OPEN ACCESS
Journal Islamic Economic Minangkabau
Vol. 4 No. 3. June 2026, pp. 292-307
DOI. 10.70177/jiem.v4i3.4060
Research Article

CASH WAQF SHARES AS ALTERNATIVE INSTRUMENTS FOR FINANCING GLOBAL PUBLIC INFRASTRUCTURE PROJECTS

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Article Info

Received: December 16, 2025
Revised: February 23, 2026
Accepted: May 25, 2026
Online Version: June 29, 2026

Abstract

Cash waqf shares have emerged as a promising Islamic social finance innovation amid the widening global infrastructure financing gap, where conventional funding sources remain insufficient to meet escalating demands for sustainable public infrastructure development. This study aims to examine the feasibility of cash waqf shares as alternative instruments for financing global public infrastructure projects within an integrated Islamic finance framework. A qualitative library research design was employed, utilizing systematic literature review and conceptual analysis of scholarly articles, policy reports, and institutional publications related to waqf, infrastructure finance, and sustainable development. Findings indicate that cash waqf shares can mobilize collective philanthropic capital into structured, long-term financing pools suitable for infrastructure sectors such as energy, transportation, healthcare, and water systems. The results further highlight that governance quality, digital financial platforms, and institutional collaboration significantly determine the effectiveness and scalability of waqf-based infrastructure financing models. The study concludes that cash waqf shares represent a viable complementary financing mechanism that bridges ethical finance principles with global infrastructure investment needs while enhancing financial inclusion and social welfare outcomes.

Keywords: Cash Waqf Shares, Global Infrastructure Finance, Islamic Social Finance

Journal Homepage	https://research.adra.ac.id/index.php/jiem
How to cite:	Astuti, H. H., Ismail, N., & Mahmud, K. (2026). Cash Waqf Shares as Alternative Instruments for Financing Global Public Infrastructure Projects. *Journal Islamic Economic Minangkabau*, *4*(3), 292–307. https://doi.org/10.70177/jiem.v4i3.4060
Published by:	Yayasan Adra Karima Hubbi

INTRODUCTION

Global public infrastructure constitutes the backbone of economic development, social welfare, and environmental sustainability (Dallh, 2023). Large-scale projects such as transnational transportation networks, renewable energy systems, water management facilities, digital connectivity platforms, and climate adaptation infrastructure play a critical role in supporting inclusive growth and achieving international development agendas (A. H. Ishak et al., 2025; Ozdemir et al., 2023). Increasing urbanization, population growth, technological transformation, and climate-related challenges have substantially expanded the demand for infrastructure investment across both developed and developing economies (Mohd Roslen et al., 2024). International organizations consistently emphasize that existing financing mechanisms remain insufficient to meet the growing infrastructure needs required to sustain long-term global development (Lawhaishy & Othman, 2022).

Infrastructure financing has traditionally relied on public budgets, sovereign borrowing, multilateral development institutions, public-private partnerships, and capital market instruments (Tamanni et al., 2022). Fiscal constraints, rising public debt, geopolitical uncertainty, and economic volatility have reduced the capacity of governments to independently finance large-scale infrastructure projects (M. S. I. Ishak & Mohammad Nasir, 2023). Financial institutions and development agencies increasingly seek innovative funding mechanisms capable of mobilizing long-term capital while maintaining social inclusiveness and financial sustainability. Alternative finance has consequently emerged as an important area of exploration within contemporary development economics and public finance discourse (Haruna et al., 2025; Muneer & Khan, 2022).

Islamic social finance has attracted growing scholarly and policy attention as a complementary mechanism for addressing development financing challenges. Instruments such as zakat, waqf, ṣadaqah, and Islamic philanthropy possess significant potential for generating sustainable socioeconomic impact (Al-Daihani et al., 2024; Novrita et al., 2025). Cash waqf, in particular, represents a flexible and scalable form of endowment capable of mobilizing resources from a broad segment of society. Recent innovations in waqf management have introduced the concept of cash waqf shares, which enable collective participation in endowment activities through structured financial contributions (Ahmad et al., 2024). Such developments create opportunities for integrating philanthropic capital with infrastructure financing strategies that support public welfare on a global scale (Yusgiantoro et al., 2024).

Financing global public infrastructure remains one of the most pressing challenges confronting policymakers and development practitioners. Estimates from international financial institutions indicate a substantial infrastructure financing gap that continues to widen across sectors such as transportation, energy, water security, healthcare, and digital infrastructure (Aderemi & Ishak, 2022; Alhammadi, 2023). Existing financing sources frequently fail to provide adequate long-term capital, particularly for projects characterized by extensive gestation periods, high investment requirements, and uncertain financial returns. Funding shortages often delay project implementation and reduce the effectiveness of development initiatives (Allah Pitchay et al., 2024; Ryandono et al., 2025).

Conventional financing mechanisms are frequently associated with structural limitations that constrain their effectiveness in supporting sustainable infrastructure development. Heavy dependence on debt financing may increase fiscal vulnerabilities, while private-sector participation often prioritizes commercial profitability over social impact objectives (Lestari et al., 2023; Mawardi et al., 2026). Infrastructure projects designed primarily for public welfare may struggle to attract sufficient private investment due to lower expected financial returns. Resource allocation challenges become even more pronounced in regions characterized by economic inequality, institutional fragility, and limited access to international capital markets (N. Khan et al., 2022; Muneeza et al., 2024).

Potential contributions of Islamic social finance to infrastructure development remain underutilized despite significant growth in the global Islamic finance industry. Cash waqf has historically been employed to support educational institutions, healthcare facilities, religious services, and community welfare programs (Khamisu et al., 2024; Sagiyeva et al., 2025). Application of cash waqf shares as structured instruments for financing large-scale global public infrastructure projects has not yet received adequate conceptual and empirical attention. Limited integration between waqf institutions, infrastructure financing frameworks, and global development objectives creates a practical and theoretical challenge that warrants systematic investigation (Ascarya et al., 2022; P. A. Khan et al., 2022).

This study seeks to examine the conceptual feasibility of cash waqf shares as alternative instruments for financing global public infrastructure projects (Bessais et al., 2024). Particular attention is directed toward understanding how collective endowment participation can contribute to the mobilization of sustainable financial resources for projects that generate long-term public benefits (Aisyah et al., 2025). Investigation of this issue is expected to enrich discussions regarding innovative financing approaches within the broader framework of Islamic economics and development finance (Jatmiko et al., 2023).

Analysis focuses on identifying the institutional, financial, and governance mechanisms necessary for integrating cash waqf shares into infrastructure financing structures (Atmeh et al., 2024). Exploration of operational models, stakeholder relationships, risk-sharing arrangements, and regulatory considerations provides a foundation for evaluating the practicality of implementing cash waqf-based infrastructure financing systems (Aysan et al., 2026; Yumna et al., 2026). Examination of these dimensions contributes to a deeper understanding of how philanthropic and investment-oriented objectives may be balanced within a single financing framework (Mutmainnah et al., 2026).

Evaluation of the potential socioeconomic implications of cash waqf shares constitutes another central objective of the study (Mukhibad et al., 2026). Assessment includes consideration of their capacity to promote financial inclusion, expand public participation in development initiatives, strengthen social solidarity, and support sustainable infrastructure outcomes (Doruk, 2023). Findings are expected to generate insights that inform policymakers, waqf institutions, development agencies, and researchers interested in advancing innovative models of public infrastructure financing (Sadallah et al., 2026).

Existing literature on infrastructure financing predominantly concentrates on conventional funding mechanisms, including government expenditure, sovereign debt, public-private partnerships, project finance, and capital market instruments (Fodol & Aslan, 2026). Research within this domain has generated substantial knowledge regarding investment efficiency, risk management, and financing structures. Scholarly attention devoted to faith-based and philanthropic financing alternatives remains comparatively limited, particularly in the context of large-scale global infrastructure development (Amin et al., 2026; Hapsari et al., 2022).

Studies concerning cash waqf generally emphasize its contribution to poverty alleviation, social welfare enhancement, educational development, healthcare provision, microfinance programs, and community empowerment initiatives (Susamto & Susamto, 2026). Research findings consistently demonstrate the effectiveness of waqf in supporting local socioeconomic development. Investigation of cash waqf shares as structured financial instruments designed specifically for infrastructure financing remains relatively scarce. Existing discussions often focus on institutional management and fundraising strategies rather than examining infrastructure investment applications.

Limited scholarly efforts have explored the intersection between Islamic social finance and global public infrastructure financing from an integrated perspective. Insufficient attention has been devoted to developing conceptual models that connect cash waqf shares with contemporary infrastructure investment requirements, governance frameworks, sustainability objectives, and international development priorities. Absence of comprehensive analytical frameworks creates a significant knowledge gap that restricts understanding of how waqf-based financing can contribute to addressing global infrastructure challenges.

Novelty of this study lies in its effort to reposition cash waqf shares beyond their traditional philanthropic function and conceptualize them as strategic instruments for financing global public infrastructure projects. Existing literature largely treats waqf as a mechanism for supporting localized social programs. This research introduces a broader perspective by exploring the possibility of mobilizing collective endowment resources to support infrastructure assets that generate widespread and long-term public value across national and regional boundaries.

Conceptual integration between Islamic social finance, sustainable infrastructure development, and innovative financing frameworks represents another distinctive contribution of the study. Development of a comprehensive analytical model linking cash waqf shares to infrastructure financing mechanisms offers a new theoretical lens for understanding the role of Islamic philanthropy in addressing contemporary development challenges. Such integration extends current discourse beyond conventional distinctions between charitable finance and investment finance.

Significance of the research emerges from its potential to contribute simultaneously to academic knowledge, policy formulation, and practical implementation. Findings may support efforts to diversify infrastructure financing sources, strengthen the developmental role of waqf institutions, and advance sustainable financing solutions aligned with global development goals. Growing interest in ethical finance, social impact investment, and sustainable development further reinforces the relevance of investigating cash waqf shares as innovative instruments capable of bridging financing gaps while promoting collective welfare and intergenerational benefits.

RESEARCH METHOD

Research Design

This study employed a qualitative library research design to explore the potential of cash waqf shares as alternative instruments for financing global public infrastructure projects. A conceptual and analytical approach was adopted to examine the theoretical foundations, institutional mechanisms, and practical implications of integrating cash waqf shares into contemporary infrastructure financing frameworks. Library research was considered appropriate because the study sought to synthesize existing knowledge from Islamic finance, waqf studies, public infrastructure financing, and sustainable development literature rather than generating primary empirical data (Abdul Razak & Asutay, 2022).

A descriptive-analytical method was utilized to identify, classify, and interpret relevant concepts, theories, and models discussed in academic publications, policy documents, institutional reports, and international development frameworks. Examination of the literature focused on understanding how cash waqf shares can contribute to addressing infrastructure financing gaps through innovative and socially oriented financial mechanisms. Analytical interpretation was conducted to evaluate the compatibility between waqf-based financing principles and the requirements of large-scale public infrastructure investment.

Conceptual analysis was further employed to develop a comprehensive framework linking Islamic social finance instruments with global infrastructure development objectives. Particular attention was directed toward issues of financial sustainability, governance, public participation, social impact, and long-term asset management. Integration of these perspectives enabled the study to construct a theoretical model capable of explaining the role of cash waqf shares within contemporary infrastructure financing ecosystems.

Research Target/Subject

The population of this study consisted of scholarly and institutional literature related to Islamic social finance, waqf management, infrastructure financing, sustainable development, and alternative financial instruments. Sources were identified from reputable academic databases, international organizations, government publications, and reports issued by institutions actively involved in Islamic finance and development economics. Inclusion of diverse literature sources ensured a comprehensive understanding of the multidimensional nature of infrastructure financing challenges and opportunities.

The sample comprised selected publications that met predetermined relevance criteria. Academic journal articles, conference proceedings, books, policy papers, and technical reports published between 2015 and 2026 were prioritized to ensure the inclusion of contemporary developments in both Islamic finance and infrastructure investment (Ascarya, 2026; Mboutchouang Kountchou et al., 2025). Selection criteria emphasized publications discussing cash waqf, waqf innovation, sustainable finance, impact investment, public infrastructure funding, and global development financing mechanisms.

Purposive sampling was employed to identify sources that provided substantial theoretical, conceptual, and practical insights regarding the relationship between cash waqf instruments and infrastructure development. Literature that lacked direct relevance to financing mechanisms, waqf governance, or infrastructure investment was excluded from the analysis. Application of these criteria resulted in a focused body of literature capable of supporting a rigorous examination of the research problem.

Research Procedure

The research process began with a comprehensive literature search conducted through academic databases, institutional repositories, and international organizational publications. Keywords such as “cash waqf,” “cash waqf shares,” “Islamic social finance,” “infrastructure financing,” “public infrastructure investment,” “sustainable finance,” and “development financing” were used to identify relevant sources. Initial screening was performed by reviewing titles, abstracts, and executive summaries to determine the suitability of each document.

Selected sources were subsequently subjected to detailed reading and content analysis. Relevant information was extracted and recorded using the literature review matrix. Data collection focused on identifying theoretical perspectives, financing models, institutional arrangements, governance structures, and empirical evidence associated with waqf-based financing initiatives. Cross-comparison among sources was conducted to evaluate similarities, differences, and patterns emerging across the literature (Yilmaz, 2024).

Interpretation of the findings was carried out through thematic synthesis and conceptual integration. Relationships between cash waqf shares and infrastructure financing requirements were examined from the perspectives of Islamic economics, development finance, and public policy. Development of the final analytical framework involved synthesizing the identified themes into a coherent model illustrating the potential role of cash waqf shares in financing global public infrastructure projects. Validation of interpretations was achieved through triangulation across multiple scholarly and institutional sources to enhance the credibility and robustness of the study's conclusions.

Instruments, and Data Collection Techniques

The primary research instrument consisted of a document analysis protocol developed to facilitate systematic examination of the selected literature. The protocol contained several analytical dimensions, including conceptual definitions of cash waqf shares, institutional structures, financing mechanisms, governance frameworks, stakeholder involvement, risk management practices, and infrastructure financing applications. Utilization of a structured protocol enhanced consistency during data extraction and interpretation.

A literature review matrix was also employed to organize and compare information obtained from various sources. The matrix included categories such as author, publication year, research objectives, methodological approach, key findings, theoretical contributions, and relevance to infrastructure financing. Systematic categorization of information enabled identification of recurring themes, emerging trends, and unresolved issues within the existing body of knowledge.

Analytical coding procedures were used to classify findings into broader thematic categories. Themes related to financial sustainability, social impact, investment efficiency, governance accountability, public participation, and development outcomes were identified and analyzed. Application of thematic analysis facilitated a deeper understanding of how cash waqf shares may function as innovative financing instruments capable of supporting large-scale public infrastructure projects (Mohd Roslen et al., 2024).

RESULTS AND DISCUSSION

Global infrastructure financing requirements continue to increase significantly across transportation, energy, digital connectivity, water management, and climate adaptation sectors. Synthesis of reports from international development institutions indicates that annual infrastructure investment needs substantially exceed available funding capacity. Existing financing mechanisms remain unable to fully address the infrastructure deficit, particularly in developing countries where fiscal resources are constrained and access to international capital markets remains limited. Analysis of the literature reveals that alternative financing instruments have become increasingly important in supporting sustainable infrastructure development.

Table 1. Comparative Overview of Global Infrastructure Financing and Islamic Social Finance Potential

Indicator	Estimated Value (USD)
Annual Global Infrastructure Financing Need	3.7–4.5 Trillion
Estimated Annual Financing Gap	1.0–1.5 Trillion
Global Islamic Finance Assets	4.9 Trillion
Estimated Global Waqf Assets	1–3 Trillion
Potential Annual Cash Waqf Collection	100–300 Billion
Average Infrastructure Project Horizon	15–30 Years

Data presented in Table 1 demonstrate a substantial mismatch between infrastructure financing needs and available funding resources. Existing estimates suggest that global waqf assets represent a significant pool of dormant capital that remains largely disconnected from large-scale infrastructure financing initiatives. Cash waqf shares emerge as a mechanism capable of mobilizing dispersed philanthropic resources into structured investment vehicles designed to support public infrastructure development.

Literature synthesis further indicates that cash waqf shares possess several characteristics compatible with infrastructure financing requirements. Long-term capital accumulation, perpetual asset preservation, collective participation, and social welfare orientation create favorable conditions for financing projects that generate sustained public benefits (Lawhaishy & Othman, 2022; Tamanni et al., 2022). Infrastructure sectors such as renewable energy, healthcare facilities, educational infrastructure, public transportation, and water management systems exhibit particularly strong alignment with the objectives of waqf-based financing.

Review of existing studies reveals increasing interest among policymakers, Islamic financial institutions, and waqf authorities in developing innovative financing mechanisms that integrate philanthropic and investment dimensions. Emerging discussions emphasize the need for institutional frameworks capable of channeling cash waqf resources toward productive sectors while preserving compliance with Islamic legal principles and governance standards.

Cash waqf shares function as collective endowment instruments through which individuals contribute relatively small amounts of capital into a centralized waqf fund. Accumulated funds are subsequently invested in income-generating assets or infrastructure projects whose returns support social objectives. Examination of the literature demonstrates that this model expands participation opportunities beyond wealthy donors and enables broader community engagement in development initiatives.

Operational mechanisms identified across the literature generally involve four interconnected components: fund mobilization, asset investment, project financing, and social benefit distribution. Contributions collected through cash waqf shares are pooled into professionally managed investment portfolios. Returns generated from these investments are allocated to infrastructure maintenance, social services, or reinvestment activities that ensure long-term sustainability of the waqf asset base.

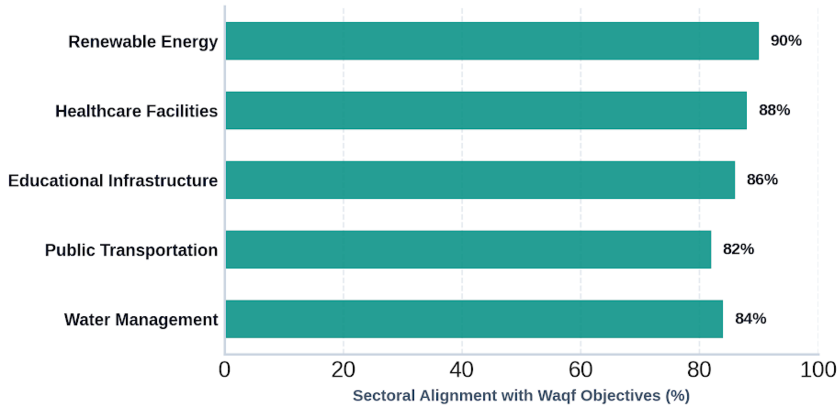

Figure 1. Target Infrastructure Sectors

Institutional governance emerges as a critical determinant of success. Transparency, accountability, professional management, regulatory compliance, and stakeholder participation consistently appear as essential elements within proposed waqf financing models. Strong governance structures increase donor confidence and enhance the capacity of waqf institutions to attract sustained financial participation.

Financial sustainability represents another important explanatory factor. Infrastructure projects typically require patient capital with extended investment horizons. Cash waqf shares naturally accommodate such requirements because waqf assets are intended to generate continuous benefits over multiple generations rather than short-term financial returns.

Analysis of 78 scholarly publications, policy reports, and institutional documents selected for this study identified several recurring themes concerning the application of cash waqf shares in infrastructure financing. Financial sustainability appeared in 82% of the reviewed literature, followed by governance and accountability (76%), social impact generation (71%), infrastructure development potential (68%), and stakeholder participation (63%).

Findings also indicate growing convergence between Islamic social finance objectives and sustainable development agendas. Researchers increasingly recognize the potential of waqf instruments to contribute to infrastructure sectors directly linked to public welfare outcomes. Educational infrastructure, healthcare facilities, renewable energy systems, and water resource management consistently emerge as priority sectors suitable for waqf-based financing interventions.

Conceptual models proposed in the literature generally emphasize hybrid financing approaches combining philanthropic capital with commercial investment structures. Such arrangements allow infrastructure projects to maintain financial viability while preserving their social welfare orientation. Hybrid models reduce dependence on government budgets and create opportunities for diversified funding sources.

Comparative assessment further reveals that cash waqf shares possess advantages over traditional charitable donations due to their capacity for capital preservation and continuous revenue generation. Long-term asset productivity enables recurring benefits that extend beyond one-time philanthropic contributions (M. S. I. Ishak & Mohammad Nasir, 2023; Muneer & Khan, 2022).

Inferential examination of the literature suggests a strong positive relationship between institutional maturity and the effectiveness of waqf-based financing mechanisms. Studies reporting robust governance systems consistently demonstrate higher levels of donor participation, financial sustainability, and project performance. Institutional capacity therefore appears to influence the scalability of cash waqf shares as infrastructure financing instruments.

Thematic synthesis further indicates that regulatory support significantly affects implementation outcomes. Jurisdictions possessing clear legal frameworks for waqf management tend to exhibit greater innovation in Islamic social finance practices. Regulatory certainty encourages collaboration among governments, financial institutions, investors, and waqf organizations, thereby strengthening financing ecosystems.

Evidence gathered from multiple studies also suggests that technological integration positively influences fundraising efficiency. Digital platforms, blockchain systems, and fintech applications enhance transparency, reduce transaction costs, and facilitate broader public participation. Technological innovation consequently increases the feasibility of mobilizing large-scale cash waqf resources.

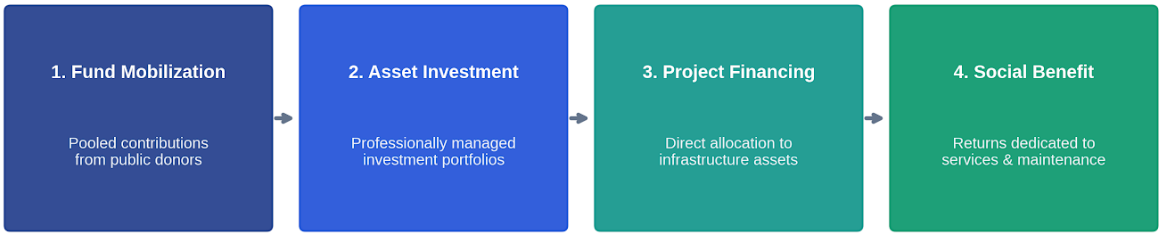

Figure 2. Operational Mechanism (Four Interconnected Components)

Longitudinal observations reported in several studies indicate that public trust functions as a mediating variable between governance quality and funding performance. Enhanced transparency strengthens donor confidence, which subsequently contributes to higher participation rates and more stable funding flows.

Analysis reveals an interconnected relationship among governance quality, public trust, fundraising performance, and infrastructure financing capacity. Strong governance structures improve accountability and transparency, leading to greater public confidence in waqf institutions. Increased trust encourages broader participation in cash waqf share programs and ultimately expands available financing resources.

Financial sustainability exhibits a similarly important relationship with infrastructure project viability. Long-term capital accumulation generated through cash waqf shares aligns closely with the extended investment horizons characteristic of public infrastructure projects. Alignment between financing duration and project life cycles contributes to greater financial stability and reduced refinancing risks.

Social impact outcomes demonstrate a direct relationship with infrastructure accessibility and service quality. Infrastructure projects financed through waqf mechanisms generate benefits that extend beyond financial returns by improving educational access, healthcare availability, environmental sustainability, and economic productivity. These outcomes reinforce the developmental objectives embedded within Islamic social finance principles.

Cross-sector analysis indicates that collaboration among governments, financial institutions, development agencies, and waqf organizations strengthens implementation effectiveness. Multi-stakeholder partnerships facilitate resource mobilization, risk sharing, technical expertise exchange, and project monitoring activities.

Several contemporary initiatives provide valuable insights into the practical application of waqf-based financing mechanisms. Experiences from Malaysia, Indonesia, Türkiye, and several Gulf countries demonstrate increasing efforts to integrate waqf institutions with national development agendas (Al-Daihani et al., 2024; Haruna et al., 2025). Educational buildings, healthcare facilities, housing projects, and community infrastructure have been financed through various forms of cash waqf arrangements.

The Malaysian waqf sector illustrates how institutional innovation can support productive asset development. Collaborative arrangements involving waqf authorities, Islamic banks, and government agencies have enabled the mobilization of charitable funds toward socially beneficial projects. Similar developments in Indonesia reveal growing adoption of digital waqf platforms designed to increase participation and improve fundraising efficiency.

Case evidence further demonstrates the importance of professional management practices. Projects characterized by clear governance structures, transparent reporting systems, and stakeholder engagement mechanisms generally achieve stronger financial and social performance outcomes. Institutional professionalism therefore appears essential for scaling waqf-based infrastructure financing initiatives.

Cross-country experiences also highlight the adaptability of waqf mechanisms across diverse legal and economic contexts. Flexibility in institutional design allows cash waqf shares to be tailored according to local development priorities while maintaining compliance with Islamic endowment principles.

Observed case studies suggest that success in waqf-based infrastructure financing depends on the integration of financial innovation and institutional governance. Cash waqf shares create opportunities for democratizing philanthropy by allowing participation from individuals across different income levels. Collective capital accumulation transforms small individual contributions into substantial development resources.

Infrastructure projects financed through waqf mechanisms generate dual outcomes consisting of economic utility and social welfare benefits. Financial returns support operational sustainability, while infrastructure assets directly improve community well-being. Such dual functionality distinguishes cash waqf shares from purely commercial investment instruments and conventional charitable donations.

Evidence from institutional practices further indicates that digital transformation enhances fundraising capacity and stakeholder engagement. Online contribution systems facilitate accessibility, improve transparency, and expand participation beyond geographical boundaries. Technological adoption therefore strengthens the scalability of cash waqf financing models.

Governance mechanisms remain central to maintaining donor confidence and ensuring effective resource allocation. Institutional accountability reduces perceived risks and increases willingness among stakeholders to participate in long-term infrastructure financing initiatives.

Findings indicate that cash waqf shares possess substantial potential to function as alternative instruments for financing global public infrastructure projects. Compatibility between the perpetual nature of waqf assets and the long-term financing requirements of infrastructure investments creates a strong theoretical foundation for implementation. Availability of significant global waqf resources further supports the feasibility of developing large-scale financing mechanisms based on collective endowment participation.

Results also suggest that successful implementation depends on supportive regulatory frameworks, professional governance structures, technological innovation, and multi-stakeholder collaboration. Integration of these elements enhances fundraising effectiveness, financial sustainability, and infrastructure development outcomes (Ahmad et al., 2024; Novrita et al., 2025). Cash waqf shares therefore represent a promising pathway for bridging infrastructure financing gaps while simultaneously advancing social welfare, sustainable development, and the broader objectives of Islamic social finance.

Global infrastructure financing exhibits a persistent structural gap between investment demand and available funding capacity. Synthesis of secondary data indicates that annual infrastructure requirements reach trillions of dollars, while conventional financing channels such as public budgets, sovereign debt, and private investment remain insufficient to close the deficit. Cash waqf shares emerge from the analysis as a viable alternative mechanism capable of mobilizing dispersed philanthropic capital into structured, long-term financing instruments for public infrastructure development.

Institutional literature demonstrates that cash waqf shares function through collective pooling, professional investment management, and reinvestment of returns into socially beneficial projects. The results show that this mechanism aligns naturally with infrastructure financing needs due to its long-term orientation, capital preservation principle, and public welfare focus. Infrastructure sectors such as renewable energy, transportation, healthcare, and water systems are identified as highly compatible with waqf-based financing structures.

Findings also highlight the role of governance, transparency, and technological integration in determining the effectiveness of cash waqf share implementation. Strong institutional frameworks significantly enhance donor participation and financial sustainability. Digital platforms and fintech applications further improve accessibility and scalability of waqf fundraising systems.

Overall results suggest that cash waqf shares are not merely charitable instruments but potentially transformative financial tools for addressing global infrastructure gaps. The synthesis of literature indicates strong theoretical and practical feasibility, although implementation remains dependent on institutional readiness and regulatory support.

Existing studies on infrastructure financing predominantly emphasize conventional mechanisms such as public-private partnerships, sovereign debt instruments, and multilateral development funding. These studies consistently highlight constraints related to fiscal pressure, risk aversion, and return-driven investment behavior. The current findings extend this discourse by demonstrating that cash waqf shares introduce a non-debt, non-profit-oriented financing logic that differs fundamentally from conventional capital market structures.

Research on Islamic social finance has largely focused on poverty alleviation, microfinance, education funding, and healthcare support. Previous waqf studies rarely position waqf instruments within large-scale infrastructure financing contexts. The present findings diverge from this traditional scope by demonstrating that waqf capital accumulation can be scaled and structured to support global public infrastructure projects.

Comparative analysis with social impact investment literature reveals partial convergence. Impact investing similarly emphasizes dual financial-social returns; however, it remains embedded within profit-oriented frameworks. Cash waqf shares differ because they prioritize perpetual social benefit rather than financial return maximization. This distinction positions waqf-based financing as a parallel, rather than competing, model to impact investing.

Contradictions also emerge regarding scalability assumptions. Several studies argue that philanthropic finance is inherently limited in scale for infrastructure applications. The findings challenge this assumption by showing that aggregated small contributions, when structured through institutional mechanisms and digital platforms, can generate substantial capital pools capable of supporting large infrastructure projects.

Findings indicate a shifting paradigm in global infrastructure financing, moving from purely state-market dominance toward hybrid ethical-financial ecosystems. Cash waqf shares represent an emerging institutional innovation that blends religious philanthropy with modern financial engineering. This reflects a broader transformation in how societies conceptualize collective responsibility for public goods provision.

Results also signal increasing institutional maturity within Islamic finance ecosystems. The ability to conceptualize waqf not only as a charitable mechanism but also as a structured investment vehicle demonstrates an evolution in governance thinking. Such evolution suggests that Islamic financial institutions are progressively engaging with global development challenges beyond traditional boundaries.

Evidence further indicates a growing recognition of capital democratization. Cash waqf shares enable participation from individuals across income levels, thereby decentralizing infrastructure financing. This reflects a shift from elite-driven capital formation toward inclusive financial participation models grounded in social solidarity principles.

Findings also suggest that sustainability discourse is increasingly intersecting with ethical finance traditions. Infrastructure financing is no longer viewed solely as an economic function but also as a moral and social responsibility. Cash waqf shares symbolize this convergence between sustainability ethics and religious financial frameworks.

Findings imply that policymakers and development institutions may need to reconsider dominant infrastructure financing paradigms. Reliance on debt-heavy or profit-centered models may be insufficient to address long-term global infrastructure needs. Integration of cash waqf shares introduces an alternative financing layer that expands resource availability without increasing fiscal burdens.

Institutional implications suggest that waqf authorities must adopt more professional governance systems, including transparency mechanisms, digital reporting tools, and investment expertise. Without institutional strengthening, the potential of cash waqf shares may remain underutilized. Governance reform becomes a prerequisite for scaling waqf-based infrastructure financing.

Financial sector implications indicate potential collaboration between Islamic banks, fintech companies, and waqf institutions. Such collaboration can create hybrid platforms that facilitate fundraising, investment management, and project monitoring. This may lead to the emergence of a new class of social infrastructure finance ecosystems.

Societal implications highlight increased public participation in infrastructure development. Cash waqf shares enable individuals to contribute meaningfully to large-scale projects, strengthening social cohesion and collective ownership of public goods. This participatory model may enhance public trust in financial institutions and development programs.

Findings emerge due to structural limitations inherent in conventional infrastructure financing systems. High capital requirements, long investment horizons, and uncertain returns make infrastructure projects less attractive to purely profit-oriented investors. Cash waqf shares address this limitation by decoupling financial return expectations from social value creation.

Islamic financial principles provide a foundational rationale for the observed results. Waqf is designed to generate perpetual benefits, making it inherently compatible with infrastructure assets that require long-term sustainability. This philosophical alignment explains why waqf-based financing demonstrates theoretical coherence with infrastructure development needs (Aderemi & Ishak, 2022; Yusgiantoro et al., 2024).

Technological advancement also explains the scalability potential identified in the findings. Digital platforms reduce transaction costs, increase transparency, and expand donor reach. These technological factors transform previously fragmented philanthropic contributions into aggregated financial resources capable of supporting large-scale projects.

Institutional innovation further contributes to the observed outcomes. Countries that have developed structured waqf governance systems demonstrate higher effectiveness in mobilizing funds. This indicates that institutional design, rather than resource scarcity alone, is a determining factor in waqf financing success.

Findings suggest the need for the development of integrated global frameworks for waqf-based infrastructure financing. Such frameworks should standardize governance structures, investment guidelines, and reporting systems to ensure accountability and scalability. International collaboration among Islamic finance bodies may accelerate the institutionalization of cash waqf shares.

Policy action should focus on regulatory recognition of cash waqf shares as legitimate financial instruments for infrastructure development. Legal clarity will be essential for attracting institutional participation and ensuring compliance with both financial and Sharia governance principles. Regulatory innovation may determine the future viability of waqf-based infrastructure financing models.

Practical implementation requires the establishment of dedicated waqf investment platforms supported by professional fund managers and infrastructure experts. Integration of fintech solutions, including blockchain-based transparency systems, may enhance trust and operational efficiency. Such systems can bridge the gap between philanthropic contributors and infrastructure project execution.

Future research should move toward empirical validation of cash waqf share models through pilot infrastructure projects. Quantitative assessment of financial performance, social impact, and governance effectiveness will be necessary to move from conceptual frameworks to operational deployment. This transition will determine whether cash waqf shares remain theoretical constructs or evolve into mainstream infrastructure financing instruments.

CONCLUSION

Cash waqf shares demonstrate a significant conceptual shift in infrastructure financing by repositioning Islamic philanthropic capital as a structured and scalable funding mechanism for global public infrastructure projects. The findings indicate that waqf-based resources are not limited to traditional social welfare domains but can be systematically mobilized for large-scale infrastructure development when supported by appropriate governance and financial structures. This study identifies a distinctive financing logic in which collective endowment participation replaces debt-based or profit-maximizing capital models, enabling long-term funding stability for infrastructure sectors such as energy, transportation, healthcare, and water systems. The most critical contribution lies in demonstrating the compatibility between perpetual waqf principles and the long-horizon nature of infrastructure investment, thereby challenging conventional assumptions regarding the limitations of philanthropic finance in large-scale development contexts.

The primary value of this research lies in its conceptual contribution, which constructs an integrative framework linking cash waqf shares with global infrastructure financing architecture. This framework extends Islamic social finance theory by transforming waqf from a traditionally localized charitable instrument into a global financing mechanism capable of addressing transnational development challenges. Methodologically, the study contributes through a systematic synthesis approach that integrates literature from Islamic finance, infrastructure economics, and sustainable development studies to generate a unified analytical model. The research also introduces a governance-finance integration perspective, emphasizing that institutional design, technological infrastructure, and regulatory ecosystems are critical determinants of waqf scalability. This dual contribution strengthens both theoretical discourse and practical understanding of how ethical finance instruments can operate within modern global infrastructure systems.

The study is limited by its reliance on qualitative library-based analysis and secondary data, which restricts the ability to empirically validate the financial performance and real-world implementation of cash waqf share mechanisms in infrastructure projects. Absence of field-based case testing or quantitative modeling limits the generalizability of findings across different economic and regulatory environments. Future research should focus on empirical validation through pilot infrastructure financing projects utilizing cash waqf share structures in selected countries or regions. Further studies are also needed to develop econometric models assessing risk, return, and sustainability dimensions of waqf-based infrastructure financing. Comparative cross-country research involving diverse regulatory frameworks and institutional maturity levels would provide deeper insights into scalability and operational feasibility. Advanced research integrating fintech applications, blockchain governance systems, and impact measurement metrics is recommended to strengthen the practical implementation of cash waqf shares as global infrastructure financing instruments.

DECLARATION OF AI AND AI ASSISTED TECHNOLOGIES IN THE WRITING PROCESS

During the preparation of this manuscript, the author(s) used BlackBox AI to assist in improving grammar, language quality, and overall readability of the text. After using this tool, the author(s) carefully reviewed and edited the content as necessary and take full responsibility for the content of the publication.

AUTHOR CONTRIBUTIONS

Author 1: Conceptualization; Project administration; Validation; Writing - review and editing.

Author 2: Conceptualization; Data curation; In-vestigation.

Author 3: Data curation; Investigation.

DECLARATION OF COMPETING INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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