant themes centred on public–private partnerships, infrastructure investment gaps, sustainable infrastructure financing, and policy frameworks for infrastructure development. The study also highlights limited cross-regional collaboration within Africa and identifies emerging research areas such as green infrastructure financing and digital infrastructure investment. The study contributes by providing a structured overview of research trends and identifying future research directions for infrastructure financing in Africa's built environment.

Keywords: *Africa; Built Environment; Infrastructure Finance; PPP; Development.*

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1. INTRODUCTION

Infrastructure development is widely recognised as a fundamental driver of economic growth, urban development, and social welfare. Adequate infrastructure systems including transportation networks, energy supply, water systems, and urban facilities are essential for supporting productive economic activities and improving the quality of life of citizens. In the context of developing economies, particularly in Africa, infrastructure plays a critical role in facilitating regional integration, trade expansion, and sustainable development (Calderón & Servén, 2014; Chuku et al., 2023). However, many African countries continue to face a substantial infrastructure deficit that constrains economic performance and development outcomes.

Historically, infrastructure development across many African countries was largely financed and delivered by the public sector, particularly during the post-independence period of the 1960s and 1970s. Governments assumed primary responsibility for financing and managing infrastructure projects through national budgets and state-owned enterprises. However, economic crises and fiscal constraints in the 1980s and 1990s significantly weakened the capacity of governments to sustain infrastructure investment (Estache, 2010; Kirkpatrick & Smith, 2011). As a result, many countries experienced declining infrastructure quality and growing investment gaps. In response to these challenges, the late 1990s and early 2000s witnessed a global shift toward alternative infrastructure financing mechanisms aimed at mobilising private sector participation in infrastructure development. One of the most prominent approaches was the adoption of Public–Private Partnerships (PPPs), which involve collaborative arrangements between public authorities and private entities for financing, constructing, and operating infrastructure projects. International financial institutions such as the World Bank and the African Development Bank actively promoted PPPs and other innovative financing mechanisms across Africa to address the continent's infrastructure investment gap (Ashiagbor et al., 2018; World Bank, 2017). These efforts coincided with growing academic and policy interest in infrastructure financing models, including project finance, blended finance, and private infrastructure investment.

The urgency of addressing Africa's infrastructure deficit has also been reinforced by continental development initiatives such as the Programme for Infrastructure Development in Africa (PIDA), which was launched in 2012 to support large-scale infrastructure projects across the continent. Despite these initiatives, estimates suggest that Africa requires between US$130 billion and US$170 billion annually to meet its infrastructure needs, while a significant financing gap persists (Mjimba & Muavha, 2021). Consequently, infrastructure financing has become a critical research area attracting increasing scholarly attention from fields such as construction management, infrastructure economics, development studies, and public policy. Over the past two decades, the academic literature on infrastructure finance in Africa has expanded considerably, reflecting growing interest in issues such as infrastructure investment gaps, public–private partnership performance, financing models for large-scale infrastructure projects, and institutional frameworks for infrastructure delivery.

However, despite the growing volume of research on infrastructure financing in Africa, the existing body of knowledge remains highly fragmented across multiple disciplines, including construction management, infrastructure economics, development studies, and public policy. This fragmentation makes it difficult to obtain a coherent understanding of the intellectual structure of the field, the dominant research themes, and the evolution of scholarly contributions over time. While previous studies have employed narrative or systematic review approaches to examine specific aspects of infrastructure financing, these approaches are often limited in their ability to capture large-scale publication patterns, collaboration networks, and the dynamic development of research themes across a broad and multidisciplinary knowledge base.

Given the rapid expansion and interdisciplinary nature of infrastructure finance research, there is a need for a more robust and quantitative approach that can systematically map the structure and evolution of the field. Bibliometric analysis provides such an approach by enabling the quantitative examination of publication trends, citation relationships, and thematic linkages within a large corpus of academic literature (Donthu et al., 2021). Through techniques such as co-authorship analysis, keyword co-occurrence mapping, and citation network analysis, bibliometric methods offer a comprehensive means of identifying influential studies, emerging research fronts, and knowledge gaps that are not easily discernible through conventional review methods. Therefore, adopting a bibliometric approach is particularly appropriate for synthesising the dispersed and rapidly growing body of literature on infrastructure financing in Africa's built environment.

2. METHODOLOGY

This study adopts a bibliometric research design to systematically examine the development and thematic trends of infrastructure finance research in the African context. Bibliometric analysis enables the quantitative evaluation of large volumes of scholarly literature through the analysis of publication patterns, citation relationships, and keyword networks, thereby providing insights into the intellectual structure of a research field (Donthu et al., 2021). Bibliographic data were retrieved exclusively from the Scopus database, which is widely recognized for its broad coverage of high-quality peer-reviewed literature across multidisciplinary fields, including construction management, infrastructure studies, economics, and public policy. Compared to other databases such as Web of Science, Scopus provides a larger journal coverage and includes a wider range of publications relevant to emerging and interdisciplinary research areas, particularly those relating to developing regions such as Africa. Previous bibliometric studies have also demonstrated that Scopus offers more comprehensive coverage for social science and infrastructure-related research, making it particularly suitable for studies aiming to map broad research domains. Furthermore, the use of a single, well-curated database enhances data consistency and reduces the risk of duplication and indexing discrepancies that may arise when combining multiple databases. The structured metadata provided by Scopus is also highly compatible with bibliometric analysis tools such as VOSviewer and the Bibliometrix package in R, thereby facilitating robust network and performance analyses. While the exclusion of other databases may limit the inclusion of some publications, the extensive coverage and data reliability of Scopus ensure that the dataset is sufficiently representative for mapping the intellectual structure and trends of infrastructure finance research in Africa.

The search was conducted using the following query: ("infrastructure finance" OR "infrastructure financing" OR "infrastructure investment" OR "public infrastructure finance" OR "infrastructure funding" OR "project finance" OR "public-private partnership" OR PPP OR "blended finance") AND (Africa OR "Sub-Saharan Africa" OR

"North Africa") AND (infrastructure OR construction OR transport OR energy OR water). The initial search yielded 942 documents. After applying filters for publication period (2000–2025), English language, document type, and subject area, the dataset was reduced to 577 documents, with 365 records removed during the filtering process. Subsequently, title and abstract screening was conducted to ensure relevance to infrastructure finance in Africa, leading to the exclusion of 22 documents. Following the eligibility assessment, 555 articles met the inclusion criteria and were retained for the final analysis. The bibliographic records were exported in CSV format and analysed using VOSviewer and the Bibliometrix package in R. VOSviewer was employed to generate visual network maps for co-authorship, keyword co-occurrence, and source analysis, while Bibliometrix was used to conduct descriptive bibliometric analyses such as annual publication trends. The combination of these tools enabled a comprehensive mapping of the research landscape and thematic evolution of infrastructure finance literature.

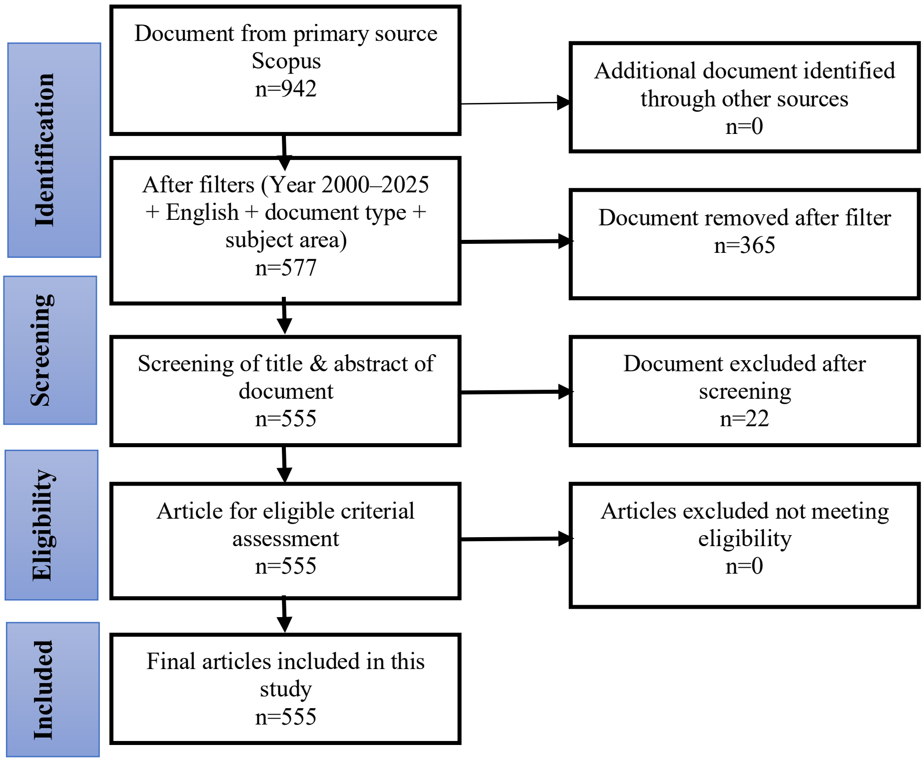

Figure 1: Study selection results using PRISMA chart

3. RESULT AND DISCUSSION

3.1 ANNUAL PUBLICATION TREND OF INFRASTRUCTURE FINANCE RESEARCH IN AFRICA

The annual publication trend as illustrated in figure 2 shows the growth and evolution of scholarly research on infrastructure finance in Africa between 2000 and 2025. The results show that research output in this field remained relatively low and stable during the early years, with fewer than ten publications annually between 2000 and 2008. This period reflects the nascent stage of academic interest in infrastructure finance within the African context, when discussions were largely limited to policy debates on infrastructure investment and development financing. A gradual increase in publications becomes evident from 2009 to 2015, with the number of studies rising steadily as infrastructure financing gained attention in development discourse. This growth can be associated with increasing global recognition of Africa's infrastructure deficit and the need for innovative financing mechanisms, including public–private partnerships (PPP), project finance, and international development finance. During this period, infrastructure investment was increasingly viewed as a critical driver of economic growth, trade facilitation, and regional integration across African economies.

From 2016 onwards, the field experienced a significant acceleration in research output, indicating a growing scholarly and policy interest in infrastructure finance across the continent. The number of publications increased consistently, reaching approximately 55 publications in 2022, before experiencing a slight decline in 2023, and rising again in 2024. The most notable surge occurs in 2025, where the number of publications reaches the highest level in the dataset, suggesting an expanding research focus on infrastructure financing strategies in Africa. This recent growth may be linked to emerging debates surrounding sustainable infrastructure investment, climate-resilient infrastructure, renewable energy financing, and international development initiatives aimed at addressing Africa's infrastructure financing gap.

Therefore, the upward trajectory of publications demonstrates that infrastructure finance has evolved into a rapidly expanding research domain, reflecting its increasing importance for economic development, urbanisation, and sustainable infrastructure provision across Africa. This rapid growth not only reflects increasing academic interest but also indicates a shift in the research agenda toward addressing complex financing challenges associated with sustainable and climate-resilient infrastructure. The surge in publications after 2016 suggests that infrastructure finance is transitioning from a peripheral topic within development studies to a central research domain with significant implications for policy formulation, investment strategies, and infrastructure governance in Africa.

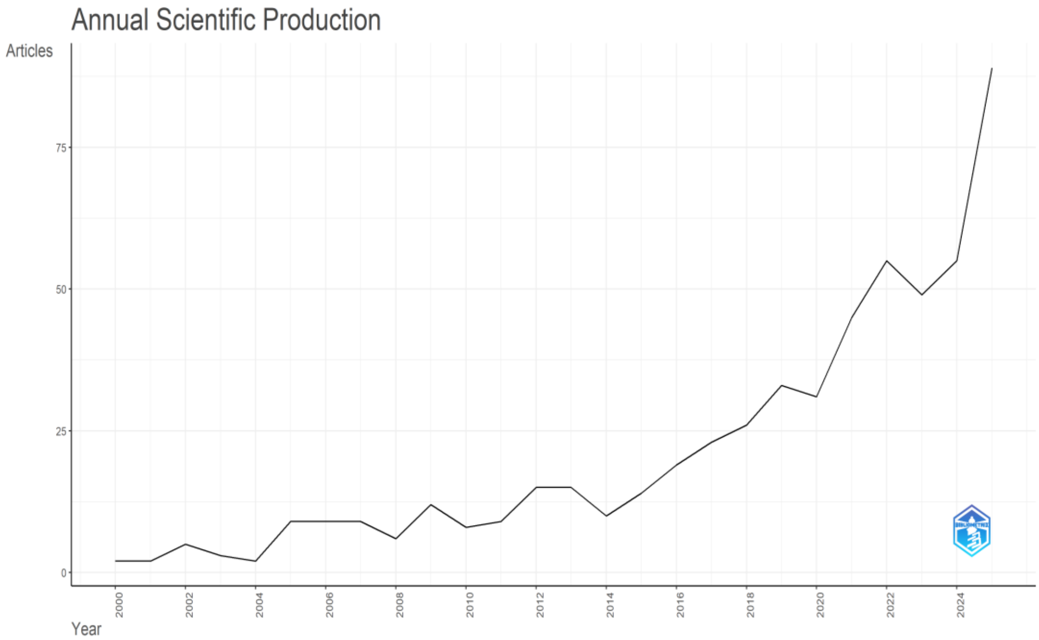

Figure 2: Annual publication trend

3.2 COUNTRY COLLABORATION NETWORK

The country collaboration network analysis reveals the extent of international research partnerships in infrastructure finance research related to Africa. The VOSviewer visualization in Figure 3 indicates that South Africa emerges as the most central and influential node, suggesting that it plays a dominant role in scholarly collaborations within the field. The prominence of South Africa reflects its relatively advanced research infrastructure, strong academic institutions, and its position as a regional hub for infrastructure development and financing initiatives in Africa. Closely connected to South Africa are major research contributors such as the United States, China, and the United Kingdom, indicating significant cross-continental collaboration in infrastructure finance studies. The presence of these countries highlights the global interest in infrastructure development across Africa, particularly given the role of international financial institutions, development banks, and foreign investment in supporting infrastructure projects on the continent. The network also reveals several collaboration clusters, indicating thematic and regional partnerships among countries. One cluster shows strong linkages between China, Nigeria, Japan, Canada, and the Russian Federation, reflecting the increasing involvement of Asian and emerging economies in infrastructure financing across Africa. Another cluster includes European countries such as Germany, Belgium, Italy, and Spain, which are connected to African countries like Rwanda, Zambia, and Tanzania, suggesting collaboration driven by development cooperation programs and international infrastructure investment initiatives. Additionally, a cluster involving Australia, Ghana, Hong Kong, and Sweden indicates research collaborations related to infrastructure investment and development finance in emerging economies.

Despite the presence of several international partnerships, the network structure suggests that collaboration intensity among African countries themselves remains relatively limited, with most connections occurring between African countries and developed economies. This pattern highlights the continued reliance on external expertise and funding sources in infrastructure finance research and practice across Africa. Strengthening intra-African research collaboration could therefore enhance knowledge exchange, improve context-specific solutions, and support more sustainable infrastructure financing strategies within the continent.

This pattern of externally driven collaboration implies that knowledge production in infrastructure finance is still heavily influenced by global North institutions, which may limit the development of context-specific financing solutions tailored to African realities. Strengthening intra-African collaboration is therefore not only a research necessity but also a strategic requirement for enhancing locally grounded infrastructure financing models.

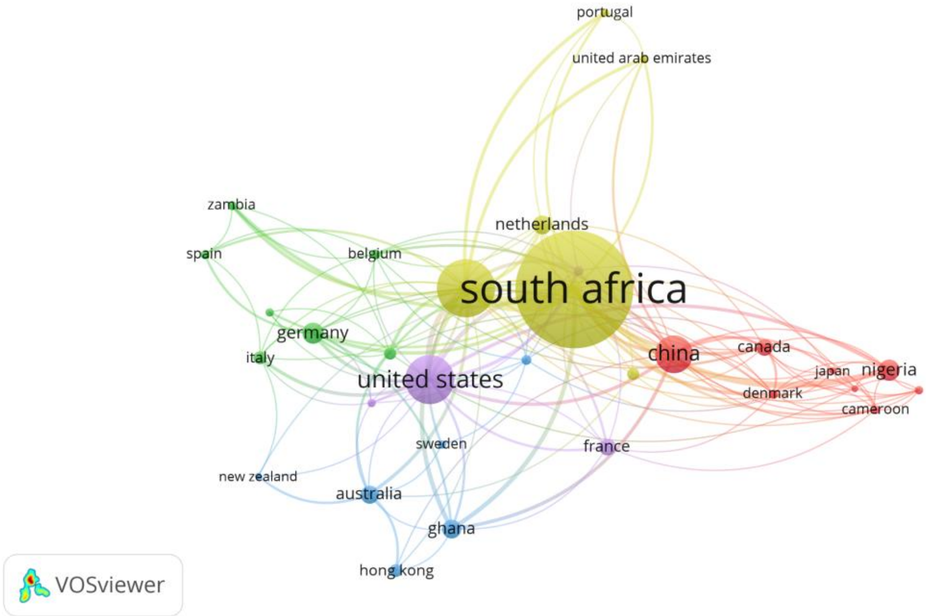

Figure 3: Country collaboration network map

3.3 KEYWORD CO-OCCURRENCE MAP

The keyword co-occurrence analysis was conducted using VOSviewer to identify the major research themes and emerging topics within the infrastructure finance literature related to Africa. A threshold of a minimum of 5 number of occurrences was set, while the default threshold of VOSviewer is 5. Thus, the implication of this is that the choice of the extraction of a particular keyword is dependent on the minimum of 5 occurrences. As shown in Table 1, the analysis produced 38 keywords grouped into seven clusters, indicating the main thematic areas that have shaped scholarly discussions in this field. The table shows that "public–private partnerships," "Africa," "sub-Saharan Africa," and "infrastructure finance" are among the most prominent and frequently occurring keywords, highlighting the central role of PPP arrangements in financing infrastructure development across the African continent. The strong linkages between these keywords suggest that much of the existing literature focuses on the role of collaborative financing mechanisms between the public and private sectors in addressing Africa's infrastructure deficit.

Cluster 1- PPP Governance and Infrastructure Service Delivery

Cluster 1 reflects themes related to PPP governance and infrastructure service delivery, including keywords such as governance, privatization, sustainability, water, Ghana, Africa, and Nigeria. The prominence of governance-related keywords suggests that the literature increasingly recognises the importance of institutional quality, regulatory frameworks, and public-sector capacity in infrastructure financing and delivery. Previous studies have shown that effective governance structures, transparent procurement systems, and institutional accountability are critical to the success of PPP infrastructure projects, particularly in developing economies (World Bank, 2017).

Cluster 2- Sustainable Infrastructure and Energy-related Development

Cluster 2 focuses on sustainable infrastructure and energy-related development, with keywords such as renewable energy, sustainable development, electricity, transportation, and poverty. This suggests that infrastructure finance research increasingly intersects with broader sustainable development goals, particularly in sectors critical to economic growth and poverty reduction in African economies. Existing studies have similarly highlighted the importance of sustainable infrastructure investment in promoting economic resilience, energy access, and inclusive development in emerging economies (Bhattacharya et al., 2015; Sachs et al., 2019).

Cluster 3- Project Finance and Private Sector Participation

Cluster 3 represents research addressing project finance and private sector participation, including keywords such as project finance, private sector, developing countries, and critical success factors. This indicates the importance of financial structuring and stakeholder involvement in ensuring the successful implementation of infrastructure projects. Prior research has emphasised that private sector participation can improve infrastructure delivery through enhanced access to finance, managerial expertise, and technological innovation (Aigbavboa et al., 2017).

Cluster 4- Geopolitical and Investment Dynamics

Cluster 4 highlights geopolitical and investment dynamics, particularly the growing role of emerging economies, as reflected in keywords such as China, BRICS, East Africa, and infrastructure investment. This cluster reflects the increasing influence of international partnerships and foreign investment in financing infrastructure across Africa. Existing literature has shown that China has become a major infrastructure financier across Africa through bilateral agreements and strategic investment initiatives such as the Belt and Road Initiative (Babones et al., 2020).

Cluster 5- Urbanisation and Environmental Challenges

Cluster 5 emphasises urbanisation and environmental challenges, with keywords including climate change, urbanization, global south, and infrastructure. This suggests that recent research increasingly addresses the intersection between infrastructure financing and urban sustainability challenges in developing regions. Rapid urbanisation across Africa has intensified pressure on transportation, housing, water, and energy infrastructure systems, thereby increasing the demand for sustainable and climate-resilient infrastructure investments (Kirkpatrick & Smith, 2011).

Cluster 6- Infrastructure Finance and the Belt and Road Initiative (BRI)

Cluster 6 capture emerging topic such as "infrastructure finance" and the Belt and Road Initiative (BRI). This cluster highlights the role of China's Belt and Road Initiative in shaping infrastructure finance dynamics in Africa. Existing studies have noted that the BRI has contributed significantly to infrastructure investment across transportation, energy, and logistics sectors in developing economies (Babones et al., 2020).

Cluster 7- Development and Rural Development

Cluster 7 capture development and rural development, indicating growing interest in rural infrastructure and inclusive development strategies. Rural infrastructure has been widely recognised as essential for improving agricultural productivity, market accessibility, poverty reduction, and regional economic integration in developing economies (Lenz et al., 2017).

Table 1: Keyword clusters and quantitative strength

Cluster	Theme	No. of Keywords	Representative Keywords	Quantitative Strength
Cluster 1	PPP Governance and Infrastructure Service Delivery	10	Africa, governance, Nigeria, Ghana, water, PPP, sustainability, sub-saharan Africa, privatization	Largest cluster dominant theme
Cluster 2	Sustainable Infrastructure and Energy	8	economic growth, electricity, renewable energy, Ethiopia, poverty, sustainable development, transportation, Zambia	High frequency cluster
Cluster 3	Project Finance and Private Sector	6	project finance, private sector, construction industry, critical success factors, developing countries, Kenya	Moderate cluster strength
Cluster 4	Geopolitical Investment Dynamics	5	China, BRICS, infrastructure investment, East Africa, infrastructure development	Emerging but influential
Cluster 5	Urbanisation and Environmental Challenges	5	climate change, urbanization, global south, infrastructure, South Africa	Moderate strength
Cluster 6	Infrastructure Finance and BRI	2	BRI, infrastructure finance	Emerging (low frequency)
Cluster 7	Development and Rural Development	2	rural development, development	Least developed cluster

The identification of these thematic clusters provides important academic and practical insights into the structure and evolution of infrastructure finance research in Africa. From an academic perspective, the clustering reveals that the field is not monolithic but is organised around interconnected domains of governance, sustainability, financial structuring, and geopolitical investment dynamics. This contributes to the literature by offering a structured understanding of how infrastructure finance research has evolved across disciplinary boundaries and by highlighting emerging areas such as climate-related infrastructure financing and sustainability-oriented investment models. From a practical and policy perspective, the findings suggest several critical priorities. The dominance of PPP-related research underscores the need for policymakers to strengthen institutional and regulatory frameworks to enhance the effectiveness of PPP arrangements. The growing emphasis on sustainable infrastructure and renewable energy financing highlights the importance of integrating environmental considerations into infrastructure investment decisions. Additionally, the prominence of international investment and geopolitical themes indicates the need for African countries to develop strategic frameworks that balance foreign investment opportunities with long-term economic sustainability and financial independence. Finally, the emerging focus on rural and inclusive development suggests that infrastructure financing strategies must extend beyond urban centres to support equitable development across the continent.

These findings provide important insights into the infrastructure financing challenges highlighted in the introduction. The dominance of PPP-related themes confirms that collaborative financing mechanisms have become central to addressing Africa's infrastructure deficit. However, the strong emphasis on governance and institutional factors suggests that many of the persistent challenges in infrastructure delivery are rooted in regulatory inefficiencies and weak institutional capacity rather than purely financial constraints. Similarly, the increasing focus on sustainability and climate-related infrastructure reflects a shift in response to emerging global and regional challenges, including climate vulnerability and the need for resilient infrastructure systems. Despite these advances, the limited representation of intra-African collaboration and locally driven financing models in the literature indicates a critical gap in developing context-specific solutions to Africa's infrastructure financing needs.

3.4 MOST INFLUENTIAL JOURNALS/DOCUMENTS

The analysis of publication sources reveals that research on infrastructure finance in Africa is distributed across journals in development economics, infrastructure policy, sustainability, and sector-specific infrastructure studies. Table 2 presents the most influential journal within the dataset, highlighting representative publications and their contribution to the literature. The classification of "most influential" journals in this study is based primarily on the number of publications within the dataset, which reflects the productivity and contribution of each source to the field. Journals with higher publication counts are considered more influential in shaping the development of infrastructure finance research in Africa. While citation-based metrics are commonly used to assess impact, this study emphasises source productivity due to the objective of mapping the structure and evolution of the research domain. Representative documents were selected from these journals to illustrate key thematic contributions and are included based on their relevance to the identified research clusters rather than citation ranking alone.

Among these, World Development emerges as the most influential outlet, with eight publications in the dataset. A notable example is the study by Lenz et al. (2017) titled "Does Large-Scale Infrastructure Investment Alleviate Poverty? Impacts of Rwanda's Electricity Access Roll-Out Program," which examines the socio-economic effects of infrastructure investment on poverty reduction in Rwanda. The prominence of this journal underscores the strong linkage between infrastructure finance and broader development outcomes in African economies.

Similarly, the Journal of Infrastructure, Policy and Development and Development Southern Africa each contributed seven publications, indicating their relevance in discussions surrounding infrastructure financing and regional economic development. For instance, Wang and Xu (2023) explore issues of debt sustainability and infrastructure financing in Africa, particularly in relation to China–Africa infrastructure cooperation. Meanwhile, Ngepah et al. (2023) investigate the employment impacts of freight infrastructure investment in South Africa, highlighting the economic benefits associated with infrastructure development. These studies demonstrate the importance of infrastructure investment not only as a financing issue but also as a driver of employment and economic growth.

Other notable outlets include ENR (Engineering News-Record) and Water SA, each with six publications in the dataset. These journals provide sector-specific insights into infrastructure markets and service delivery. For example, Ruiters and Matji (2016) propose a conceptual framework for financing water services infrastructure in South Africa through public–private partnerships, reflecting the growing emphasis on PPP models for infrastructure delivery. Likewise, Sustainability (Switzerland) contributes six publications, including Chaitarin et al. (2025), which investigates the relationship between transport infrastructure and trade flows, reflecting the increasing integration of sustainability and infrastructure financing debates.

The dataset also highlights the contributions of regionally focused journals such as the South African Journal of Economics, which includes influential studies such as Perkins et al. (2005) on economic infrastructure investment in South Africa. In addition, conference proceedings such as the Proceedings of the International Conference on Industrial Engineering and Operations Management feature research examining PPP financing models for transit-oriented development in South Africa (Aigbavboa et al., 2017). Journals such as Global Policy and Energy for Sustainable Development further contribute to the discourse by addressing the role of international development finance and governance risks in infrastructure investment across Sub-Saharan Africa (Babones et al., 2020; Falchetta et al., 2021).

Therefore, the distribution of publication sources indicates that infrastructure finance research in Africa is highly interdisciplinary, spanning development economics, infrastructure policy, sustainability, and sector-specific studies such as energy, transport, and water infrastructure. The presence of both international development journals and regionally focused outlets reflects the growing academic and policy interest in addressing Africa's infrastructure financing gap through innovative financing mechanisms, public–private partnerships, and international investment collaborations.

Table 2: Top sources of infrastructure finance research in Africa

Journal	Paper Title	Authors/Year	Number of Publications within the dataset
World Development	Does Large-Scale Infrastructure Investment Alleviate Poverty? Impacts of Rwanda's Electricity Access Roll-Out Program	Lenz et al. (2017)	8
Journal of Infrastructure, Policy and Development	China and Africa: A new narrative on debt sustainability and infrastructure financing	Wang and Xu (2023)	7
Development Southern Africa	The impact of freight infrastructure investment on employment in South Africa	Ngepah et al. (2023)	7

Journal	Paper Title	Authors/Year	Number of Publications within the dataset
ENR (Engineering News-Record)	European, U.S. firms still dominate Africa infrastructure market	Oirere (2013)	6
Water SA	Public–private partnership conceptual framework for financing water services infrastructure in South Africa	Ruiters and Matji (2016)	6
Sustainability (Switzerland)	When Does Air Transport Infrastructure and Trade Flows Matter?	Chaitarin et al. (2025)	6
South African Journal of Economics	An analysis of economic infrastructure investment in South Africa	Perkins et al. (2005)	5
Proceedings of the International Conference on Industrial Engineering and Operations Management	Public–private partnerships: An effective finance model for transit-oriented development in South Africa?	Ndebele et al. (2017)	5
Global Policy	China's Role in Global Development Finance: China Challenge or Business as Usual?	Babones et al. (2020)	5
Energy for Sustainable Development	The role of regulatory, market and governance risk for electricity access investment in Sub-Saharan Africa	Falchetta et al. (2021)	5

4. KNOWLEDGE GAPS AND FUTURE RESEARCH DIRECTIONS

The findings of this study reveal several key gaps in the literature on infrastructure finance in Africa. First, although public–private partnerships (PPP) dominate the research landscape, there is limited focus on context-specific financing models tailored to African institutional and socio-economic conditions. Second, while governance emerges as a central theme, there is insufficient empirical evidence on how institutional capacity and regulatory frameworks influence infrastructure financing outcomes. Third, the analysis shows limited collaboration among African countries, indicating a gap in regionally driven knowledge production and context-specific solutions. Fourth, although there is growing attention to sustainable and climate-resilient infrastructure, research on the practical implementation and financing of green infrastructure in Africa remains underdeveloped. Finally, emerging areas such as rural infrastructure development and inclusive financing strategies are relatively underexplored.

Future research should focus on strengthening context-specific financing models and enhancing intra-African research and policy collaboration, as current literature remains limited in addressing locally driven and institutionally grounded solutions to Africa's infrastructure financing challenges. The study is limited to Scopus-indexed publications and does not include grey literature from institutions such as the World Bank and African Development Bank. As these organisations produce significant policy and practice-oriented reports on infrastructure financing in Africa, their exclusion may limit the comprehensiveness of the findings. Future studies could incorporate such sources to provide a more holistic perspective.

5. CONCLUSIONS

This study presents a bibliometric mapping of infrastructure finance research in Africa based on publications indexed in the Scopus database between 2000 and 2025. The findings reveal a rapidly growing and interdisciplinary body of literature, reflecting the increasing importance of infrastructure financing in addressing Africa's infrastructure deficit. The results show that research in this field is largely structured around themes such as public–private partnerships (PPP), sustainable infrastructure development, and international investment dynamics. While PPPs dominate the literature as a key financing mechanism, the prominence of governance-related themes indicates that infrastructure financing challenges in Africa are not only financial but also institutional in nature. The collaboration analysis further reveals strong global partnerships but limited intra-African collaboration, suggesting a gap in context-specific knowledge development. These findings contribute to the literature by providing a structured overview of the intellectual landscape of infrastructure finance research in Africa and highlighting emerging areas such as sustainability and climate-resilient infrastructure. From a practical perspective, the results underscore the need for stronger institutional frameworks, increased regional collaboration, and more locally grounded financing strategies to effectively address Africa's infrastructure challenges. Overall, the study bridges the gap between the identified infrastructure financing challenges and existing research by showing how current scholarly efforts align with, and in some cases overlook, critical areas necessary for sustainable infrastructure development in Africa.

6. ACKNOWLEDGEMENTS

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