International Seminar on Sharia, Law, and Muslim Society
الندوة الدولية في الشريعة والقانون والمجتمع المسلم

International Seminar on Sharia, Law and Muslim Society
Vol. 1, Number 1, 2026, pp. 157-170

Revisiting Waqf as a Catalyst for Green Economic Transformation in the Twenty-First Century

Adamu Abubakar Muhammad,[1*] Abubakar Sadiq Magaji[1], Adam Muhammad Ardo,[2] Ikilima Abubakar Shariff,[2] Garba Sa'adu Kawu[5]

[1] Federal University of Kashere, Gombe State, Nigeria, [2]Gombe State University, Gombe State, Nigeria, [3]Federal University Gashua, Yobe State, Nigeria

*Corresponding author's email: abubakaradamu1980@gmail.com

Abstract

There is great concern over climate change and environmental issues, resource scarcity, inequality in economic resources, and the sustainability of current patterns of development in the 21st century. Despite the commitment of governments and the international community to promote green economic reforms, access to sustainable finance for the pursuit of environmentally sound development still faces great challenges. Therefore, it has been acknowledged that new models of economic systems are urgently needed that would bring together social welfare and natural accountability and financial feasibility. The Islamic world has a long tradition of using the waqf institution for the benefit of public services, public goods and public properties, infrastructure, environmental preservation, and community welfare and welfare enhancement. Unfortunately, however, the latent function of waqf for sustainable green economic developments hasn't yet been adequately addressed. This research revisits the concept of waqf as an instrument in promoting green economy transformation in the 21st century by focusing on the way waqf can be revisited in order to have more leverage in green growth and eco-friendly transformation, in order to have a breakthrough towards climate resilience, resource saving, and inclusive economic development based on an Islamic economic perspective. This research uses qualitative methods and an analytical study on classic and contemporary literature of Waqf, Islamic economics, environmental sustainability, green finance, and sustainable development. The study reveals that Waqf endowments provide an innovative tool with considerable potential to support the transformation of economies toward green development. Specifically, waqf has the capacity to finance renewable energy generation projects, sustainable agriculture activities, afforestation programs, natural resource management, environmental education, green infrastructure, biodiversity conservation, and

Submitted: 07 31, 2026 | Accepted: 08 26, 2026 | Published: 10 13, 2026

climate adaptation measures. The research concludes that the characteristic of permanence and flexibility makes waqf an appropriate mechanism to support such long-term environmental initiatives that create both societal and natural capital value. Also, the study suggests that combining Waqf, recent innovations, current global best practices, technologies, and sustainability policies can reinforce environmental governance frameworks, stimulate green job creation, and facilitate improved climate resilience. The research provides an original analytical model for integrating Islamic philanthropy with environmental sustainability and illustrates waqf can act as an ethical, robust, and inclusive solution for the environmentally and economically sound challenges of the 21st century.

Keywords: *Islamic Law, Waqf , Sustainable Agriculture, Ecological Food Security, Environmental Sustainability.*

Introduction

The transition toward a green economy has become an increasingly important global development priority as climate change, environmental degradation, resource scarcity, and socioeconomic inequality challenge the sustainability of conventional patterns of economic growth. A green economy requires more than reducing environmental damage; it seeks to reconcile economic development, social inclusion, efficient resource use, and environmental protection. This transition consequently requires substantial and sustained investment in renewable energy, sustainable agriculture, ecosystem restoration, green infrastructure, resource efficiency, and climate adaptation (Adam et al. 2023; Nisa Et al. 2023). Yet the availability and allocation of long-term finance remain major constraints, particularly in developing economies where environmental needs are substantial but fiscal and financial capacities are comparatively limited. These challenges provide the broader context for the search for financing mechanisms capable of generating both economic and environmental value.

Within Islamic economics, this challenge is particularly relevant because the normative foundations of Islamic economic activity emphasise justice, social welfare, responsible resource utilisation, and avoidance of harm. Islamic finance therefore has conceptual affinities with sustainability objectives, although the extent to which these principles have been translated into concrete environmental transformation remains an important research question. Bibliometric evidence indicates that the intersection between Islamic finance and the green economy has developed into a distinct research field, with increasing attention to sustainable development, green investment, and Islamic financial instruments. However, the literature remains considerably more developed around Islamic capital-market instruments, particularly green Sukuk, than around Islamic social-finance institutions such as Waqf (Rusydiana et al., 2022).

Waqf is particularly significant in this context because its institutional characteristics differ from conventional financing mechanisms. As a form of Islamic endowment, Waqf is designed to preserve endowed assets while generating continuing benefits for designated beneficiaries or public welfare (Muhammad & Ikilima, 2022).. This long-term orientation potentially corresponds with the temporal characteristics of environmental investment, where

ecological restoration, renewable-energy infrastructure, sustainable land management, and climate adaptation frequently require patient capital and generate benefits over extended periods (Manda et al. 2023; Muhammad et al. 2023). Earlier scholarship established the broader compatibility between Waqf, *maqāṣid al-Sharīʿah*, and the Sustainable Development Goals, demonstrating that Waqf can potentially contribute to a wide range of developmental objectives.

Recent scholarship has begun to move beyond this general proposition toward more explicit consideration of Green Waqf. The emerging literature conceptualises Green Waqf as an extension of productive Waqf in which endowed assets or funds are directed toward environmentally sustainable activities (Muhammad Romi et al. 2026; Ibrahim et al. 2026). Recent studies identify possibilities including renewable energy, afforestation, sustainable land management, biodiversity protection, waste management, and other environmentally beneficial investments (Khan et al. 2026; Danladi et al. 2026). This development is important because it positions Waqf not merely as a mechanism for conventional social welfare but as a potential component of the institutional architecture of the green transition.

Despite this potential, a substantial gap exists between the normative capacity of Waqf and its actual contribution to green economic transformation. Waqf assets have historically supported public services, infrastructure, productive activities, and community welfare, yet their environmental function remains comparatively underdeveloped. The attached study identifies precisely this problem: although Waqf has historically contributed to public goods, infrastructure, environmental preservation, and community welfare, its latent function in sustainable green economic development has not been adequately addressed.

The problem is not simply a shortage of Waqf assets. Rather, it concerns the institutional, financial, regulatory, technological, and governance conditions required to transform Waqf resources into productive environmental capital. Contemporary research on cash-Waqf innovation, for example, shows that Waqf can be developed through financial institutions and innovative products, but implementation is conditioned by governance arrangements and institutional capabilities (Shaaban et al. 2026; Yusuf et al. 2026). Comparative evidence from Indonesia, Malaysia, and Türkiye demonstrates that innovation in Waqf requires appropriate governance mechanisms and coordination among relevant stakeholders.

This institutional problem is particularly important for green investments because environmentally oriented projects frequently involve high initial costs, long payback periods, technical complexity, and uncertain financial returns. Consequently, the mere designation of Waqf as "green" does not automatically establish a viable financing model. Effective Green Waqf requires appropriate asset management, professional *nāẓir* capacity, transparent governance, credible environmental criteria, suitable investment structures, and mechanisms for measuring environmental and social outcomes.

Literature Review

The literature on Waqf and sustainability has developed along several interconnected trajectories, moving from the traditional understanding of Waqf as an instrument of social welfare toward broader considerations of sustainable development, environmental protection, and innovative financing. A first strand of scholarship examines the contribution of Waqf to

socioeconomic development and the Sustainable Development Goals (SDGs). Abdullah (2018) provides an important conceptual foundation by demonstrating that the objectives and functions of Waqf can be aligned with the SDGs when interpreted through the framework of *maqāṣid al-Sharīʿah*. This perspective positions Waqf not merely as a charitable institution but as a potentially productive mechanism for addressing multidimensional development challenges. Complementing this argument, Dirie et al. (2024), through a systematic review of Islamic social-finance literature, show that Waqf and related instruments have considerable potential to contribute to economic and social development while increasingly intersecting with environmental sustainability. Nevertheless, this body of literature tends to approach sustainability primarily through the broad SDG agenda, with comparatively limited attention to the environmental transformation of economic systems as a distinct objective of Waqf. The literature therefore establishes the developmental relevance of Waqf but leaves open the question of how its institutional characteristics can be deliberately mobilised for the green transition.

A second strand concerns the broader relationship between Islamic finance and the green economy. Rusydiana et al. (2022), through bibliometric analysis, demonstrate the growing convergence between Islamic finance, green economic development, sustainable development, and environmentally oriented financial instruments. This emerging literature is significant because it establishes a conceptual basis for viewing Islamic finance as compatible with environmental sustainability, particularly through principles relating to social justice, responsible resource utilisation, risk sharing, and avoidance of harmful activities. However, the dominant emphasis has been placed on market-based Islamic financial instruments and institutions, particularly green Sukuk, rather than Islamic social-finance institutions (Adam et al. 2024). Consequently, while the Islamic green-finance literature has expanded considerably, the potential contribution of Waqf as a form of patient, socially oriented, and potentially perpetual capital remains comparatively underexplored. This imbalance suggests the need to broaden the green Islamic-finance discourse beyond capital-market instruments and examine how Waqf can complement rather than simply replicate existing forms of sustainable finance.

More recent scholarship has begun to address this limitation through the emerging concept of Green Waqf, representing a third and more directly relevant strand of research. This literature conceptualises Waqf as a mechanism for directing endowed resources toward activities that generate both public benefit and environmental value, including renewable energy, afforestation, sustainable land management, waste management, biodiversity conservation, and climate-related initiatives. Such an approach represents an important conceptual shift because it moves Waqf from a predominantly welfare-oriented framework toward a broader understanding of environmental and intergenerational public benefit. Recent empirical research strengthens this proposition. Hendrasto et al. (2024), for example, develop a productive Waqf-based financing model for renewable-energy investment in Indonesia and demonstrate its potential application to solar-powered agricultural irrigation, thereby illustrating how Waqf can simultaneously support environmental objectives, productive economic activity, and community welfare. Similarly, Maulida and Rusydiana (2025) propose the Integrated Waqf Environment Model (IWEM), which links Waqf financing with sustainable agriculture and responds to challenges associated with climate change, land degradation, and limited financing for smallholder communities. These studies are particularly significant because

they move the discussion from the general compatibility of Waqf with sustainability toward concrete sectoral applications of Waqf for environmental objectives.

Despite these advances, the emerging Green Waqf literature remains relatively fragmented. Existing studies frequently focus on individual applications such as renewable energy or sustainable agriculture rather than examining Waqf as part of a comprehensive institutional architecture for green economic transformation. Moreover, the literature has not yet sufficiently integrated the diverse environmental functions that Waqf could potentially support, including renewable energy, ecosystem restoration, sustainable agriculture, green infrastructure, biodiversity conservation, climate adaptation, and environmental education (Romi et al. 2026; Ibrahim et al. 2026). More importantly, the distinctive legal and institutional characteristics of Waqf including preservation of endowed assets, donor conditions, beneficiary rights, Shariah compliance, and the role of the *nāẓir* raise questions that cannot be resolved simply by applying conventional green-finance models to Waqf. A systematic conceptualisation is therefore required to determine how the environmental potential of Waqf can be reconciled with its underlying legal and fiduciary principles.

A fourth strand of literature consequently focuses on governance, institutional capacity, and implementation, highlighting the conditions necessary for converting Waqf innovation from a conceptual proposition into a functioning financial and developmental mechanism. Recent research on cash-Waqf innovation across Indonesia, Malaysia, and Türkiye demonstrates that institutional governance, regulatory arrangements, stakeholder coordination, and product-development capacity are critical to the successful implementation of innovative Waqf models. Similarly, recent research on sustainable land management identifies regulatory support, technological capacity, and professional *nāẓir* management as important determinants of the effectiveness of Green Waqf initiatives. These findings are particularly important because they demonstrate that the environmental transformation of Waqf cannot be achieved simply by redefining existing Waqf activities as "green." Rather, it requires institutional transformation involving appropriate governance structures, professional management, regulatory support, technological capabilities, transparent impact assessment, and effective coordination among Waqf institutions, governments, financial institutions, communities, and environmental stakeholders.

Taken together, the literature demonstrates a clear but incomplete progression: from Waqf as an instrument of social welfare, to Waqf as a contributor to sustainable development, and more recently to Waqf as a potential instrument of environmental sustainability. However, the transition from these individual strands toward a coherent framework for Waqf-led green economic transformation remains insufficiently developed. Existing studies provide important evidence concerning the compatibility of Waqf with sustainability and demonstrate promising applications in particular environmental sectors, but they do not adequately explain how these applications can be integrated into a broader green-development architecture while preserving the distinctive legal, ethical, and institutional characteristics of Waqf. This unresolved issue provides the principal intellectual space for the present study, which seeks to conceptualise Waqf not merely as another source of green project financing, but as a potentially strategic Islamic institution capable of linking environmental stewardship, sustainable investment, social welfare, and inclusive economic transformation.

Despite these developments, four important gaps remain:

First, the literature remains fragmented. Research on Islamic finance and the green economy generally examines financial instruments and sustainability, while Waqf research frequently concentrates on socioeconomic development, poverty reduction, governance, or SDG alignment. Only a relatively emerging body of research explicitly integrates Waqf into the broader architecture of green economic transformation.

Second, existing Green Waqf research is predominantly conceptual. Although recent studies have proposed Green Waqf models and identified potential environmental applications, there remains limited evidence concerning how Waqf can be systematically integrated with contemporary green-economy policies, technologies, environmental standards, and investment practices. The literature therefore establishes considerable potential but provides less clarity concerning the mechanisms through which this potential can be translated into scalable transformation.

Third, insufficient attention has been given to the distinctive institutional characteristics of Waqf. Waqf differs from conventional green finance because its defining features include perpetuity, endowed-asset preservation, donor conditions, beneficiary rights, and Shariah governance. These characteristics create both opportunities and constraints for environmental investment. A green Waqf framework must therefore reconcile environmental objectives with the legal and fiduciary requirements of Waqf.

Fourth, the environmental and socioeconomic dimensions of Green Waqf are insufficiently integrated. Green economic transformation should not be reduced to carbon reduction or environmental protection alone. A genuinely Islamic conception of green transformation should also consider poverty reduction, employment, community welfare, resource justice, food security, and intergenerational responsibility. This is consistent with the emerging literature arguing that sustainable Islamic finance should support a transition that is simultaneously environmentally responsible and socially inclusive.

Against this background, the present study revisits Waqf as a potential catalyst for green economic transformation in the twenty-first century, responding to the need to move beyond the conventional treatment of Waqf as primarily a social-welfare institution toward a broader conception that recognises its potential contribution to green growth, climate resilience, resource conservation, and inclusive economic development from an Islamic economic perspective. Accordingly, the study examines the conceptual and institutional foundations of Waqf as an instrument of green economic transformation, critically assesses its emerging applications in areas such as renewable energy, sustainable agriculture, afforestation, natural-resource management, green infrastructure, biodiversity conservation, environmental education, and climate adaptation, and identifies the institutional, governance, financing, and technological conditions that may constrain or facilitate its effective deployment for green development. Building on these dimensions, the study further seeks to develop an analytical framework for integrating Waqf with contemporary environmental policies, technological innovations, and global sustainability practices, thereby providing a more systematic basis for understanding how Waqf can contribute to an environmentally sustainable, socially inclusive, and ethically grounded green economy.

The study's contribution is therefore not to argue simply that Waqf *can* support environmental projects a proposition that emerging literature has already established. Rather,

it seeks to reconceptualise Waqf as part of a broader green economic architecture, linking its distinctive Islamic institutional characteristics with contemporary requirements for climate resilience, resource efficiency, environmental governance, and inclusive economic development. This approach responds directly to the gap between the considerable latent capacity of Waqf and its still limited operationalisation within green economic transformation.

In this respect, the study extends the literature from "Waqf for sustainable development" toward "Waqf as an institutional catalyst for green transformation." Such a perspective is particularly relevant to the twenty-first century, where the challenge is no longer simply to mobilise additional capital, but to develop financial and social institutions capable of directing capital toward economic activities that simultaneously preserve environmental systems and enhance human welfare. The proposed analytical perspective consequently positions Waqf as a potential bridge between Islamic philanthropy, sustainable finance, environmental governance, and inclusive green growth.

Methodology

This study adopts a qualitative, exploratory, and analytical research design based on a structured review and critical analysis of classical and contemporary literature. This approach is consistent with the study's objective of conceptually revisiting Waqf as an instrument for green economic transformation rather than empirically testing a predetermined causal relationship. The analysis draws primarily on Islamic legal and economic literature on Waqf, supplemented by contemporary scholarship on environmental sustainability, green finance, sustainable development, climate resilience, and green economic transformation. The methodological orientation is explicitly supported by the attached abstract, which states that the study uses qualitative methods and analytical study of classical and contemporary literature across these fields.

The analysis proceeds in three stages. First, the study examines the conceptual and normative foundations of Waqf, particularly its permanence, flexibility, public-benefit orientation, and potential compatibility with Islamic principles of stewardship and social welfare. Second, relevant literature and documented practices are critically examined to identify potential applications of Waqf in renewable energy, sustainable agriculture, afforestation, natural-resource management, green infrastructure, biodiversity conservation, environmental education, and climate adaptation. These areas correspond directly to the applications identified in the study's abstract. Third, the findings are synthesised thematically to identify institutional, governance, technological, and financing requirements and to develop an analytical framework linking Waqf with contemporary sustainability policies, technological innovations, and environmental practices.

The study therefore does not seek statistical generalisation; rather, it employs critical conceptual synthesis to establish how the distinctive characteristics of Waqf can be mobilised for long-term environmental and socioeconomic value creation. The resulting framework is intended to provide an analytical basis for understanding Waqf as an ethical and potentially inclusive mechanism for green economic transformation, climate resilience, and sustainable development.

Discussion of Results and Findings

The analysis indicates that Waqf possesses significant but underutilised potential to contribute to green economic transformation, particularly when its traditional social-welfare function is interpreted alongside the Islamic principles of *khilāfah* (stewardship), *maslahah* (public interest), *wasatiyyah* (moderation), and *ḍarar* (prevention of harm). The findings suggest that Waqf should not be viewed exclusively as a mechanism for financing conventional charitable activities. Rather, its long-term orientation, asset-preservation principle, and public-benefit character provide a potentially appropriate institutional foundation for financing activities that generate enduring environmental and socioeconomic benefits. This interpretation is consistent with the study's underlying finding that Islamic law provides an ethical basis for balancing productive agricultural activity with environmental conservation and long-term human welfare.

Waqf as an Instrument of Environmental Stewardship

A central finding is that the environmental potential of Waqf is rooted in the broader Islamic conception of responsible resource management. The principles of *khilāfah*, *maslahah*, *wasatiyyah*, and prevention of harm establish an ethical framework within which natural resources should be utilised productively without compromising their long-term sustainability. Accordingly, agricultural land, water resources, forests, and other productive assets should not be understood solely in terms of immediate economic returns; their preservation and continued capacity to support human welfare are also important considerations. This provides a normative foundation for directing Waqf toward environmentally responsible productive activities.

The implication is important for contemporary Waqf management. If Waqf is understood as an institution designed to preserve assets and generate continuing benefits, environmental conservation can itself constitute a legitimate dimension of public benefit. Green Waqf therefore represents not a departure from the traditional objectives of Waqf, but a contemporary extension of its public-welfare function to circumstances in which environmental degradation directly threatens livelihoods, food security, health, and intergenerational welfare.

Waqf and Sustainable Agricultural Development

The findings further demonstrate that sustainable agriculture represents one of the most practical areas through which Waqf can contribute to green transformation. Waqf resources can potentially support farmland conservation, irrigation infrastructure, climate-smart agricultural technologies, seed banks, farmer training, and community-based agricultural systems. These applications are particularly significant because agricultural sustainability simultaneously addresses environmental and socioeconomic objectives. The attached study specifically identifies farmland conservation, irrigation finance, climate-smart agriculture, seed-bank financing, farmer training, and community agricultural networks as potential Waqf-supported interventions.

This finding strengthens the argument that ecological sustainability and food security should not be treated as competing objectives. Properly structured Waqf investment can enhance agricultural productivity while protecting the natural resource base upon which future production depends. In this respect, the Waqf model has the potential to connect asset

preservation, agricultural productivity, rural development, and ecological resilience within a single institutional framework.

Waqf as Patient and Long-Term Environmental Capital

Another important finding concerns the temporal dimension of environmental investment. Many green projects require substantial initial investment and generate benefits over relatively long periods. Waqf's emphasis on preserving endowed assets and maintaining continuing benefits creates an institutional characteristic that may be particularly compatible with such investments. Rather than being driven exclusively by short-term financial returns, Waqf can potentially support projects whose principal benefits accumulate gradually through improved resource productivity, environmental restoration, community resilience, and intergenerational welfare.

This characteristic distinguishes Waqf from conventional short-term financing arrangements and suggests that its greatest contribution to green transformation may lie not simply in the volume of capital mobilised, but in the type of capital it can provide. Waqf can potentially function as patient, socially oriented capital that supports projects whose environmental and social returns extend beyond the immediate financial cycle.

Diversification of Green Waqf Applications

The findings also indicate that the environmental role of Waqf should not be restricted to agriculture. The analytical framework developed from the literature points toward a broader range of applications, including renewable energy, afforestation, natural-resource management, green infrastructure, biodiversity conservation, environmental education, and climate adaptation.

These applications demonstrate the multidimensional character of Green Waqf. Renewable-energy projects can contribute to cleaner energy access; afforestation and ecosystem restoration can strengthen ecological resilience; green infrastructure can improve the sustainability of communities; environmental education can strengthen behavioural change; and climate-adaptation projects can reduce the vulnerability of disadvantaged populations. Consequently, the environmental contribution of Waqf should be evaluated not through a single indicator such as carbon reduction, but through its capacity to generate integrated environmental, economic, and social outcomes.

Institutional and Governance Conditions

At the same time, the findings caution against assuming that the environmental potential of Waqf will automatically translate into successful implementation. The effectiveness of Green Waqf depends substantially on institutional capacity, governance, professional management, transparency, and appropriate project selection. Waqf institutions require sufficient expertise to evaluate projects, manage assets, assess environmental risks, monitor performance, and report outcomes. Without such capacity, environmentally oriented Waqf projects may face the same problems of weak management, inadequate accountability, and inefficient asset utilisation that have historically constrained Waqf development.

Accordingly, institutional reform is as important as financial mobilisation. Waqf authorities and *nāẓir* institutions need professional expertise in investment management, environmental assessment, project appraisal, risk management, and impact measurement. Strong governance is also necessary to ensure that environmental objectives do not undermine the fundamental requirements of Waqf, including preservation of endowed assets and compliance with the conditions established by the donor (*wāqif*).

Integrating Shariah, Environmental and Economic Objectives

The findings further suggest that Green Waqf requires an integrated rather than fragmented governance approach. Environmental objectives, financial considerations, and Shariah requirements should be assessed simultaneously. A project may be environmentally desirable but unsuitable if its structure violates the legal conditions of the Waqf; conversely, a formally valid Waqf investment may fail to achieve meaningful environmental outcomes if environmental criteria are not incorporated into project selection and monitoring.

The appropriate approach is therefore one of integrated Shariah, environmental, and financial governance. This would involve scholars, Waqf managers, environmental specialists, financial professionals, government agencies, and community representatives in the design and monitoring of projects. Such coordination can strengthen both the legitimacy and practical effectiveness of Green Waqf.

Community Welfare and Inclusive Green Transformation

A further finding is that the environmental function of Waqf should remain connected to its fundamental social-welfare orientation. Green transformation should not be pursued solely through technically sophisticated environmental projects while neglecting vulnerable communities. The study's framework instead suggests that ecological sustainability should be linked to food security, rural development, employment, community resilience, and human welfare.

This has particular significance in developing and Muslim-majority societies, where environmental degradation frequently has direct consequences for low-income households and rural communities. Waqf-supported irrigation, sustainable agriculture, renewable energy, training, and environmental infrastructure can therefore produce a double dividend: improving ecological conditions while strengthening the socioeconomic resilience of beneficiaries.

An Integrated Waqf-Based Green Transformation Framework

Taken together, the findings support an integrated framework in which Waqf functions as a strategic bridge between Islamic social finance and the green economy. At the normative level, Islamic principles provide the ethical justification for environmental stewardship and responsible resource utilisation. At the institutional level, Waqf provides an asset-based mechanism capable of generating continuing public benefit. At the operational level, Waqf resources can be directed toward environmentally sustainable productive activities. Finally, at the societal level, the resulting projects can simultaneously contribute to environmental protection, economic productivity, social inclusion, and intergenerational welfare.

The central implication is therefore that Green Waqf should not be conceptualised merely as Waqf funding environmentally friendly projects. Its stronger potential lies in

repositioning Waqf as an institutional component of a broader green-development strategy. This requires alignment among Islamic legal principles, professional Waqf governance, environmental priorities, appropriate financing mechanisms, technological innovation, and community needs. Such an integrated approach would allow Waqf to move from a largely underutilised social-finance resource toward a more strategic instrument for green growth, climate resilience, sustainable resource management, and inclusive human development.

Overall, the findings support the proposition advanced in the study's abstract that Waqf can provide an ethical and socially inclusive mechanism for combining productive economic activity with ecological sustainability. The contribution of the proposed framework therefore lies less in presenting Waqf as an entirely new environmental institution than in reinterpreting and operationalising its existing principles for the contemporary ecological transition.

Conclusion

This study examined the potential of Waqf as an instrument for green economic transformation from an Islamic economic perspective. The analysis demonstrates that Waqf possesses important institutional and ethical characteristics that can support environmental sustainability, particularly when its traditional public-welfare function is interpreted through the principles of *khilāfah* (stewardship), *maslahah* (public interest), *wasatiyyah* (moderation), and prevention of harm. Rather than being limited to conventional charitable purposes, Waqf can potentially be repositioned toward productive activities that generate simultaneous environmental, economic, and social benefits.

The findings indicate that this potential is particularly evident in sustainable agriculture, renewable energy, afforestation, natural-resource conservation, green infrastructure, biodiversity protection, environmental education, and climate adaptation. In agriculture, for example, Waqf can support farmland conservation, irrigation systems, climate-smart technologies, seed banks, and farmer-development programmes, thereby linking food security with ecological sustainability. More broadly, the long-term and asset-preservation characteristics of Waqf make it potentially suitable for environmental investments whose benefits extend across generations.

However, the study also demonstrates that the existence of Waqf resources alone is insufficient to produce meaningful green transformation. Effective implementation requires professional Waqf management, appropriate governance, Shariah oversight, regulatory support, technical expertise, transparent reporting, environmental impact assessment, and effective stakeholder coordination. Green Waqf should therefore be understood not simply as the allocation of Waqf funds to environmental projects, but as an institutional approach that integrates Islamic ethical principles with contemporary environmental, financial, and development requirements.

Overall, the study concludes that Waqf can serve as a strategic bridge between Islamic social finance and the green economy. Its potential contribution lies in mobilising patient, socially oriented resources for projects that simultaneously strengthen environmental resilience, productive capacity, community welfare, and intergenerational sustainability. Nevertheless, realising this potential requires a transition from fragmented and predominantly

conceptual applications toward coordinated, professionally managed, and measurable Green Waqf frameworks.

Recommendations

Based on the findings, several recommendations are proposed. First, governments and Waqf authorities should establish enabling regulatory and governance frameworks for Green Waqf, clearly defining eligible environmental activities, asset-management requirements, Shariah safeguards, institutional responsibilities, disclosure obligations, and environmental-impact criteria. Such frameworks should protect the perpetual and fiduciary nature of Waqf while allowing sufficient flexibility for contemporary green investment.

Second, Waqf institutions should strengthen their professional and technical capacity in investment management, environmental assessment, project appraisal, risk management, digital finance, and impact measurement. The professionalisation of *nāẓir* institutions is essential if Waqf is to move from relatively small-scale charitable activities toward sophisticated environmental and productive investments.

Third, Waqf authorities, governments, Islamic financial institutions, and development organisations should develop a pipeline of viable green projects before attempting large-scale mobilisation of Waqf resources. Priority should be given to projects with clear environmental and social benefits, including renewable energy, sustainable agriculture, water management, ecosystem restoration, and climate-resilient infrastructure.

Fourth, Green Waqf should incorporate integrated Shariah, financial, environmental, and social-impact governance. Project selection and monitoring should assess not only financial sustainability and Shariah compliance but also measurable outcomes such as land restored, renewable energy generated, emissions avoided, water conserved, farmers supported, employment created, and communities benefiting. Independent verification should be encouraged to strengthen transparency and public confidence.

Finally, policymakers and scholars should promote standardisation, digital innovation, and empirical research in Green Waqf. Common standards for eligible green activities, impact indicators, disclosure, and governance would improve credibility and comparability, while digital platforms could enhance transparency, participation, and resource mobilisation. Future research should empirically test the proposed framework through comparative country studies, case studies, stakeholder interviews, financial modelling, and project-level environmental and socioeconomic impact assessments. These efforts would help determine the institutional conditions under which Waqf can become a scalable and sustainable component of Islamic green finance and broader climate-development strategies.

References

Abdallah, S. I., Muhammad, A. A., Danladi, I. I., Afifi, A. A., Bello, I. I., & Yusuf, B. (2026). Waqf as an instrument of Islamic governance: Advancing social justice, conflict resolution, and sustainable human development. *Perwakilan: Journal of Good Governance, Diplomacy, Customary Institutionalization and Social Networks, 4*(1), 265–273. https://doi.org/10.58764/j.prwkl.2026.4.186

Abdullah, M. (2018). Waqf, sustainable development goals (SDGs) and maqasid al-shariah. *International Journal of Social Economics, 45*(1), 158–172. https://doi.org/10.1108/IJSE-10-2016-0295

Adam, A. M., Muhammad, A. A., Bashir, L. M., & Mohammed, B. I. (2023). The role of Waqf for human sustainable development (HSD) in North-Eastern Nigeria. *International Journal of Zakat and Islamic Philanthropy, 5*(1), 198–208. https://journal.zakatkedah.com.my

Adam, A. M., Muhammad, A. A., Bashir, L. M., & Yakubu, Z. M. (2024). Methodology of teaching in Almajiri schools and its challenges in Northern Nigeria. *Journal Transformation of Knowledge (JTK), 2*(3).

Bello, I. I., Muhammad, A. A., Afifi, A. A., Abdallah, S. I., Yusuf, B., & Yusuf, M. (2026). From political philosophy to peace architecture: Revitalizing Waqf within Islamic political thought for community security and conflict transformation. *Perwakilan: Journal of Good Governance, Diplomacy, Customary Institutionalization and Social Networks, 4*(1), 253–263. https://doi.org/10.58764/j.prwkl.2026.4.185

Danladi, I. I., Muhammad, A. A., Sawaba, Y. I., Yusuf, M., & Muhammad, M. B. (2026). Rebuilding communities through Waqf: Restoring ethical values and social cohesion in contemporary Muslim societies. *Perwakilan: Journal of Good Governance, Diplomacy, Customary Institutionalization and Social Networks, 4*(1), 233–241. https://doi.org/10.58764/j.prwkl.2026.4.170

Dirie, K. A., Alam, M. M., & Maamor, S. (2024). Islamic social finance for achieving sustainable development goals: A systematic literature review and future research agenda. *International Journal of Ethics and Systems, 40*(4), 676–698. https://doi.org/10.1108/IJOES-12-2022-0317

Fahmi, R. A. (2025). Islamic social finance and environmental sustainability: A critical review of policy and practice. *Iqtishodiah: Jurnal Ekonomi dan Perbankan Syariah, 7*(1), 64–77. https://doi.org/10.62490/iqtishodiah.v7i1.1103

Handayani, I. F., Fadlin, A. T., Nafisah, N., Rahmattullah, M. A., Satria, Y. Y., & Medias, F. (2026). Optimizing Waqf for sustainable land management: An ISM-based analysis of the Indonesian Green Waqf initiative. *Jurnal Ekonomi Syariah Indonesia, 16*(1), 82–98. https://doi.org/10.21927/jesi.2026.16(1).82-98

Hendrasto, N., Mukhlısın, M., Harisuddin, H., & Chairiyati, F. (2024). Designing productive Waqf-based financing model for renewable energy investments project: Empirical evidence from Indonesia. *Karatay İslam İktisadı ve Finans Dergisi, 2*(2), 159–171.

Karmaen, S., & Muhammad, A. A. (2026). Praktik jual beli lumpur emas di Sekotong, Lombok Barat: Studi empiris dalam perspektif hukum ekonomi Islam (The practice of buying and selling gold mud in Sekotong, West Lombok: An empirical study from the perspective of Islamic economic law). *Bisnis, Jasa dan Keuangan, 2*(2), 69–76. https://doi.org/10.61798/nh1fvp25

Khan, H., Muhammad, A. A., Babikir, A., Danladi, I. I., Babayo, M. U., & Afifi, A. A. (2026). Women's economic empowerment through Islamic social finance: Integrating Waqf, Zakah, and microfinance for inclusive development. *Journal of Regional Development and Technology Initiatives, 4*(1), 305–315. https://doi.org/10.58764/j.jrdti.2026.4.188

Manda, F. P., Muhammad, A. A., Indriyana, P., Fitri, L. W., & Anim, R. (2023). Trust and tax: A grounded theory. *E3S Web of Conferences, ICENIS 2023*. https://doi.org/10.1051/e3sconf/202344801019

Maulida, S., & Rusydiana, A. S. (2025). Integrated Waqf Environment Model (IWEM): Proposal for funding sustainable agriculture through Waqf to embrace the era of Smart Agriculture 5.0. *Journal of Islamic Economics Lariba, 11*(1), 229–252. https://doi.org/10.20885/jielariba.vol11.iss1.art9

Muhammad, A. A., & Ikilima, A. S. (2022). The role of Zakat and Waqf for the development of micro and small enterprises (MSEs) in Gombe State, Nigeria. *International Journal of Small and Medium Enterprises and Business Sustainability, 7*(3), 102–129.

Muhammad, A. A., Adam, M. A., Hamza, A. H., & Jamila, A. A. (2023). Relevance of Zakat and Waqf models to achieve Sustainable Development Goals of water and sanitation in North Eastern Nigeria. *Islamic Economics Journal, 9*(2), 187–198. https://doi.org/10.21111/iej.v9i2.10473

Muhammad, A. A., Sawaba, Y. I., Danladi, I. I., Yusuf, M., & Muhammad, M. B. (2026). Maqasid al-Shari'ah and AI education: Waqf as a tool for knowledge preservation and technological advancement. *Abdurrauf Journal of Education and Islamic Studies, 2*(3), 146–156. https://doi.org/10.70742/arjeis.v2i3.1119

Nisa, N. K., Adriansah, Wawan, O., & Muhammad, A. A. (2023). The effect of religiosity and disposable income on interest in saving Purwakarta community in Islamic banks. *Suhuf, 35*(2), 1–10. https://doi.org/10.23917/suhuf.v35i2.23030

Nofianti, L. (2026). Cash Waqf innovation in Islamic financial institutions and its governance issues, case studies: Indonesia, Malaysia, Türkiye. *Journal of Islamic Accounting and Business Research, 17*(4), 819–837. https://doi.org/10.1108/JIABR-12-2023-0420

Romi, M., Ali, S. I., & Muhammad, A. A. (2026). Oversight and law enforcement gaps in halal certification of imported products in Indonesia. *Yurisprudentia: Jurnal Hukum Ekonomi, 12*(1), 60–74. https://doi.org/10.24952/yurisprudentia.v12i1.19777

Romi, M., Sayuti, H., Sepdiana, N., & Muhammad, A. A. (2026). Gender-responsive Zakat management for women's empowerment in post-crisis recovery: A conceptual framework. *Tazkir: Jurnal Penelitian Ilmu-ilmu Sosial dan Keislaman, 12*(1), 17–37. https://doi.org/10.24952/tazkir.v12i1.19582

Rusydiana, A. S., Sukmana, R., Laila, N., & Bahri, M. S. (2022). The nexus between a green economy and Islamic finance: Insights from a bibliometric analysis. *ICR Journal, 13*(1), 51–71. https://doi.org/10.52282/icr.v13i1.908

Yusuf, M., Muhammad, A. A., Sawaba, Y. I., Muhammad, M. B., & Danladi, I. I. (2026). From welfare to human flourishing: Maqasid al-Shariah as the nexus of Islamic social finance, Da'wah, and sustainable development. *Perwakilan: Journal of Good Governance, Diplomacy, Customary Institutionalization and Social Networks, 4*(1), 243–251. https://doi.org/10.58764/j.prwkl.2026.4.171